Planning and Zoning Board Meeting
City of Rio Rancho
AGENDA
May 27, 2025
6:00 PM
City Hall

BOARD MEMBERS

Scottie Richardson, District 1, Vice-Chair	Andrea Hankins, District 5
Kevin Kofchur, District 2	Lisa Hardisty, District 6
Fred Radosevich, District 3, Chair	Sal Tortorici, At-Large
Robert Gabaldon, District 4	

MEETING INFORMATION

This meeting will be conducted in-person and virtually, as well as, streamed live on the City of Rio Rancho website at https://rrnm.gov/2303/Watch-and-Download-City-Meetings.

Join by Computer: https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09

Meeting ID: 851 8074 1871

Passcode: 026819

Pursuant to the Rules of Procedure, any person wishing to address the Board related to an item listed under Public Hearings or Discussion and Deliberation, shall register in person with the designated City staff person. No more than two (2) hours in total will be allotted for comments pertaining to a specific agenda item at any meeting. A majority vote of the Board members present may approve to extend the total amount of time allotted for public input related to a specific agenda item at a meeting.

Public input can be submitted in writing to the designated City staff person prior to the date of the meeting in which the item is scheduled to be heard; however, only public input received before 4 p.m. on the day of the meeting will be entered into the record prior to the meeting.

CALL TO ORDER AND PLEDGE OF ALLEGIANCE

CONSENT CALENDAR

There will be no discussion of these items unless a Board Member so requests, in which event the item will be moved to a discussion item on the regular agenda.

1. May 13, 2025 Planning and Zoning Board Meeting Minutes
2025-0513_PZB_Minutes_SB.docx

STAFF PRESENTATIONS, REPORTS AND COMMENTS

PUBLIC HEARINGS

Pursuant to the Rules of Procedure, all aggrieved persons, and materially relevant witnesses sponsored by such interested persons, wishing to address the Board shall register in person or via specified communications technology/equipment with the City staff person.

2. **Preliminary Plat Extension.** The applicant, Richmond American Homes, requests approval of a Preliminary Plat Extension for the Broadmoor Heights Unit 4 subdivision. Staff contact is Ben Isaacs and staff recommend approval with findings and conditions.
Zoning & Location Map.pdf
Extension Request.pdf
Preliminary Plat.pdf
Reproduction of Notifications.pdf
Proof of Ownership.pdf

3. **Subdivision Variance.** The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements on all side and rear lot lines for the proposed Dos Soles Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.
Zoning, Location Map
Application & Authorization
Justification
Preliminary Plat
Construction Plans
Reproduction of Notices, Legal Ad
Reviewer Comments
Findings_of_Fact_BMB.docx

4. **Preliminary Plat.** The Applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprising 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes. Staff contact is Tim Dvorak and staff recommends approval with findings and conditions.
Zoning, Location Map
Application & Authorization
Dos Soles Preliminary Plat
Reproduction of Notices, Legal Ad
Reviewer Comments

5. **Subdivision Variance.** The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.
Zoning, Location Map
Application
Authorization
Justification
Preliminary Plat
Reproduction of Notices, Legal Ad
Reviewer Comments
Findings_of_Fact_.docx

6. **Subdivision Variance.** The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.
Zoning, Location Map
Application

Authorization
Justification
Reproduction of Notices, Legal Ad
Preliminary Plat
Reviewer Comments
Findings_of_Fact_.docx

7. **Preliminary Plat.** The Applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, to be comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. Staff contact is Tim Dvorak and staff recommends approval with findings and conditions.
Zoning, Location Map
Application
Authorization
Broadmoor Hill Preliminary Plat
Reproduction of Notices, Legal Ad
Reviewer Comments

8. **Text Amendment**. The City of Rio Rancho is requesting approval of text amendments the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions, Sections: General Provisions, Platting Procedure, Design Standards, and Administration and Enforcement. Staff contact is Michelle Costilla, and staff recommends the Planning and Zoning Board recommend approval to the Governing Body.
DRAFT CoRR Chapter 155 - Subdivisions
Legal Ad.pdf
Draft_Ordinance_MC_BMB.doc

DISCUSSION AND DELIBERATION

9. **Resolution.** The City of Rio Rancho is requesting approval of the adoption of a Resolution of the City of Rio Rancho, New Mexico for an update to the Development Process Manual (DPM).
RR DPM Chapter 1 DPM Overview.pdf
RR DPM Chapter 2 Development Procedures.pdf
RR DPM Chapter 3 Drainage Flood Control Erosion.pdf
RR DPM Chapter 4 Transportation.pdf
RR DPM Chapter 5 Water and Wastewater Infrastructure.pdf
RR DPM Chapter 6 Parks and Trails.pdf
RR DPM Chapter 7 Surveys and Permanent Monumentation.pdf
Crosswalks Combined.pdf
Legal Ad.pdf
Combined Comment Log.pdf
Public Comment 5.20.25.pdf
DRAFT_Resolution.doc

COMMENTS BY MEMBERS

PUBLIC FORUM

Any person wishing to address a board, commission, committee, or advisory body related to a non-agenda item shall register in person with the applicable City staff person. No more than two (2) hours in total will be allotted for public forum comments at any meeting. A majority vote of the board, commission, committee, or advisory body members present may approve to extend the total amount of time allotted for public forum at a meeting.

ADJOURNMENT

CITY OF RIO RANCHO
COVER PAGE

Legislation Item:

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
May 13, 2025 Planning and Zoning Board Meeting Minutes

BACKGROUND AND ANALYSIS:

IMPACT:

ALTERNATIVES:

DEPARTMENT RECOMMENDATION:
Approval

ATTACHMENT: 2025-0513_PZB_Minutes_SB.docx

Planning and Zoning Board
of the
City of Rio Rancho

MINUTES

MAY 13, 2025
6:00 PM
Council Chambers, City Hall

MEMBERS PRESENT:	**STAFF PRESENT:**
Scottie Richardson, District 1, Vice-Chair	Amy Rincon, Development Services Director
Kevin Kofchur, District 2	Brian Babyak, Planning & Zoning Manager
Robert Gabaldon, District 4	Tim Dvorak, Planner II
Andrea Hankins, District 5 (Virtual)	Liz Ruiz Carlos, Planner II
Lisa Hardisty, District 6	Michelle Costilla, Planner II
Sal Tortorici, At-Large (Virtual)	Ben Isaacs, Planner I
MEMBERS ABSENT:	Tamarah Martinez, Planner I
Fred Radosevich, District 3, Chair	Sharon Bitah, Administrative Assistant

CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Vice-Chair Richardson called the meeting to order at 6:00 PM.

CONSENT CALENDAR

1) April 22, 2025 Planning and Zoning Board Meeting Minutes

Robert Gabaldon moved to approve the Consent Calendar. Seconded by Kevin Kofchur.
The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

STAFF PRESENTATIONS, REPORTS AND COMMENTS

2) Planning and Zoning Monthly Building Activity Report – April 2025

3) Planning and Zoning Monthly Summary Plat Report – April 2025

PUBLIC HEARINGS

4) The applicant, AMREP Southwest, Inc., requested approval of a Variance to allow for development of a single-family home on a substandard 50' width R-1: Single-Family lot at the subject property of Rio Rancho Estates Unit 11, Block U, Lot 2.

Staff member, Tim Dvorak presented the item recommending approval with findings and conditions and stood for questions.

Applicant Bryan Aragon spoke on the item and stood for questions.

Lisa Hardisty moved to approve Item #4. Seconded by Kevin Kofchur.
The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

5) The applicants, Jai and Desiree Prasad, requested approval of a Variance to the E-1: Estate Residential District 10 ft. side setback requirement for the construction of an attached garage for the property located at 1051 Saratoga Dr NE, legally described as Unit 17, Block 38, Lot 42A.

Staff member, Michelle Costila presented the item recommending denial and stood for questions.

Applicant Jai Prasad spoke on the item and stood for questions.

Robert Gabaldon moved to approve Item #5. Seconded by Kevin Kofchur.

In response to Commissioner Kofchur's questions, Mr. Prasad confirmed there has been no discussion with utility companies regarding the encroachment. He explained the size of truck and trailer is the reason for the irregular-sized garage and its proximity to the wall. It was also a factor in answering Commissioner Hardisty's questions on resizing or relocating the garage. He explained the utilities were only located in the front in answer to Commissioner Gabaldon's question.

The motion failed by a vote of **0 FOR** and **6 AGAINST**
YES: (None)
NO: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici

6) The applicant, Solano Builders & Construction LLC, requested approval of a Variance to the R-1: Single-Family Residential District 60 ft minimum lot width requirement for a 50 ft wide lot for the property located at 400 Northern Boulevard NE.

Staff member, Ben Isaacs presented the item, recommending approval with findings and conditions, and stood for questions.

Applicant Diana Ramirez spoke on the item and stood for questions after being administered the oath virtually.

Kevin Kofchur moved to approve Item #6. Seconded by Lisa Hardisty.
The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

7) The applicant, Diana Reyes, through their agent Solano Builders, requested approval of a Variance request to the minimum required R-1: Single-Family Residential District minimum front lot width of 60' to allow for a 50' wide lot for the construction of a new 3,179 square foot dwelling unit on the subject property of 1537 Tulip Road SE, legally described as Unit 11, Block E, Lot 68.

Staff member, Tamarah Martinez presented the item, recommending approval with findings and conditions, and stood for questions.

Applicant Diana Reyna Castillo spoke on the item and stood for questions.

Lisa Hardisty moved to approve Item #7. Seconded by Kevin Kofchur.
The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

8) The applicants, Maria C. Zavala and Jose L. Solano, requested approval of a Variance to the R-1: Single Family Residential District 60' minimum lot width requirement to allow for a 50' lot width for the

construction of a primary single-family dwelling unit for the property legally described as Unit 11, Block E, Lot 69.

Staff member, Liz Ruiz-Carlos presented the item, recommending approval with findings and conditions, and stood for questions.

Applicant Diana Ramirez had no additional comments.

Robert Gabaldon moved to approve Item #8. Seconded by Kevin Kofchur.

Applicant Diana Ramirez clarified Commissioner Hardisty's question regarding the two lots.

The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

9) The applicant, Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA), through their agent, JAG Planning and Zoning, requested approval of a Preliminary/Final Plat for the lots legally described as Western Hills Unit 2, PAR A, B, C, and Star Villa East, PAR B and C. The plat combines the five parcels into four parcels and dedicates a portion of Right of Way (ROW).

Staff member, Liz Ruiz-Carlos presented the item, recommending approval with findings and conditions, and stood for questions.

Agent, Juanita Garcia spoke on the item and stood for questions.

Lisa Hardisty moved to approve Item #9. Seconded by Kevin Kofchur.
The motion carried by a vote of **6 FOR** and **0 AGAINST**
YES: Scottie Richardson, Kevin Kofchur, Robert Gabaldon, Andrea Hankins, Lisa Hardisty, Sal Tortorici
NO: (None)

DISCUSSION AND DELIBERATION

COMMENTS BY BOARD MEMBERS

PUBLIC FORUM

ADJOURNMENT

Lisa Hardisty moved to adjourn the meeting. Seconded by Kevin Kofchur.
Chairman Radosevich adjourned the meeting at 6:33 PM.

APPROVED THIS 27th DAY OF MAY 2025.

_____
Fred Radosevich, Chairman

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 23-210-00010

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Preliminary Plat Extension. The applicant, Richmond American Homes, requests approval of a Preliminary Plat Extension for the Broadmoor Heights Unit 4 subdivision. Staff contact is Ben Isaacs and staff recommend approval with findings and conditions.

BACKGROUND AND ANALYSIS:
The applicant, Richmond American Homes, requests approval of a Preliminary Plat Extension for the Broadmoor Heights Unit 4 subdivision. The Broadmoor Heights Unit 4 subdivision would create 53 residential lots and three tracts, all zoned R-4: Single-Family Residential, on approximately 14.4558 acres.

The Preliminary Plat for the Broadmoor Heights Unit 4 subdivision was approved by the Planning & Zoning Board on October 10, 2023. The Preliminary Plat was later amended and approved by the Planning & Zoning Board on June 25, 2024. The amendment to the Preliminary Plat increased the depth of several lots and defined and clarified easements. It also extended the deadline by which the plat was to be recorded to twelve months from its approval, to June 25, 2025.

Ownership of the property transferred to Richmond American Homes in January 2025, after being originally owned by BGV Rio Rancho I, LLC. The current extension request is to allow for additional time for construction. The applicant stated in their justification letter that construction began in February of 2025, and that infrastructure work will need to be completed "in order to negate the need for a Development Agreement and Financial Guarantee".

The City Subdivision Ordinance [Code of Ordinances, Chapter 155.22(F), Longevity], states, “Approval of a preliminary plat is effective for one year unless extended by the Planning Board, based on a finding that the delay has been unavoidable and the extension is in the public interest.”

Staff find it is in the public interest to grant the Preliminary Plat Extension. The extension provides the applicant with additional time to address any issues or outstanding items for subdivision construction. One of the primary purposes of the longevity clause is to prevent development of a subdivision, approved under previous iterations of the subdivision and zoning codes, that no longer meets the City’s standards.

There have been no significant revisions to the subdivision code, zoning code, or infrastructure design standards since the plat's approval date that would necessitate a second review and reapproval for the Broadmoor Heights Unit 4 subdivision. Staff recommend the Planning and Zoning Board find that the Preliminary Plat Extension will allow the applicant additional time to finalize construction plans and that this would serve a compelling public interest.

NOTIFICATIONS:
Notice of the Preliminary Plat Extension request and hearing date was sent via first class mail to abutting property owners. A legal notice was published in the May 12, 2025 edition of the Albuquerque Journal. A notice sign was posted to the property on May 20, 2025. All legal notification requirements for this project have been met.

IMPACT:
The Development Services Department recommends that the Planning and Zoning Board approve the Preliminary Plat Extension with the following findings and conditions:

GENERAL FINDINGS OF FACT:
1. The Planning and Zoning Board has jurisdiction over the applicant's request for approval of a Preliminary Plat Extension.
2. The applicant has the authority to apply for a Preliminary Plat Extension.

SPECIFIC FINDINGS OF FACT AND CONDITIONS OF APPROVAL:
1. The Preliminary Plat Extension has been prepared, reviewed and conforms to the City of Rancho plans and policies.
2. The Preliminary Plat conforms to the requirements of the Subdivision Code, Code of Ordinances, Chapter 155.22 (F).
3. The Preliminary Plat extension provides the applicant with additional time to comply with the conditions of Preliminary Plat approval.
4. The City has made no significant revisions to the Code of Ordinance or infrastructure design standards since the approval of the Broadmoor Heights Unit 4 preliminary plat that would create inconsistent standards for the development given the Preliminary Plat Extension.
5. All the conditions of the October 10, 2023 Preliminary Plat approval and June 25, 2024 Preliminary Plat Amendment shall apply to this extension, with those conditions being updated to:
   a. In accordance with R.O. 2003 § 155.24(A), the Final Plat shall be recorded within twelve months following this extension of the preliminary plat (May 27, 2026), or the Planning and Zoning Board approval shall become null and void.
   b. Infrastructure shall be installed and accepted prior to the recording of the final plat or the applicant shall submit for staff review and approval of a subdivision improvement agreement and financial guarantee prior to the final plat hearing.
   c. Impact fee assessment will be based on the date of the original preliminary plat approval and will be valid for four years from the date of that approval.
   d. The applicant shall address the reviewers' comments prior to submitting construction plans or the final plat, whichever is applicable.

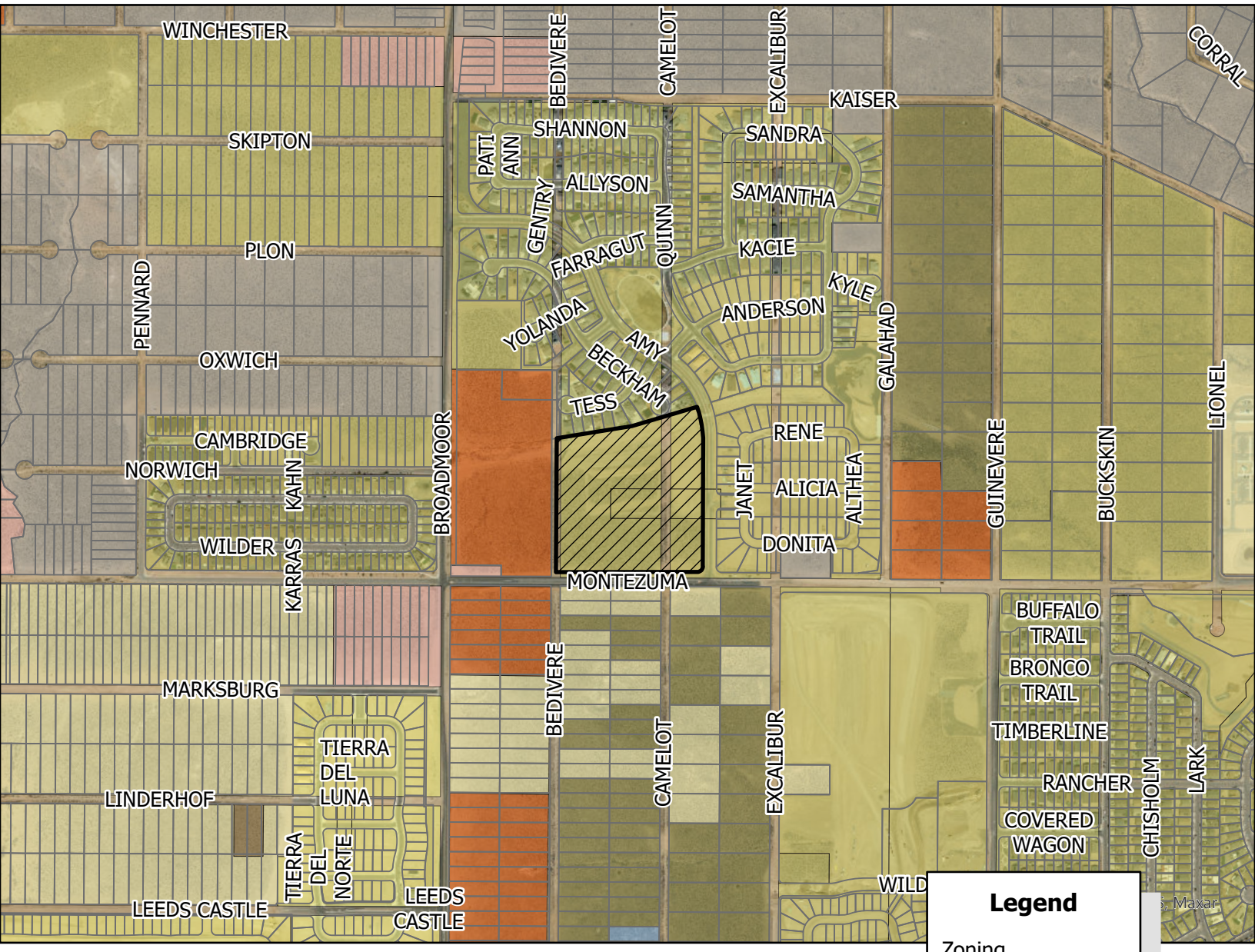
ALTERNATIVES:
The Planning and Zoning Board may:
1. Approve the request with staff recommendations and conditions.
2. Approve the request with amendments to recommendations and/or conditions.
3. Deny the request.
4. Postpone the item and continue the public hearing for the preliminary plat extension in order to further review.

DEPARTMENT RECOMMENDATION:
Staff recommend approval with findings and conditions.

ATTACHMENT: Zoning & Location Map.pdf

ATTACHMENT: Extension Request.pdf
ATTACHMENT: Preliminary Plat.pdf
ATTACHMENT: Reproduction of Notifications.pdf
ATTACHMENT: Proof of Ownership.pdf

7820 ENCHANTED HILLS BLVD NE



GIS Moving Spatial Data Forward

DISCLAIMER: All information on this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map courtesy of Ben Isaacs, 5/16/2025

Via Emailed PDF to Planning@rrnm.gov

May 6, 2025

City of Rio Rancho
Development Services, Planning and Zoning
3200 Civic Center Circle NE
Rio Rancho, NM 87144

RE: Extension of Time to Complete Subdivision Improvements for Broadmoor Heights Unit 4

Dear Madam or Sir:

Richmond American Homes respectfully requests an Extension of Time to record the final plat for the Broadmoor Heights Unit 4.

We have determined that we wish to complete the infrastructure work prior to submitting for final replat in order to negate the need for a Development Agreement and Financial Guarantee. The City of Rio Rancho approved the amendment for Broadmoor Heights Unit 4 in June 2024. Richmond American Homes purchased Unit 4 in January of 2025 and construction commenced in February of 2025.

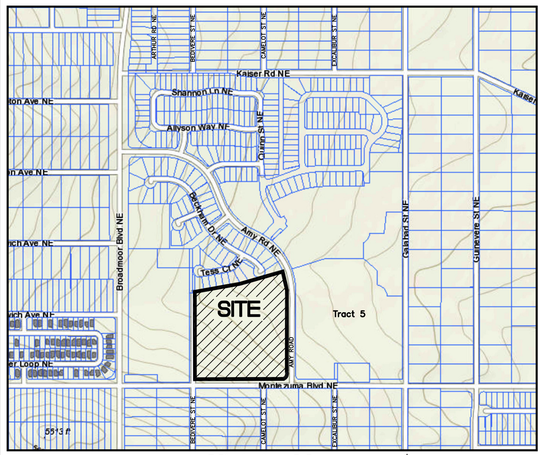
As of today, Richmond American Homes expects to have all subdivision improvements completed by the end of 2025, and to be ready to record a final plat shortly thereafter.

Sincerely,

NIEL CAMPBELL
VP LAND AQUISITION
RICHMOND AMERICAN HOMES

AMENDED PRELIMINARY PLAT

Plat for
Broadmoor Heights, Unit 4
Being Comprised of
Tract 4-A, Broadmoor Heights
City of Rio Rancho
Sandoval County, New Mexico
May 2024



Vicinity Map

N.T.S.

Notes

1. FIELD SURVEY PERFORMED IN FEBRUARY 2006 AND NOVEMBER 2012 AND ADDITIONAL SURVEY WORK PERFORMED IN JUNE & JULY 2013 AND APRIL & MAY 2017.
2. ALL DISTANCES ARE GROUND DISTANCES: US SURVEY FOOT.
3. THE PARCELS SHOWN HEREON ARE LOCATED IN PROJECTED SECTION 6, TOWNSHIP 12 NORTH, RANGE 3 EAST, N.M.P.M., WITHIN THE TOWN OF ALAMEDA GRANT.
4. THE BASIS OF BEARINGS REFERENCES NEW MEXICO STATE PLANE COORDINATES (NAD 83-CENTRAL ZONE).
5. SUBDIVISION DATA

NUMBER OF TRACTS REPLATTED:	1
NUMBER OF LOTS CREATED:	53
NUMBER OF TRACTS CREATED:	5
MILES OF ROAD CREATED:	0.3567 MILES
RIGHT OF WAY DEDICATED BY THIS PLAT:	2.4558 ACRES
TOTAL PLATTED ACREAGE:	14.4558 ACRES

6. THE COORDINATES SHOWN HEREON ARE MODIFIED NEW MEXICO STATE PLANE COORDINATES (NAD 83-GROUND), USING GROUND TO GRID FACTOR OF 0.999656696 WITH AN ORIGIN OF (0,0).
7. MEASURED BEARINGS AND DISTANCES MATCH RECORD INFORMATION EXACTLY AS SHOWN ON THE PLAT OF RECORD (8/19/2022, VOL. 3, FOL. 4923)(RRE BK. 31, PG. 70-72).

Free Consent & Dedication

THE SUBDIVISION HEREON DESCRIBED IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S) AND/OR PROPRIETOR(S) THEREOF DO HEREBY GRANT THE RIGHT TO CONSTRUCT, OPERATE, INSPECT, MAINTAIN FACILITIES THEREIN; AND ALL PUBLIC UTILITIES EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRICAL POWER, COMMUNICATION, WATER AND WASTEWATER SERVICES FOR BURIED DISTRIBUTION LINES, CONDUITS AND PIPES FOR UNDERGROUND UTILITIES WHERE SHOWN OR INDICATED, AND INCLUDING THEIR RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO ALL OF THE FOREGOING AND DOES HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED.

BGV RIO RANCHO I, LLC

_____
DAVID BECKHAM, AUTHORIZED REPRESENTATIVE DATE

STATE OF)
) SS
COUNTY OF)

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON _____, 20__
BY: DAVID BECKHAM, AUTHORIZED REPRESENTATIVE, BGV RIO RANCHO I, LLC

BY: _____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

Indexing Information

Section 1, T.12N., R.2E., and Section 6, T.12N., R.3E., N.M.P.M., as Projected into the Town of Alameda Grant
Subdivision: Broadmoor Heights
UPC #1-012-072-538-055
Owner: BGV Rio Rancho I, LLC

Purpose of Plat

1. GRANT EASEMENTS AS SHOWN HEREON.
2. DEFINE AND CONFINE EASEMENTS AS SHOWN HEREON.
3. SUBDIVIDE AS SHOWN HEREON.

Documents

1. PLAT FOR BROADMOOR HEIGHTS, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON APRIL 13, 2018, IN VOLUME 3, FOLIO 4211 (RRE BOOK 27, PAGE 64-69).
2. PLAT FOR BROADMOOR HEIGHTS, UNIT 2, FILED IN THE SANDOVAL COUNTY CLERK'S OFFICE ON JUNE 30, 2020, IN VOLUME 3, FOLIO 4558 (RRE BOOK 30, PAGE 13-15).
2. PLAT OF RECORD FOR TRACT 4-A, BROADMOOR HEIGHTS, FILED IN THE SANDOVAL COUNTY CLERK'S OFFICE ON AUGUST 19, 2022, IN VOL. 3, FOLIO 4923 (RRE BK 31, PAGES 70-72).

Legal Description

TRACT 4-A, OF BROADMOOR HEIGHTS, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO, ON AUGUST 19, 2022, IN VOL. 3, FOLIO 4923 (RRE BK 31, PAGES 70-72).

Public Utility Easements

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.

B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.

C. Qwest Corporation d/b/a CenturyLink QC for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.

D. Sparklight for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

D. Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

E. City of Rio Rancho Utilities (water and sanitary sewer) for installation, maintenance, and services of lines and other equipment and facilities reasonably necessary to provide services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM) and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

Filing Information

STATE OF NEW MEXICO)
) SS
COUNTY OF SANDOVAL)

THIS INSTRUMENT WAS FILED FOR RECORD ON

___: ___ AM/PM, _____,
20___

RECORDED IN VOLUME _____, OF RECORDS OF SAID

COUNTY, FOLIO _____

BY: _____,
DEPUTY

Public Approvals

CHAIRMAN OF THE RIO RANCHO PLANNING AND ZONING BOARD

APPROVED THE _____ DAY OF _____ , 2019.

BY: _____
CHAIRMAN OF THE RIO RANCHO PLANNING AND ZONING BOARD

CITY CLERK'S CERTIFICATE:

I, REBECCA MARTINEZ, CITY CLERK OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED AND ALL RIGHTS OF WAY (ROW) WHICH ARE SHOWN HEREON WERE ACCEPTED FOR DEDICATION TO THE CITY OF RIO RANCHO BY THE CITY OF RIO RANCHO PLANNING AND ZONING BOARD AT THEIR MEETING HELD ON THE

_____ DAY OF _____, 2019.

BY: _____
REBECCA MARTINEZ, CITY CLERK

TREASURER'S CERTIFICATE:

I, JENNIFER A. TAYLOR, TREASURER OF SANDOVAL COUNTY, NEW MEXICO DO HEREBY CERTIFY THAT THE PREVIOUS TEN (10) YEARS PROPERTY TAXES HAVE BEEN PAID IN FULL.

_____
SANDOVAL COUNTY TREASURER DATE

Utility Approvals

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED COMPANY REPRESENTATIVES.

_____
CITY OF RIO RANCHO

_____
QWEST CORPORATION D/B/A CENTURYLINK QC

_____
PNM ELECTRIC

_____
NEW MEXICO GAS COMPANY

_____
SPARKLIGHT

_____
COMCAST

Jurisdiction Certification

I, BRIAN J. MARTINEZ, A NEW MEXICO REGISTERED, PROFESSIONAL, LAND SURVEYOR DO HEREBY AFFIRM THAT THE PROPERTY DESCRIBED DOES LIE WITHIN THE PLATTING AND SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO, NEW MEXICO.

_____
BRIAN J. MARTINEZ DATE
N.M.P.S. No. 18374

BRIAN J. MARTINEZ NEW MEXICO No. 18374 REGISTERED PROFESSIONAL SURVEYOR

Surveyor's Certificate

I, BRIAN J. MARTINEZ, A REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED BY ME OR UNDER MY SUPERVISION, AND MEETS THE MINIMUM REQUIREMENTS OF MONUMENTATION AND SURVEYS OF THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE CHAPTER 155, AND IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

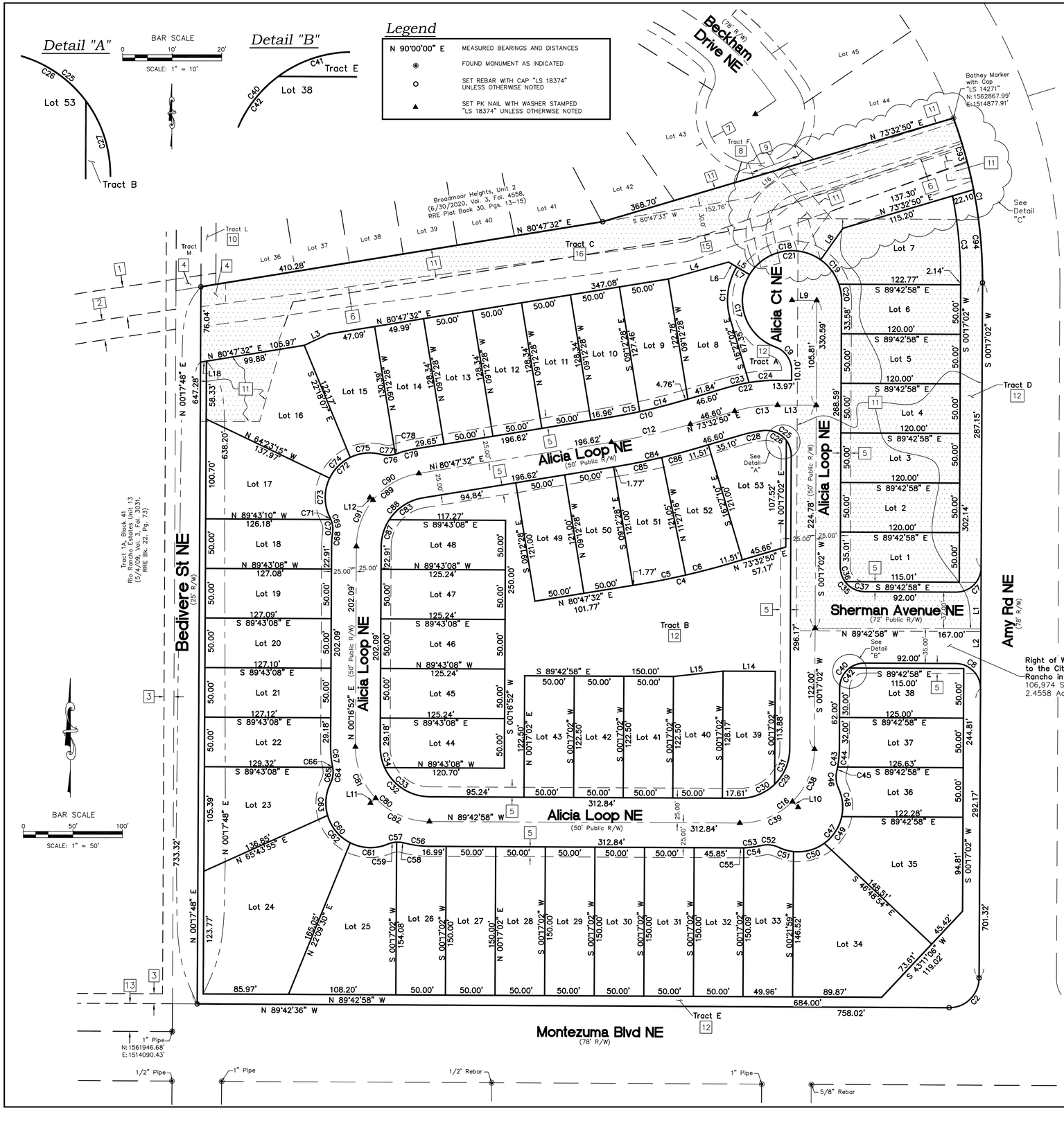
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BRIAN J. MARTINEZ DATE
N.M.R.P.S. NO. 18374

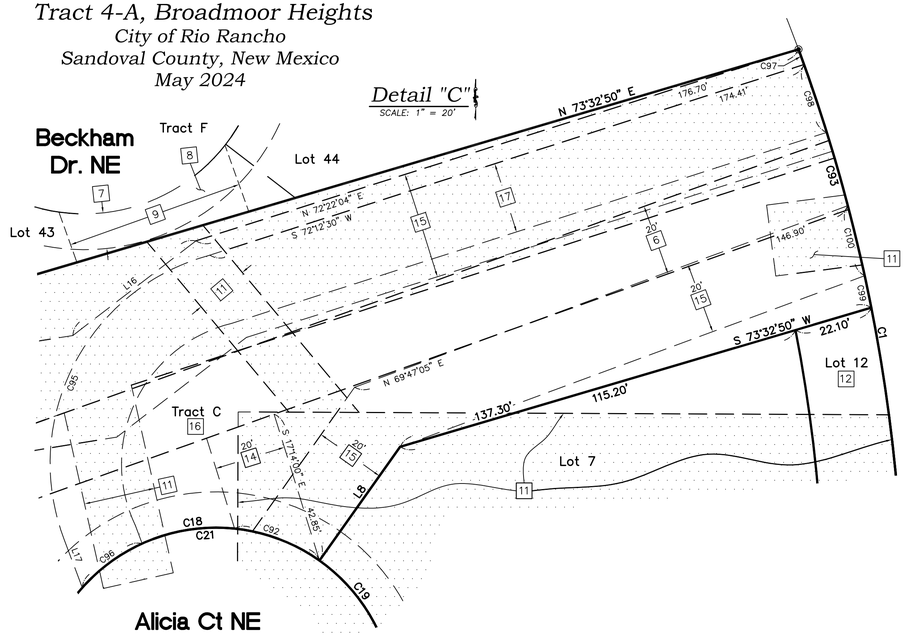
BRIAN J. MARTINEZ NEW MEXICO No. 18374 REGISTERED PROFESSIONAL SURVEYOR

CSI-CARTESIAN SURVEYS INC.
P.O. BOX 44414 RIO RANCHO, N.M. 87174
Phone (505) 896 - 3050 Fax (505) 891 - 0244
cartesianbrian@gmail.com

AMENDED PRELIMINARY PLAT

Plat for
Broadmoor Heights, Unit 4
Being Comprised of
Tract 4-A, Broadmoor Heights
City of Rio Rancho
Sandoval County, New Mexico
May 2024





Easement Notes

1. EXISTING REMAINING PORTION OF 30' DRAINAGE EASEMENT (7/11/2007, VOL. 3, FOL. 2821-B) (RRE BK. 21, PG 2) AND MODIFIED BY PLAT (6/30/2020, VOL. 3, FOL. 4558) (RRE BK. 30, PG. 13-15)
2. EXISTING 20' PUBLIC UTILITY EASEMENT (7/11/2007, VOL. 3, FOL. 2821-B) (RRE BK. 21, PG 2)
3. EXISTING 10' P.U.E. (5/4/2009, VOL. 3, FOL. 3031) (RRE BK. 22, PG. 73)
4. EXISTING DRAINAGE EASEMENT RETAINED IN PLACE OF VACATED FORMER RIGHT OF WAY (4/13/2018, VOL. 3, FOL. 4211) (RRE BK. 27, PG. 64-69)
5. 10' P.U.E. GRANTED WITH THE FILING OF THIS PLAT
6. EXISTING 20' SANITARY SEWER EASEMENT (4/13/2018, VOL. 3, FOL. 4211) (RRE BK. 27, PG. 64-69)
7. EXISTING 10' P.U.E. (6/30/2020, VOL. 3, FOL. 4558) (RRE BK. 30, PG. 13-15)
8. EXISTING PUBLIC DRAINAGE EASEMENT ACROSS TRACT F (6/30/2020, VOL. 3, FOL. 4558) (RRE BK. 30, PG. 13-15)
9. EXISTING PUBLIC WATER & SEWER EASEMENT (6/30/2020, VOL. 3, FOL. 4558) (RRE BK. 30, PG. 13-15)
10. EXISTING PRIVATE BLANKET DRAINAGE EASEMENT ACROSS TRACT L (6/30/2020, VOL. 3, FOL. 4558) (RRE BK. 30, PG. 13-15)
11. EXISTING FLOATING PUBLIC DRAINAGE EASEMENT GRANTED TO THE CITY OF RIO RANCHO (8/19/2022, VOL. 3, FOL. 4923) (RRE BK., PG. 70-72) FORMER LOCATION WITHIN TRACT 4-A, SHOWN HEREON AS [ ] NOW CONFINED AND DEFINED BY THIS PLAT WITHIN TRACT C ONLY
12. TRACTS A, B, D AND E SHALL BE DESIGNATED AS PRIVATE COMMON AREAS WITH BLANKET LANDSCAPE AND PUBLIC DRAINAGE EASEMENTS. TO BE MAINTAINED BY THE HOA BENEFITING THE RESIDENTS THEREOF. GRANTED WITH THE FILING OF THIS PLAT.
13. EXISTING 28' RIGHT-OF-WAY EASEMENT (5/4/2009, VOL. 3, FOL. 3031) (RRE BK. 22, PG. 73)
14. 20' PUBLIC SANITARY SEWER EASEMENT OPERATED AND MAINTAINED BY THE CITY OF RIO RANCHO GRANTED WITH THE FILING OF THIS PLAT
15. PUBLIC STORM DRAIN EASEMENT TO BE OPERATED AND MAINTAINED BY THE CITY OF RIO RANCHO, GRANTED WITH THE FILING OF THIS PLAT
16. BLANKET PEDESTRIAN AND LANDSCAPE EASEMENT WITHIN TRACT C TO BE MAINTAINED BY THE HOA, GRANTED WITH THE FILING OF THIS PLAT
17. 20' FIRE ACCESS EASEMENT TO BE OPERATED AND MAINTAINED BY THE CITY OF RIO RANCHO, GRANTED WITH THE FILING OF THIS PLAT

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Plat for
Broadmoor Heights, Unit 4
Being Comprised of
Tract 4-A, Broadmoor Heights
City of Rio Rancho
Sandoval County, New Mexico
August 2023

Parcel Table		
Parcel Name	Area (Acres)	Area (Sq. Ft.)
Lot 1	0.1372	5,976
Lot 2	0.1377	6,000
Lot 3	0.1377	6,000
Lot 4	0.1377	6,000
Lot 5	0.1377	6,000
Lot 6	0.1381	6,015
Lot 7	0.2113	9,204
Lot 8	0.1670	7,274
Lot 9	0.1440	6,273
Lot 10	0.1471	6,407
Lot 11	0.1473	6,417
Lot 12	0.1473	6,417
Lot 13	0.1473	6,417
Lot 14	0.1476	6,431
Lot 15	0.1723	7,506
Lot 16	0.2768	12,059
Lot 17	0.2013	8,767
Lot 18	0.1462	6,367
Lot 19	0.1459	6,354
Lot 20	0.1459	6,355
Lot 21	0.1459	6,356
Lot 22	0.1463	6,371
Lot 23	0.2211	9,632
Lot 24	0.4128	17,982
Lot 25	0.2694	11,735
Lot 26	0.1735	7,557
Lot 27	0.1722	7,500
Lot 28	0.1722	7,500
Lot 29	0.1722	7,500
Lot 30	0.1722	7,500
Lot 31	0.1722	7,500
Lot 32	0.1722	7,500
Lot 33	0.1732	7,545
Lot 34	0.3360	14,636
Lot 35	0.2659	11,582
Lot 36	0.1430	6,228
Lot 37	0.1437	6,260
Lot 38	0.1421	6,190
Lot 39	0.1512	6,587
Lot 40	0.1439	6,267
Lot 41	0.1406	6,125
Lot 42	0.1406	6,125
Lot 43	0.1406	6,125
Lot 44	0.1430	6,231
Lot 45	0.1438	6,262
Lot 46	0.1438	6,262
Lot 47	0.1438	6,262
Lot 48	0.1422	6,192
Lot 49	0.1389	6,050
Lot 50	0.1389	6,050
Lot 51	0.1439	6,268
Lot 52	0.1499	6,531
Lot 53	0.1728	7,527
Right of Way Dedicated to the City of Rio Rancho in Fee Simple	2.4558	106,974
Tract A	0.0674	2,935
Tract B	0.9284	40,441
Tract C	1.3325	58,043
Tract D	0.2257	9,831
Tract E	0.4888	21,291

Curve Table					
Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C1	169.54'	472.00'	20°34'50"	168.63'	S 10°00'23" E
C2	47.13'	30.00'	90°00'22"	42.43'	S 45°17'13" W
C3	88.03'	450.00'	11°12'28"	87.88'	N 05°19'12" W
C4	100.15'	792.00'	7°14'42"	100.08'	N 77°10'11" E
C5	52.40'	792.00'	3°47'28"	52.39'	N 78°53'48" E
C6	47.74'	792.00'	3°27'14"	47.74'	N 75°16'27" E
C7	39.27'	25.00'	90°00'00"	35.36'	N 45°17'02" E
C8	39.27'	25.00'	90°00'00"	35.36'	N 44°42'58" W
C9	30.77'	25.00'	70°31'44"	28.87'	N 34°58'50" W
C10	78.52'	621.00'	7°14'42"	78.47'	N 77°10'11" E
C11	53.94'	65.00'	47°32'46"	52.40'	S 07°18'16" W
C12	81.69'	646.00'	7°14'42"	81.63'	N 77°10'11" E
C13	43.82'	150.00'	16°44'12"	43.66'	S 81°54'56" W
C14	45.47'	621.00'	4°11'43"	45.46'	N 75°38'41" E
C15	33.05'	621.00'	3°02'59"	33.05'	N 79°16'02" E
C16	117.81'	75.00'	90°00'00"	106.07'	N 45°17'02" E
C17	88.42'	50.00'	101°19'20"	77.34'	S 19°35'01" E
C18	82.25'	50.00'	94°15'06"	73.28'	S 78°12'12" W
C19	31.23'	50.00'	35°47'04"	30.72'	N 36°46'43" W
C20	16.73'	50.00'	19°10'14"	16.65'	N 09°18'05" W
C21	218.63'	50.00'	250°31'44"	81.65'	S 55°01'10" W
C22	51.12'	175.00'	16°44'12"	50.94'	S 81°54'56" W
C23	22.10'	175.00'	7°14'08"	22.09'	S 77°09'54" W
C24	29.02'	175.00'	9°30'04"	28.99'	S 85°32'00" W
C25	42.03'	25.00'	96°20'00"	37.25'	N 47°52'58" W
C26	25.95'	25.00'	59°27'48"	24.80'	N 66°19'04" W
C27	16.09'	25.00'	36°52'12"	15.81'	N 18°09'04" W
C28	22.70'	125.00'	10°24'12"	22.67'	S 78°44'56" W
C29	78.54'	50.00'	90°00'00"	70.71'	N 45°17'02" E
C30	38.77'	50.00'	44°25'37"	37.81'	N 68°04'14" E
C31	39.77'	50.00'	45°34'23"	38.73'	N 23°04'14" E
C32	78.54'	50.00'	89°59'50"	70.71'	S 44°43'03" E
C33	57.06'	50.00'	65°23'12"	54.01'	S 57°01'22" E
C34	21.48'	50.00'	24°36'38"	21.31'	S 12°01'27" E
C35	39.27'	25.00'	90°00'00"	35.36'	S 44°42'58" E
C36	16.08'	25.00'	36°50'29"	15.80'	S 18°08'12" E
C37	23.19'	25.00'	53°09'31"	22.37'	S 63°08'12" E
C38	58.90'	75.00'	45°00'00"	57.40'	N 22°47'02" E
C39	58.90'	75.00'	45°00'00"	57.40'	N 67°47'02" E
C40	39.27'	25.00'	90°00'00"	35.36'	S 45°17'02" W
C41	16.09'	25.00'	36°52'12"	15.81'	S 71°50'56" W
C42	23.18'	25.00'	53°07'48"	22.36'	S 26°50'56" W
C43	22.84'	100.00'	13°05'19"	22.79'	N 06°49'42" E
C44	18.10'	100.00'	10°22'11"	18.07'	N 05°28'08" E
C45	4.75'	100.00'	2°43'08"	4.75'	N 12°00'47" E
C46	16.94'	25.00'	38°48'45"	16.61'	S 06°02'01" E
C47	111.09'	45.00'	141°26'52"	84.95'	N 45°17'02" E
C48	29.58'	45.00'	37°39'51"	29.05'	N 06°36'28" W
C49	32.84'	45.00'	41°49'09"	32.12'	N 33°08'01" E
C50	32.84'	45.00'	41°49'09"	32.12'	N 74°57'10" E
C51	15.82'	45.00'	20°08'44"	15.74'	S 74°03'54" E
C52	16.94'	25.00'	38°48'45"	16.61'	N 83°23'55" W
C53	22.84'	100.00'	13°05'19"	22.79'	N 83°44'22" E
C54	18.69'	100.00'	10°42'41"	18.67'	N 82°33'03" E
C55	4.15'	100.00'	2°22'38"	4.15'	N 89°05'43" E
C56	25.70'	100.00'	14°43'38"	25.63'	S 82°21'09" E
C57	16.61'	25.00'	38°04'17"	16.31'	S 85°58'32" W
C58	7.66'	25.00'	17°33'09"	7.63'	N 83°45'54" W
C59	8.95'	25.00'	20°31'08"	8.91'	S 77°11'57" W
C60	109.59'	45.00'	139°32'26"	84.45'	S 43°17'23" E
C61	39.28'	45.00'	50°00'47"	38.05'	S 88°03'13" E
C62	36.82'	45.00'	46°53'11"	35.81'	S 39°36'14" E
C63	33.49'	45.00'	42°38'28"	32.72'	S 05°09'36" W
C64	16.61'	25.00'	38°04'17"	16.31'	N 07°26'41" E
C65	16.36'	25.00'	37°29'14"	16.07'	N 07°44'13" E
C66	0.25'	25.00'	0°35'03"	0.25'	N 11°17'56" W
C67	20.72'	100.00'	11°52'19"	20.68'	S 05°39'18" E
C68	13.76'	100.00'	7°53'01"	13.75'	S 04°13'23" W
C69	15.42'	25.00'	35°20'05"	15.17'	N 09°30'10" W
C70	13.67'	25.00'	31°19'36"	13.50'	N 07°29'55" W

Curve Table					
Curve #	Length	Radius	Delta	Chord Length	Chord Direction
C71	1.75'	25.00'	4°00'30"	1.75'	N 25°09'57" W
C72	103.90'	45.00'	132°17'01"	82.31'	S 38°58'18" W
C73	41.56'	45.00'	52°54'35"	40.09'	S 00°42'55" E
C74	30.09'	45.00'	38°18'57"	29.54'	S 44°53'51" W
C75	32.25'	45.00'	41°03'29"	31.56'	S 84°35'04" W
C76	15.42'	25.00'	35°20'05"	15.17'	N 87°26'46" E
C77	14.16'	25.00'	32°27'38"	13.97'	N 88°52'59" E
C78	1.25'	25.00'	2°52'27"	1.25'	N 71°12'57" E
C79	19.22'	100.00'	11°00'48"	19.19'	S 75°17'08" W
C80	117.81'	75.00'	89°59'50"	106.06'	S 44°43'03" E
C81	57.03'	75.00'	43°34'16"	55.67'	S 21°30'16" E
C82	60.77'	75.00'	46°25'34"	59.12'	S 66°30'11" E
C83	41.63'	50.00'	47°42'18"	40.44'	S 56°56'22" W
C84	84.85'	671.00'	7°14'42"	84.79'	N 77°10'11" E
C85	47.66'	671.00'	4°04'10"	47.65'	N 78°45'26" E
C86	37.19'	671.00'	3°10'31"	37.18'	N 75°08'06" E
C87	28.63'	50.00'	32°48'21"	28.24'	S 16°41'03" W
C88	70.26'	50.00'	80°30'40"	64.62'	S 40°32'12" W
C89	105.39'	75.00'	80°30'40"	96.93'	S 40°32'12" W
C90	54.74'	75.00'	41°49'14"	53.54'	S 59°52'55" W
C91	50.65'	75.00'	38°41'26"	49.69'	S 19°37'35" W
C92	25.62'	50.00'	29°21'28"	25.34'	N 69°20'59" W
C93	75.08'	472.00'	9°06'52"	75.01'	N 15°44'22" W
C94	94.46'	472.00'	11°27'58"	94.30'	N 05°26'57" W
C95	100.52'	60.12'	95°47'34"	89.21'	S 27°10'09" W
C96	20.94'	50.00'	24°00'02"	20.79'	S 53°36'36" W
C97	4.51'	472.00'	0°32'52"	4.51'	N 20°01'22" W
C98	20.00'	472.00'	2°25'41"	20.00'	N 18°32'06" W
C99	9.11'	472.00'	1°06'21"	9.11'	N 11°44'07" W
C100	20.14'	472.00'	2°26'41"	20.14'	N 13°30'37" W

Line Table		
Line #	Direction	Length (ft)
L1	N 00°17'02" E	62.00'
L2	N 00°17'02" E	60.00'
L3	S 64°58'31" W	26.94'
L4	S 74°16'43" W	63.02'
L5	N 58°55'21" W	24.63'
L6	S 58°55'21" E	9.63'
L7	S 58°55'21" E	15.00'
L8	N 35°19'45" E	38.98'
L9	N 89°42'58" W	25.00'
L10	N 44°42'58" W	8.00'
L11	N 46°42'37" E	7.15'
L12	S 51°01'42" E	4.05'
L13	N 89°42'58" W	38.97'
L14	S 89°42'58" E	52.61'
L15	N 83°48'43" E	50.32'
L16	S 52°26'45" W	43.41'
L17	S 20°33'45" E	14.49'
L18	N 80°47'32" E	6.08'

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NEW MEXICO'S LEADING NEWS SOURCE

ALBUQUERQUE JOURNAL

El Defensor Chieftain | Rio Rancho Observer | Valencia County News-Bulletin

Dept 880697
PO Box 29650
Phoenix, AZ 85038-9650 Phone: (505)823-3220

Proof of Ad 05/08/2025

Account:	**1010956**
Name:	**CITY OF RIO RANCHO**
Company:	**CITY OF RIO RANCHO DEVELOPMENT SVCS DEPT** **ATTN: ACCOUNTS PAYABLE**
Address:	**3200 CIVIC CENTER CIR NE** **RIO RANCHO, NM 87144**
Telephone:	**(505)891-5005**

Ad ID:	**228070**
Description:	
Run Dates:	**05/12/2025 - 05/12/2025**
Class:	**3001**
Orig User:	**master**
Words:	**423**
Lines:	**122**
Agate Lines:	**174**
Depth:	**12.37**
Blind Box:	

Total Ad Cost **$142.88**

Amount Paid **$0.00**

Publication	Start	Stop	Inserts	Cost
Albuquerque Journal	05/12/2025	05/12/2025	1	132.76

CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.

The City of Rio Rancho

Development Services
Planning Division
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 ● Fax (505) 896-8994

May 19, 2025

RE: Preliminary Plat (Extension), Case No. 23-210-00010
Broadmoor Heights Unit 4 Subdivision

Dear Property Owner:

You are receiving this certified notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, Richmond American Homes, requests approval of an extension for a previously approved preliminary plat, that created 53 Single-Family lots and three tracts from the property legally described as Broadmoor Heights, Tract 4-A.

The **Planning and Zoning Board** will consider this request at a public hearing on **May 27, 2025** at 6:00 pm in the **Council Chambers** and **Virtually** through the **zoom link and number below.**

On the back of this letter is a location map of the project, with the property identified by diagonal stripes.

If you would like to comment on this application, you are encouraged to send in comments in writing, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

If you would like to participate virtually during the meeting please use the following information to join the meeting: https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09 or call +1(253)215-8782 (US) Meeting ID: 851 8074 1871 **Passcode: 026819**

Please do not hesitate to contact me via e-mail me at bisaacs@rrnm.gov or call me at 505-891-5035, if you have any questions concerning this matter. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing. The meeting is also best accessed for viewing via www.rrnm.gov.

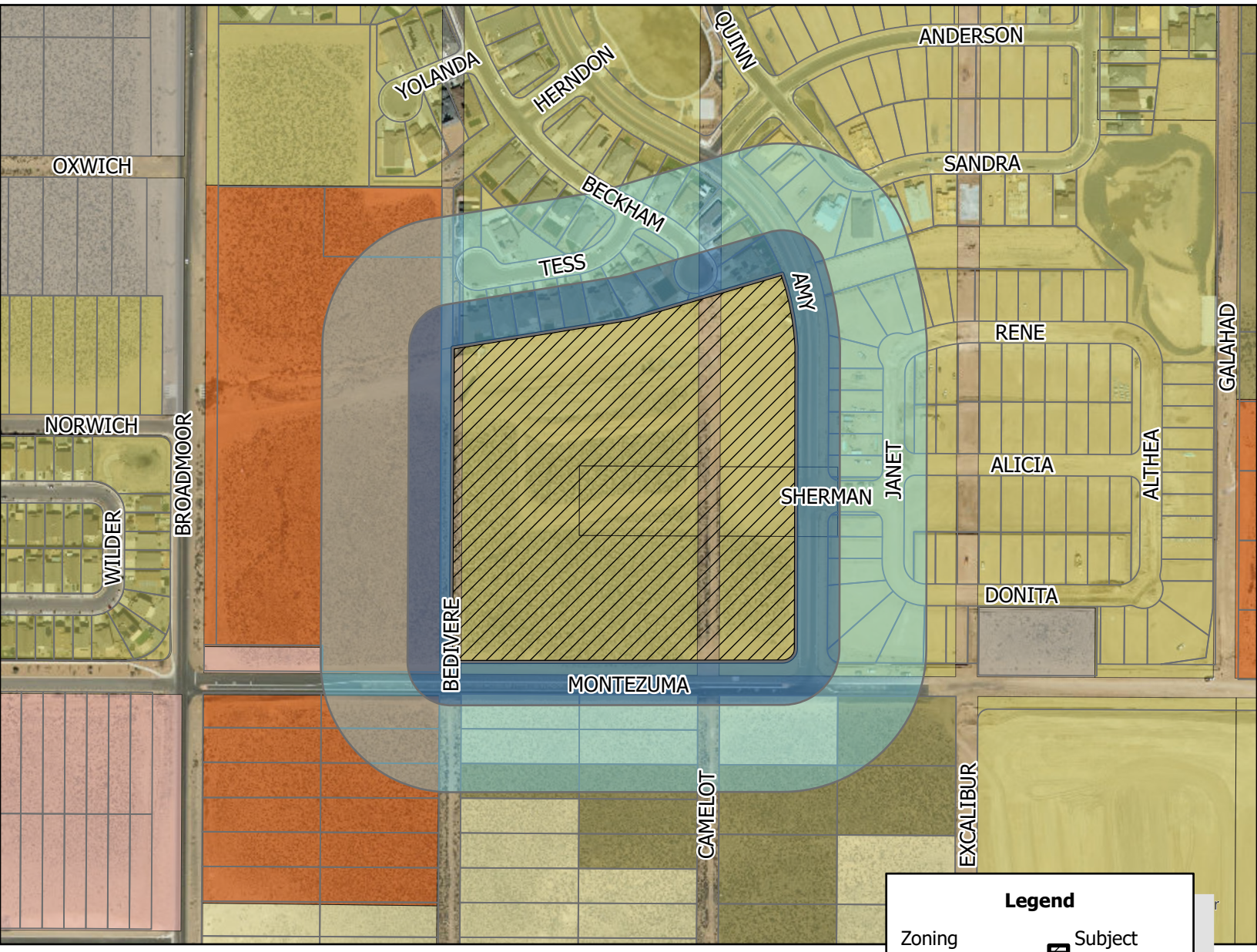
If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Ben Isaacs
Municipal Planner I
Development Services Department
City of Rio Rancho



BROADMOOR HEIGHTS UNIT 4
NOTICE MAP



Rio Rancho
City of Vision

GIS
Moving Spatial Data Forward

N
W
E
S

0 0.01 0.03 0.06 0.09 0.12 0.15
Miles

DISCLAIMER: All information on this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map courtesy of Ben Isaacs, 5/7/2025

DOC: 2025002834 B: 428 P: 2834 SWD
02/06/2025 04:02:31 PM Page 1 of 3
Anne Brady-Romero, County Clerk-Sandoval County, NM

WHEN RECORDED, RETURN TO:
M.D.C. Holdings, Inc.
4350 South Monaco Street
Denver, CO 80237
Attention: Matt Hinrikus

Old Republic Title Company 2500071 LO

SPECIAL WARRANTY DEED

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the undersigned, **BHU4 Development, LLC**, a New Mexico limited liability company (the "**Grantor**"), hereby grants, sells, and conveys to **RICHMOND AMERICAN HOMES OF NEW MEXICO, INC.**, a Colorado corporation (the "**Grantee**") that certain real property described on Exhibit A attached hereto and incorporated herein by this reference, together with all rights and privileges appurtenant thereto:

SUBJECT TO all taxes and other assessments, reservations in patents and all easements, rights of way, encumbrances, liens, covenants, conditions, restrictions, obligations and liabilities as may appear of record, any matters which would be shown or discovered by a survey or inspection of the property, zoning ordinances and regulations and any other laws, ordinances or governmental regulations restricting or regulating the use, occupancy or enjoyment of the property.

AND GRANTOR hereby binds itself and its successors to warrant and defend the title against all of the acts of Grantor and no other, subject to the matters set forth above.

With special warranty covenants.

[SIGNATURE ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the undersigned has executed this Special Warranty Deed as of this 6 day of February 2025.

GRANTOR:

BHU4 Development, LLC
a New Mexico limited liability company

By: _____
Simon T. Haynes, Manager

STATE OF NEW MEXICO)
) §§
COUNTY OF BERNALILLO)

The foregoing Special Warranty Deed consisting of 3 pages was executed before me on February 4, 2025, by Simon T. Haynes, the Manager of BHU4 Development, LLC, a New Mexico limited liability company.

STATE OF NEW MEXICO
NOTARY PUBLIC
NICOSHA SCHEDLBAUER
Commission Number 2004999
Commission Expires 12/19/2028

Nicosha Schedlbauer
Notary Public

My Commission Expires: 12/19/2028

Exhibit A

Legal Description of the Easement Property

Tract Four-A (4-A) of the Plat for Tract 4-A, BROADMOOR HEIGHTS, being comprised of Tract 4, Broadmoor Heights and a portion of Vacated Bedivere Street NE Right of Way, City of Rio Rancho, Sandoval County, New Mexico, as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Sandoval County, New Mexico on August 19, 2022, in Plat Book 3, page 4923, (Rio Rancho Estates Book 31, page 70).

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 25-280-00002

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Subdivision Variance. The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements on all side and rear lot lines for the proposed Dos Soles Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.

BACKGROUND AND ANALYSIS:
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3.

A Site Plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

The subject properties are zoned SU: Special Use District for Townhomes per Ordinance No. 43, Enactment No. 07-42, adopted by the Governing Body on July 11, 2007.

The subject properties are additionally within the Unit 10 Specific Area Plan, adopted by the Governing Body on August 24, 2016 via Resolution No. 68, Enactment No. 16-065 and most recently amended on June 27, 2024 under Resolution No. 52, Enactment No. 24-051.

This Subdivision Variance request is for the proposed Dos Soles Subdivision, being heard concurrently under case #25-210-00002. The proposed subdivision is located on the southeast intersection of Southern Blvd SE, a principal arterial, and 7th St SE, a residential road (see attached map). Dos Soles comprises approximately 2.9932 plat acres and would create 42 lots and 2 tracts, all zoned SU: Special Use District for Townhomes.

The subject Subdivision Variance application requests approval of allowance for solely 10' front public utility easements across all lots, and all tracts as needed, with no side and rear 5' public utility easements on lots. However, please see DSD Engineering's markup of the plat in the attachment "Reviewer Comments," which identifies 5' public utility easements along the existing property boundaries, which should remain.

REVIEW CRITERIA:

R.O. 2003 § 155.60 (A) addresses Subdivision Variances, stating “(A) Variance from the strict

application of design standards may be allowed in cases where unusual conditions exist, or a variance would provide an improved design. Financial gain, loss or monetary savings cannot be considered solely as a basis for a variance request."

Staff recommends the Planning and Zoning Board finds that the subject Subdivision Variance is necessary due to the nature of the development. As Dos Soles will consist of attached townhomes, side public utility easements would prohibit this configuration. The requested subdivision variance would provide for improved design of this subdivision. Criteria is satisfied.

CONFORMANCE WITH CITY POLICIES AND REGULATIONS:
Application materials for this Subdivision Variance request were sent to the below agencies for review:

Development Services Planning	Comments throughout ABM & in "Reviewer Comments."
Development Services Engineering	Comments attached in "Reviewer Comments."
Rio Rancho Fire & Rescue	Comments attached in "Reviewer Comments."
Rio Rancho Police	No comments received.
SSCAFCA	No adverse comments.
Parks, Recreation, and Community Services	No adverse comments.
Rio Rancho Public Schools	No comments received.
MRMPO	No comments received.

SURROUNDING LAND USE/ZONING:
The proposed Dos Soles Subdivision is bounded by R-1: Single-Family Residential District in all directions.

NOTIFICATIONS: Notice of pending development application was sent together with Preliminary Plat request (#25-210-00002) via certified mail to property owners within 100' of the subject property and first class postcards to property owners within 300' of the subject property 15 days prior to the hearing. A legal notice was published in the Albuquerque Journal on May 12, 2025. A public notice sign was posted to the property as required by ordinance.

IMPACT:

The Development Services Department recommends approval of Subdivision Variance request #25-280-00002 subject to the findings set forth below:

General Findings of Fact:
1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant’s request for a Subdivision Variance to easement requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

Specific Findings of Fact for Approval:
1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.43 is approved for the Dos Soles Subdivision, Preliminary Plat case #25-210-00002.
3. The Applicant shall provide for 5 ft Public Utility Easements along perimeter of the subdivision, adjacent to properties abutting subdivision.

If the Planning and Zoning Board determines that the application does not adequately meet the criteria for granting a Subdivision Variance, then the following specific findings of fact for denial are recommended:

Specific Findings of Fact for Denial:
1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.43.

ALTERNATIVES:

The Planning and Zoning Board may:
1. Approve the Subdivision Variance with findings.
2. Approve the Subdivision Variance with amendments to the findings.
3. Deny the Subdivision Variance.
4. Postpone the Subdivision Variance to allow for further review and information.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends the Planning and Zoning Board approve the requested Subdivision Variance with findings.

ATTACHMENT: Zoning, Location Map
ATTACHMENT: Application & Authorization
ATTACHMENT: Justification
ATTACHMENT: Preliminary Plat
ATTACHMENT: Construction Plans
ATTACHMENT: Reproduction of Notices, Legal Ad
ATTACHMENT: Reviewer Comments
ATTACHMENT: Findings_of_Fact_BMB.docx

DOS SOLES SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE
RRE UNIT 7, BLOCK 7, LOTS 1-3



RioRancho
City of Vision

0 60 120 240 360 480
Feet

Subject Properties
Roads
Zoning
R-1
SU

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by:Tim Dvorak on 5/9/2025

Development Services Department, Ste. 130
3200 Civic Center Circle NE, Rio Rancho, NM 87144
(505) 891-5005

PLANNING & ZONING LAND USE APPLICATION

Please check appropriate box

Administrative Permit	Plan	Subdivision	Zoning
☐ Community Residential Care Facility	☐ Comprehensive Plan Amendment	☐ Final Plat	☐ Annexation
☐ Development Review Committee (DRC)	☐ Corridor Plan Amendment	☐ Preliminary Plat	☐ Appeal
☐ Home Occupation	☐ Master Plan	☐ Summary Plat	☐ Conditional Use Permit
☐ Model Home / Sales Office	☐ Master Plan Amendment	☐ Vacation of Plat/Street	☐ Master Sign Plan
☐ Residential Child Care Facility 6 or <	☐ Specific Area Plan Amendment	☐ Street Name Change	☐ Site Plan
☐ Sign Permit	☐ Text Amendment	☐ Subdivision Interpretation	☐ Special Exception
☐ Other		☒ Subdivision Variance	☒ Variance
			☐ Zone Map Amendment
			☐ Zoning Certification
			☐ Zoning Interpretation

Please Print In Ink Only or Type
Application must be complete. Please attach the appropriate checklist for the action you are requesting, if applicable.

APPLICANT/AGENT INFORMATION

Applicant Name: X2D, LLC		Phone: 505.933.4411
Address: PO Box 10492		E-Mail:
City: Albuquerque	State: NM	Zip: 87184
Proprietary Interest:	List Owners:	
Deed or Ownership Verification Provided: (Initials)		Letter of Authorization Provided: (Initials) SG
Agent Name: Community Design Solutions, LLC / Sheldon Greer		Phone: 505.264.0472
Address: 9384 Valley View Drive NW, Suite 100		E-Mail: sheldon.greer@cdsnm.com
City: Albuquerque	State: NM	ZIP Code: 87114

DESCRIPTION OF REQUEST: (PLEASE ADD ADDITIONAL SHEET(S) IF NECESSARY)

Variance Request of the 5' Setback Requirement

Dos Soles Subdivision / southeast corner of Southern Boulevard and 7th Street

SITE INFORMATION: (PLEASE PROVIDE ACCURATE LEGAL DESCRIPTION)

Subdivision/Unit : Dos Soles	Block(s): 7	Lot(s): 1, 2, & 3
Existing Zoning: SU	Proposed Zoning: SU	
No. of existing lots: 3	No. of proposed lots: 44	Total area of site (acres) 2.9932

ACKNOWLEDGEMENT

I hereby acknowledge that I have read this entire application and affirm that all information provided is correct. I agree to comply with the requirements of the City of Rio Rancho as outlined in all applicable laws, ordinances and regulations.

Print Name: Sheldon Greer, PE	Applicant: X2D, LLC	Agent: Community Design Solutions, LLC
Signature:		Date: May 7, 2025

FOR OFFICIAL USE ONLY

H.T.E. PROJECT #	FEE	RECEIPT #

APPLICATION ACCEPTED BY: _____ **DATE:** _____

Form revised January 26, 2017

:X2Dllc, Po Box 10492, Albuquerque, NM 87184, DS.Civ.Auth

February 15th, 2025

RE: Preliminary Plat and related submittals – Dos Soles

Dear Madam/Sir:

On behalf of X2D, LLC, this letter is to authorize Sheldon Greer of Development Management Consultants, as agent to X2D, LLC to submit all applications and make all representations regarding the preliminary and final plat of Dos Soles Subdivision located in Rio Rancho NM. Dos Soles Subdivision consists of a replat of Lots 1-3, Block 7, Unit 10, Rio Rancho Estates.

Feel free to contact me if you have any questions or concerns.

Respectfully,

Matthew Herrera
X2Dllc
505-933-4411

Development Managing Consultants

Professional Construction Managers & Consulting Engineers

May 7, 2025

Tim Dvorak
City of Rio Rancho
Development Services
3200 Civic Center Cir NE
Rio Rancho, NM 87144

Re: Dos Soles Subdivision – Subdivision Variance Request

Mr. Dvorak:

DMC on behalf of X2D, LLC, requests approval of a subdivision variance requiring 5-foot minimum easements on side and rear lot lines for the proposed Dos Soles Subdivision, on the property legally described as Lots 1-3 Unit 10 Block 7, Rio Rancho Estates (proposed as Dos Soles Subdivision, containing 42 lots and 2 tracts).

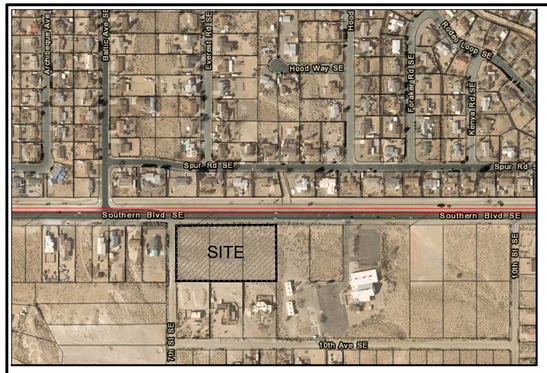
The proposed subdivision includes 10’ Public Utility Easements along the front of all lots and through the proposed tracts as necessary to reach Public Right of Way. The proposed subdivision includes attached dwelling units which share one common wall, prohibiting the use of side lot easements.

Please feel free to contact us at your convenience should you have any questions.

Sincerely,



Sheldon Greer, PE
505-264-0472



VICINITY MAP

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ADMINISTRATIVELY BY THE RIO RANCHO CITY DEVELOPMENT DEPARTMENT DIRECTOR ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS THAT MAY BE CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL) SS

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
D: City of Rio Rancho for installation, maintenance, and service of storm drain lines, manholes, and inlets, sanitary sewer lines, manholes and service lines, water lines, valves and other equipment and facilities reasonably necessary to provide storm, sanitary sewer and water services
E: Sparklight for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.
F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
L4	S 08°15'52" W	2.63'
L5	S 64°11'16" E	20.45'
L6	S 29°43'07" W	2.57'
L7	S 35°19'50" E	6.87'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	19.50'	6.62'	6.59'	N 51°59'39" E	19°27'43"
C2	25.00'	12.47'	12.34'	N 76°00'48" E	28°34'34"
C3	20.00'	31.44'	28.30'	N 44°40'12" W	90°03'28"
C4	19.50'	16.35'	15.87'	N 66°16'56" E	48°02'17"
C5	20.00'	31.42'	28.28'	N 44°41'55" W	90°00'00"
C6	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C7	25.00'	16.09'	15.81'	S 71°15'50" E	36°52'12"
C8	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C9	19.50'	13.42'	13.16'	S 19°24'48" E	39°25'46"
C10	30.50'	9.90'	9.86'	S 31°36'07" E	18°35'58"
C11	25.00'	12.46'	12.34'	S 08°01'08" E	28°34'00"
C12	29.83'	8.34'	8.31'	S 14°16'21" W	16°00'59"
C13	29.83'	3.87'	3.87'	S 25°59'59" W	7°26'16"
C14	29.83'	12.99'	12.89'	S 42°11'39" W	24°57'03"
C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

_____
SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

_____
PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

_____
CITY OF RIO RANCHO DATE

_____
PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

_____
NEW MEXICO GAS COMPANY DATE

_____
QWEST CORPORATION D/B/A CENTURYLINK QC DATE

_____
SPARKLIGHT DATE

_____
COMCAST DATE

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

_____ _____ _____
ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

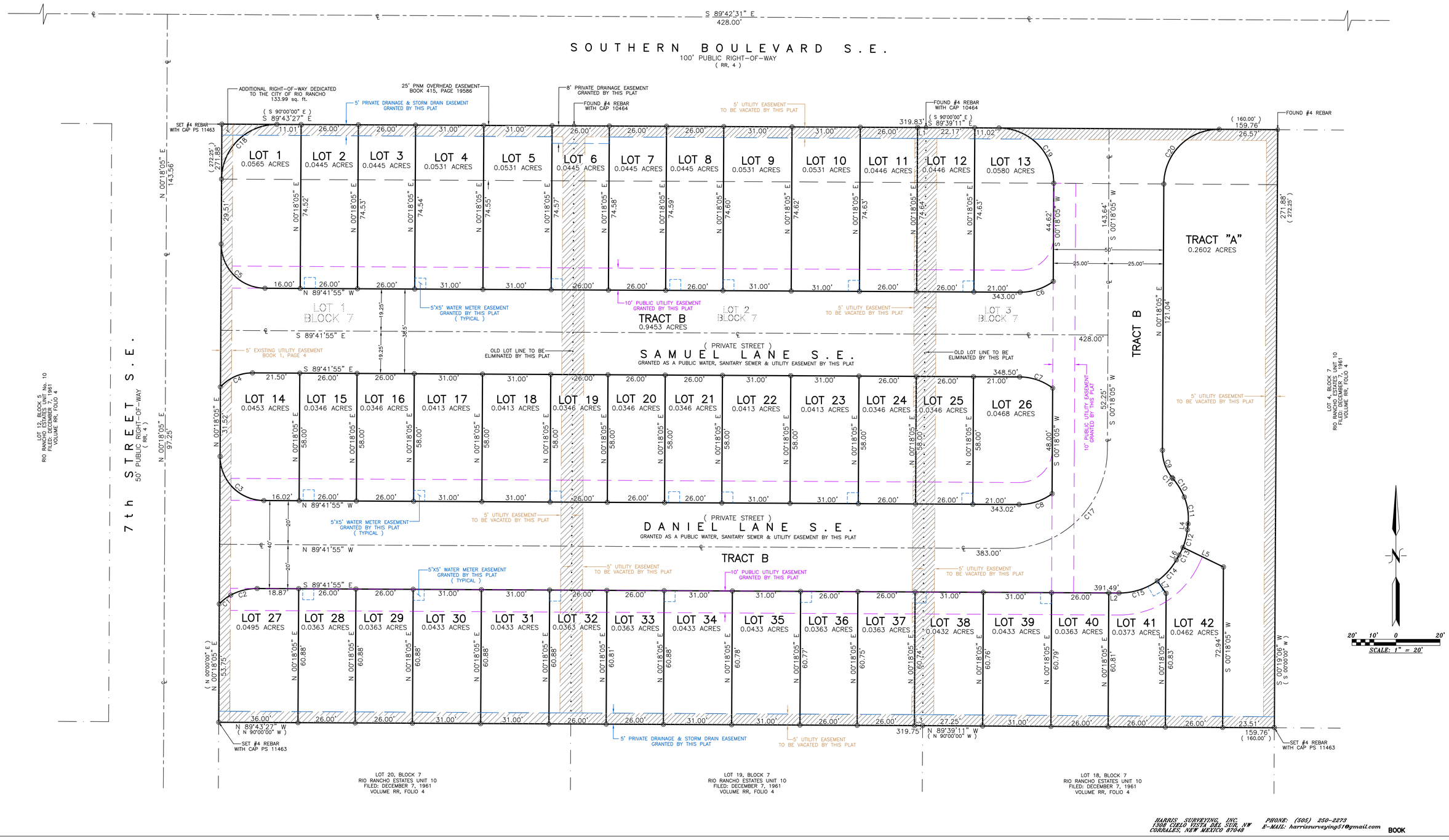
I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

_____
ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DR. SUR. NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

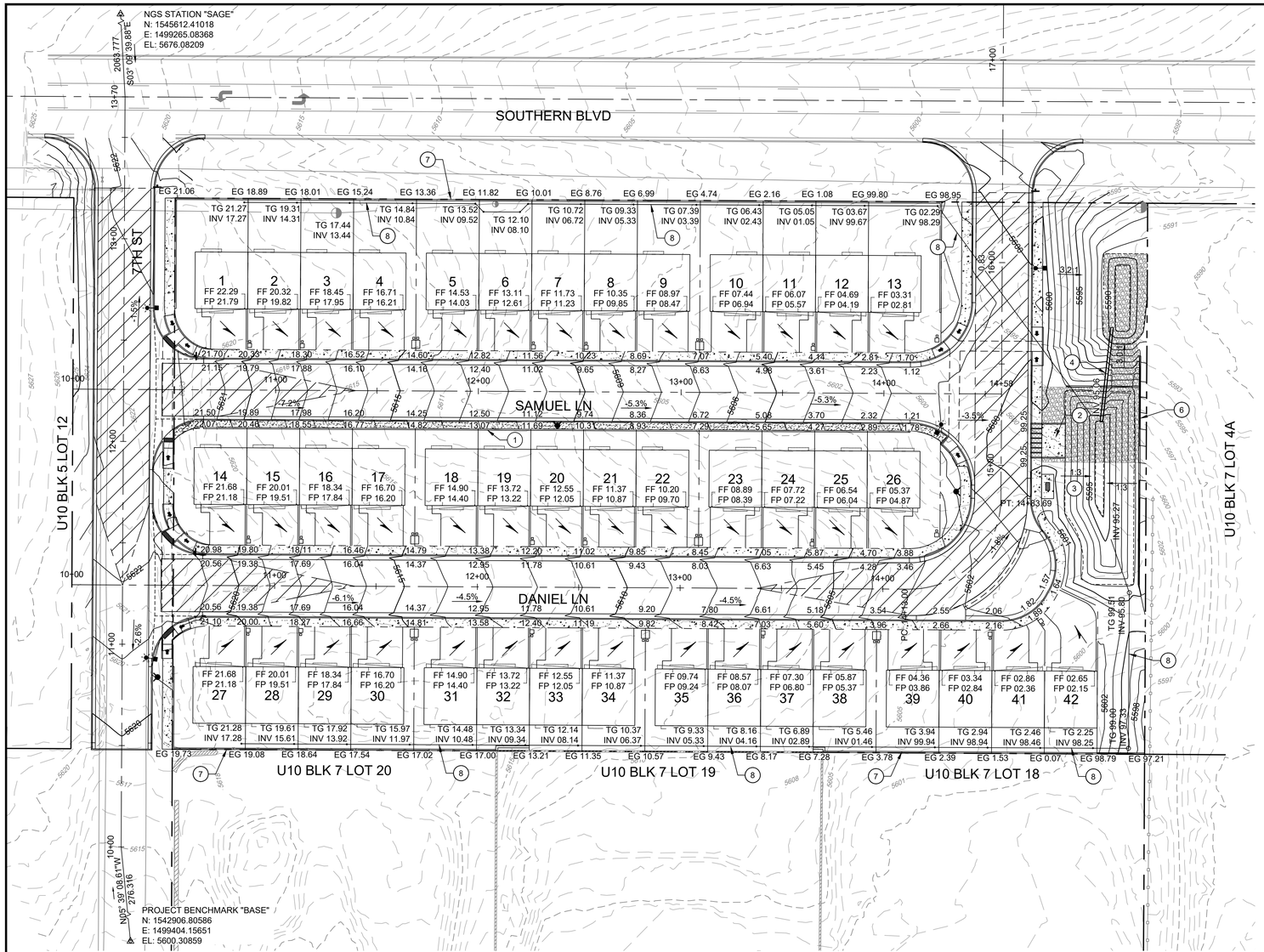
PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024



23-0827 PLAT(2024 FOLDER).DWG

HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE



GRADING CONSTRUCTION NOTES

I.D.#	DESCRIPTION
1	OMIT HEAD JOINTS ON REAR WALL LOTS 13-27 TO ENSURE PROPER STORMWATER DRAINAGE
2	INSTALL 7 SIDEWALK CULVERTS AND CONCRETE RUNDOWN PER DETAIL ____.
3	INSTALL WATER QUALITY AND DETENTION POND, INCLUDING RIPRAP PROTECTION PER DETAIL ___.
4	INSTALL 12" DIA. OUTLET PIPE.
5	INSTALL RIPRAP-LINED PLUNGE POOL PER DETAIL ____.
6	INSTALL CMU RETAINING WALL PER DETAIL ____, INCLUDING AUXILIARY WEIR STRUCTURE.
7	INSTALL CMU RETAINING WALL PER DETAIL ____.
8	INSTALL 12" STORM DRAIN WITH 12" RISER PIPES AND GRATES PER DETAIL ____. PIPE AND GRATE ELEVATIONS PER PLAN.

LEGEND

- DIRECTION OF FLOW
- PROPOSED SPOT ELEVATION (XX.XX)
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- RIGHT OF WAY (ROW)
- PROPERTY LINE
- ROADWAY CENTERLINE
- LIMITS OF OVER-EX
- LIMITS OF DISTURBANCE
- RETAINING WALL
- RETAINING WALL POINT (X-X)

City of Rio Rancho

NO.	DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			
6			
7			

REVISIONS (OR CHANGE NOTICES)

DEVELOPMENT MANAGEMENT CONSULTANTS
PROFESSIONAL CONSTRUCTION MANAGERS & CONSULTING ENGINEERS
9320 Menaul Blvd. NE, ste. D
Albuquerque, NM 87112
Office: (505) 296-7100
Fax: (505) 296-7105
DMC

DOS SOLES SUBDIVSION

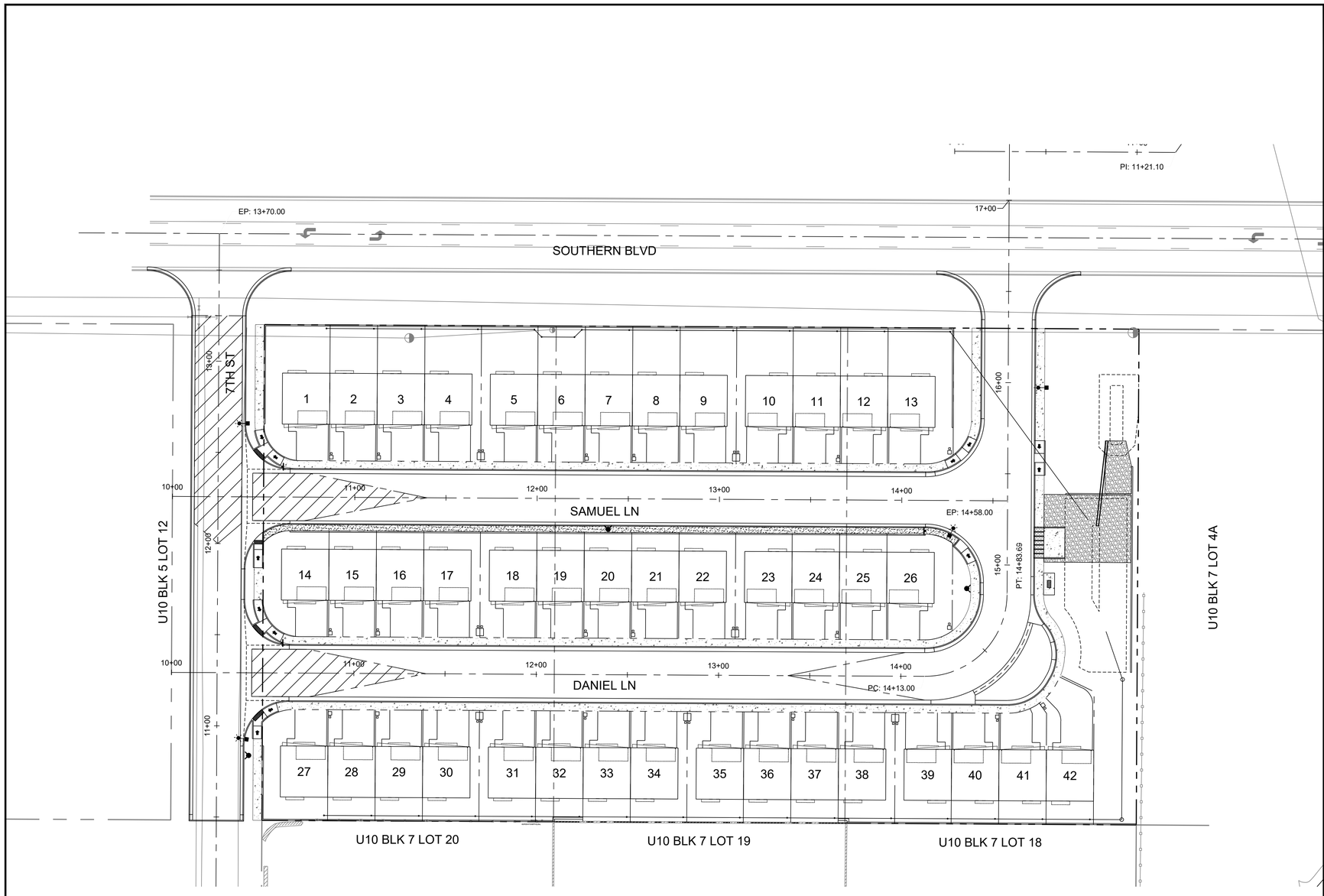
GRADING PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

08/17/2024

PROJECT NO.	0124
DESIGNED BY:	SEG
DRAWN BY:	SEG
CHECKED BY:	SEG
DATE:	08/2024
DPI CHK:	

SHEET 3



LEGEND

	NEW	EXISTING
CURB & GUTTER		
PAVEMENT EDGE		
STREET LIGHT		
STOP SIGN		
CURB TRANSITION		

MATCHLINE OF NEW TO EXISTING ASPHALT PAVEMENT.

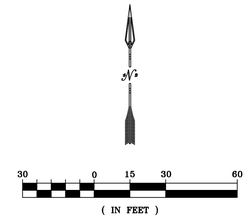
TRANSITION CROWN PER NM APWA STD DWG 2401

GENERAL NOTES:

1. ALL CURVE DATA ON THE ROAD PLAN AND PROFILES REFERS TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB RETURNS HAVE A 25' RADIUS AT THEORETICAL FACE OF CURB (FLOWLINE), UNLESS NOTED OTHERWISE.
3. CONTRACTOR TO FIELD VERIFY DRIVEWAY LOCATIONS PRIOR TO CONSTRUCTION.
4. CENTERLINE MONUMENTATION TO BE INSTALLED PER CORR STANDARDS AS SHOWN ON THE SUBDIVISION PLAT.
5. PEDESTRIAN ACCESS SHALL CONFORM TO NMDOT DETAILS FOR ADA COMPLIANT PEDESTRIAN ACCESS. SEE NMDOT STANDARD DRAWINGS 608-001-1 THROUGH 608-001-12.

STREET LIGHTING NOTES:

1. THIS DRAWING SHOWS THE DESIRED STREET LIGHT LAYOUT ONLY. DESIGN OF THE ELECTRICAL WIRING AND APPURTENANCES REQUIRED TO COMPLETE THE SYSTEM WILL BE PROVIDED BY OTHERS.
2. STREET LIGHTS WITHIN THE SUBDIVISION ARE TO BE PNM STANDARD LED TO BE ISNTALLED BY OTHERS.
3. ALL STREET LIGHTING MUST COMPLY WITH THE "NIGHT SKY PROTECTION ACT".



City of Rio Rancho

NO.	DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			
6			
7			

REVISIONS (OR CHANGE NOTICES)

DEVELOPMENT MANAGEMENT CONSULTANTS
PROFESSIONAL CONSTRUCTION MANAGERS & CONSTULTING ENGINEERS
9320 Menaul Blvd. NE, ste. D
Albuquerque, NM 87112
Office: (505) 296-7100
Fax: (505) 296-7105
DMC

DOS SOLES SUBDIVSION

OVERALL PAVING PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

08/17/2024

PROJECT NO.	0124
DESIGNED BY:	SEG
DRAWN BY:	SEG
CHECKED BY:	SEG
DATE:	08/2024
DPI CHK:	

SHEET 5

City of Rio Rancho
Development Services Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 Fax (505) 896-8994

May 9, 2025

RE: **Dos Soles Subdivision: Preliminary Plat (Case # 25-210-00002) & Subdivision Variance: (Case # 25-280-00002).**

Dear Property Owner:

You are receiving this notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

In a concurrent request, the applicant additionally requests approval of a Subdivision Variance to Chapter 155.43 *Easements* requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision. The applicant is requesting solely 10-ft public utility easements within the front of all lots, and all tracts as necessary. Public utility easements are internal to property lines and serve as portions of land allocated for placement of utilities as necessary.

The Planning and Zoning Board will consider this request at a public hearing on **Tuesday, May 27, 2025** starting at 6:00 pm in the **Council Chambers of City Hall, located at 3200 Civic Center Circle**. If you would like to comment on this application, you are encouraged to send in comments in writing to tdvorak@rrnm.gov, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

For the **Planning and Zoning Board meeting**, to participate virtually: Join via computer:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: **026819** Join via phone: 1-253-215-8782 US

Please do not hesitate to contact me at 505-896-8361 or e-mail me at tdvorak@rrnm.gov if you have any questions about the application or accessing the meeting. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Tim Dvorak

Tim Dvorak
Municipal Planner II
Development Services Department
Planning Division
City of Rio Rancho

DOS SOLES SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE
RRE UNIT 7, BLOCK 7, LOTS 1-3



Rio Rancho
City of Vision

0 60 120 240 360 480
Feet

Subject Properties
Roads
Zoning
R-1
SU

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by Tim Dvorak on 5/9/2025

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision. The applicant additionally requests approval of a Subdivision Variance to Chapter 155.43 *Easements.* The PZB will hear the request on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



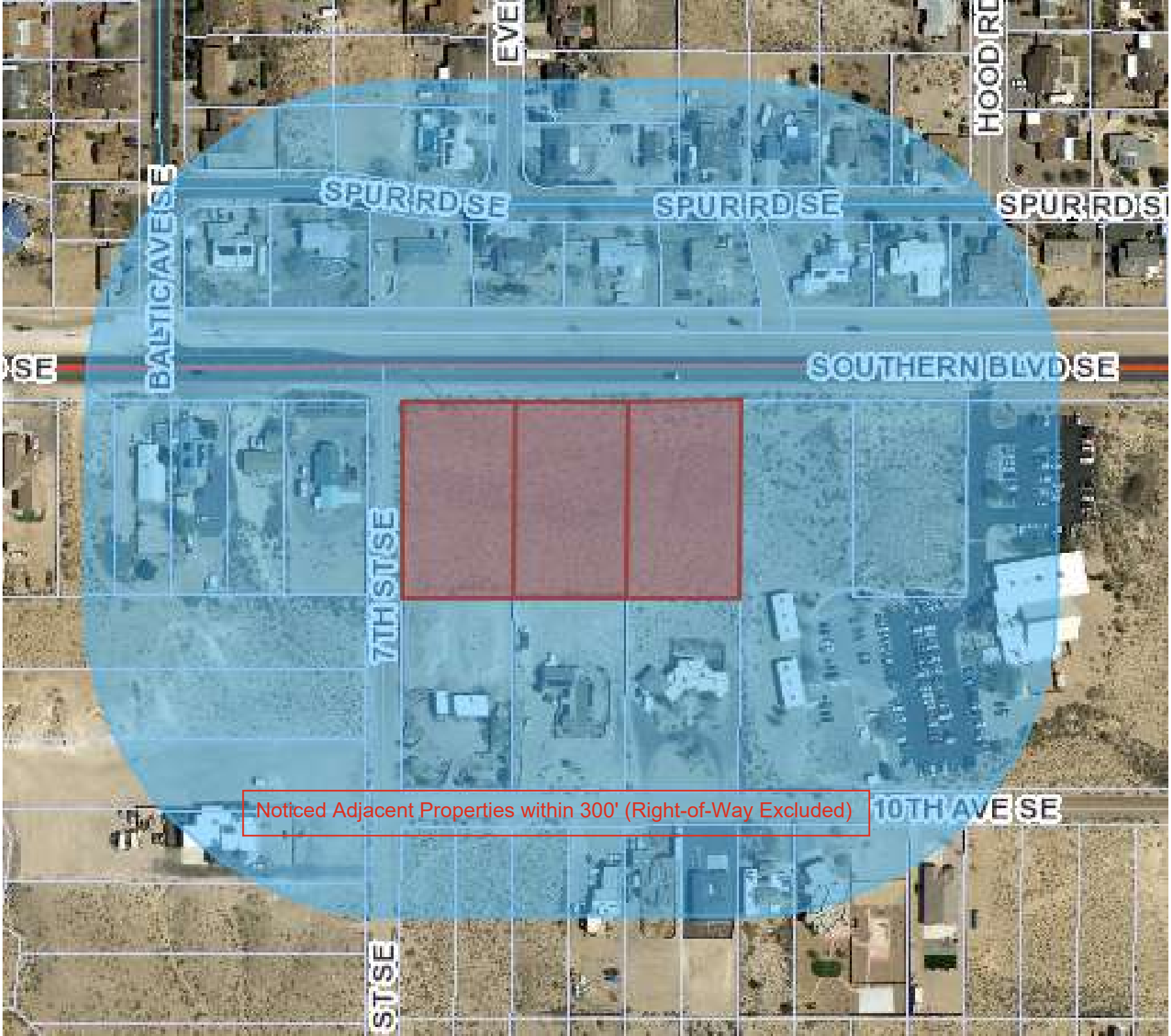
Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision. The applicant additionally requests approval of a Subdivision Variance to Chapter 155.43 *Easements.* The PZB will hear the request on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US




SPUR RD SE
SPUR RD SE
BALTIC AVE SE
635
655
675
701
715
735
9999
779
793
807
9999
SOUTHERN BLVD SE
SOUTHERN BLVD SE
620
624
628
632
700
701
708
812
7TH ST SE
900
1001
1005
701
705
709
1009
10TH AVE SE
Noticed Adjacent Properties within 100' (Right-of-Way Excluded)


SPUR RD SE
SPUR RD SE
SPUR RD S
BALTIC AVE SE
SOUTHERN BLVD SE
7TH ST SE
10TH AVE SE
Noticed Adjacent Properties within 300' (Right-of-Way Excluded)

CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

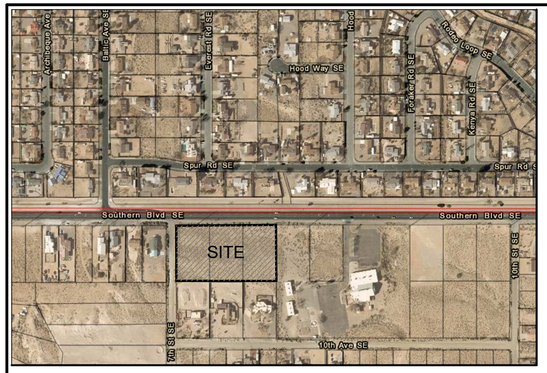
Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.



VICINITY MAP

Correct to 42 lots & 2 tracts

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

Reflect total lot and tract acres

Reflect total acreage of ROW dedicated to the City

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ~~ADMINISTRATIVELY~~ BY THE RIO RANCHO ~~CITY DEVELOPMENT DEPARTMENT DIRECTOR~~ ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

Reflect current Clerk, Noel C. Davis

Remove "administratively"

Remove Director and reflect "Planning and Zoning Board"

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

Remove Director Block

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS ~~THAT MAY BE~~ CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
SS
COUNTY OF SANDOVAL)

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

Owner/proprieter names need to be shown for each signature line.

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
D: City of Rio Rancho for installation, maintenance, and service of storm drain lines, manholes, and inlets, sanitary sewer lines, manholes and service lines, water lines, valves and other equipment and facilities reasonably necessary to provide storm, sanitary sewer and water services
E: Sparklight for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.
F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

Underline City of Rio Rancho & Sparklight so they are more easily visible. Additionally include Comcast & Ezee Fiber under this section.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
L4	S 08°15'52" W	2.63'
L5	S 64°11'16" E	20.45'
L6	S 29°43'07" W	2.57'
L7	S 35°19'50" E	6.87'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	19.50'	6.62'	6.59'	N 51°59'39" E	19°27'43"
C2	25.00'	12.47'	12.34'	N 76°00'48" E	28°34'34"
C3	20.00'	31.44'	28.30'	N 44°40'12" W	90°03'28"
C4	19.50'	16.35'	15.87'	N 66°16'56" E	48°02'17"
C5	20.00'	31.42'	28.28'	N 44°41'55" W	90°00'00"
C6	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C7	25.00'	16.09'	15.81'	S 71°15'50" E	36°52'12"
C8	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C9	19.50'	13.42'	13.16'	S 19°24'48" E	39°25'46"
C10	30.50'	9.90'	9.86'	S 31°36'07" E	18°35'58"
C11	25.00'	12.46'	12.34'	S 08°01'08" E	28°34'00"
C12	29.83'	8.34'	8.31'	S 14°16'21" W	16°00'59"
C13	29.83'	3.87'	3.87'	S 25°59'59" W	7°26'16"
C14	29.83'	12.99'	12.89'	S 42°11'39" W	24°57'03"
C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Add language in plat title after "Plat of Dos Soles Subdivision" to reflect (Being a Replat of Lots 1 thru 3, Block 7, Rio Rancho Estates Unit 10)

Zoning Comments Page 1 of 2

Reformat P&Z Board signature block to below:

Rio Rancho Planning & Zoning Board

Approved the __ day of __, 20__

_____

By Fred Radosevich, P&Z Chairman

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

CITY OF RIO RANCHO DATE

PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

NEW MEXICO GAS COMPANY DATE

QWEST CORPORATION D/B/A CENTURYLINK QC DATE

SPARKLIGHT DATE

COMCAST DATE

Add Ezee Fiber signature line.

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DRIVE NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

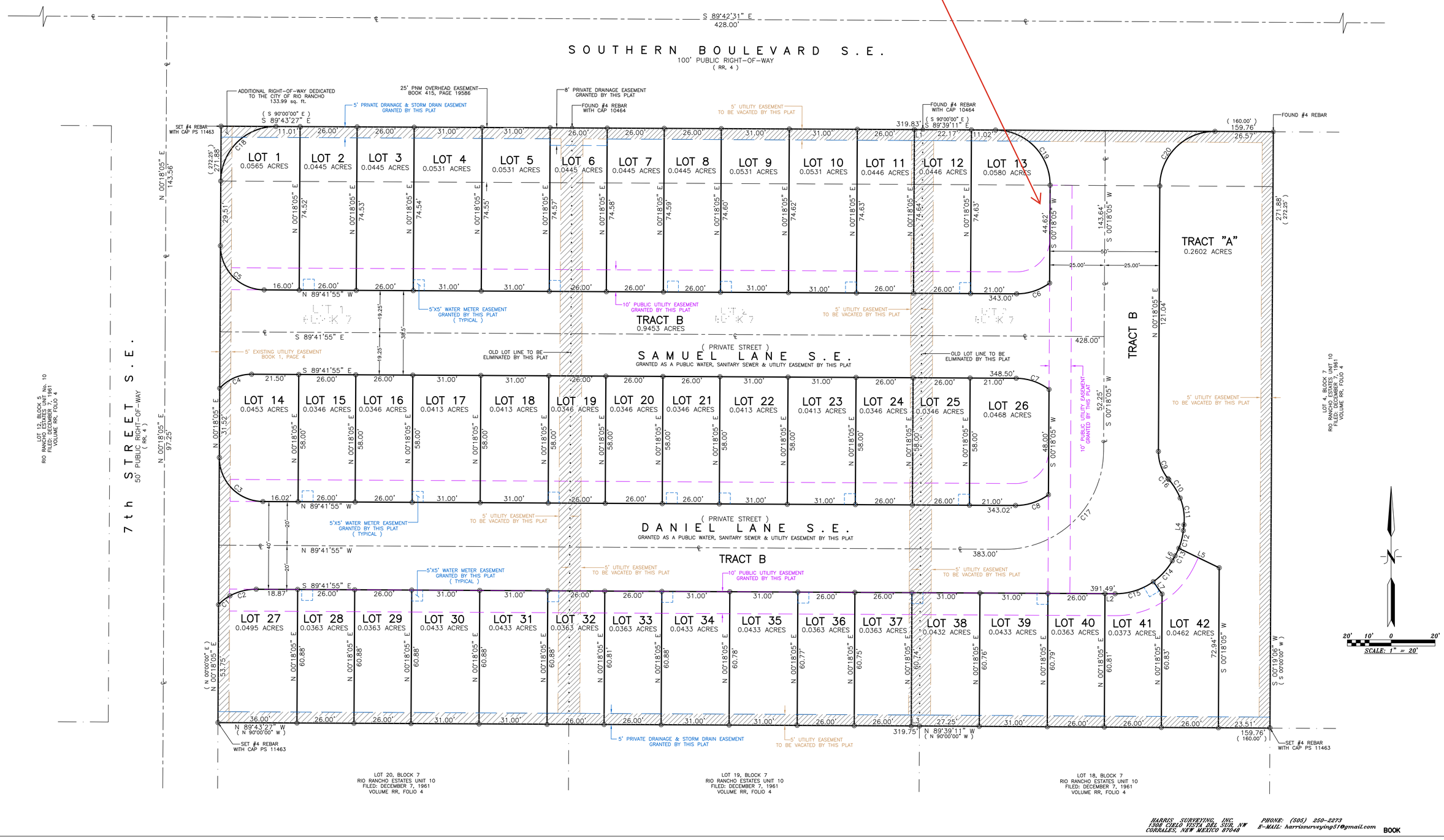
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Zoning Comments Page 2 of 2

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Please notate Non-Vehicular Access Easements for lots with side property lines adjacent to streets



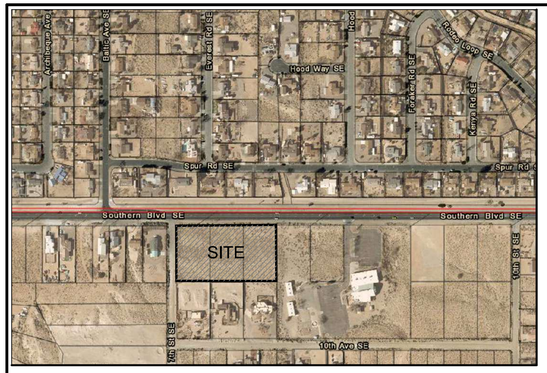
HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

23-0827 PLAT(2024 FOLDER).DWG

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Engineering Comments Page 1 of 2



VICINITY MAP

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ADMINISTRATIVELY BY THE RIO RANCHO CITY DEVELOPMENT DEPARTMENT DIRECTOR ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS THAT MAY BE CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL) SS

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
D: City of Rio Rancho for installation, maintenance, and service of storm drain lines, manholes, and inlets, sanitary sewer lines, manholes and service lines, water lines, valves and other equipment and facilities reasonably necessary to provide storm, sanitary sewer and water services
E: Sparklight for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.
F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
L4	S 08°15'52" W	2.63'
L5	S 64°11'16" E	20.45'
L6	S 29°43'07" W	2.57'
L7	S 35°19'50" E	6.87'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	19.50'	6.62'	6.59'	N 51°59'39" E	19°27'43"
C2	25.00'	12.47'	12.34'	N 76°00'48" E	28°34'34"
C3	20.00'	31.44'	28.30'	N 44°40'12" W	90°03'28"
C4	19.50'	16.35'	15.87'	N 66°16'56" E	48°02'17"
C5	20.00'	31.42'	28.28'	N 44°41'55" W	90°00'00"
C6	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C7	25.00'	16.09'	15.81'	S 71°15'50" E	36°52'12"
C8	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C9	19.50'	13.42'	13.16'	S 19°24'48" E	39°25'46"
C10	30.50'	9.90'	9.86'	S 31°36'07" E	18°35'58"
C11	25.00'	12.46'	12.34'	S 08°01'08" E	28°34'00"
C12	29.83'	8.34'	8.31'	S 14°16'21" W	16°00'59"
C13	29.83'	3.87'	3.87'	S 25°59'59" W	7°26'16"
C14	29.83'	12.99'	12.89'	S 42°11'39" W	24°57'03"
C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

_____
SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

_____
PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

_____
CITY OF RIO RANCHO DATE

_____
PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

_____
NEW MEXICO GAS COMPANY DATE

_____
QWEST CORPORATION D/B/A CENTURYLINK QC DATE

_____
SPARKLIGHT DATE

_____
COMCAST DATE

Ezee Fiber

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

_____ _____ _____
ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

_____
ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DR, SUR, NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

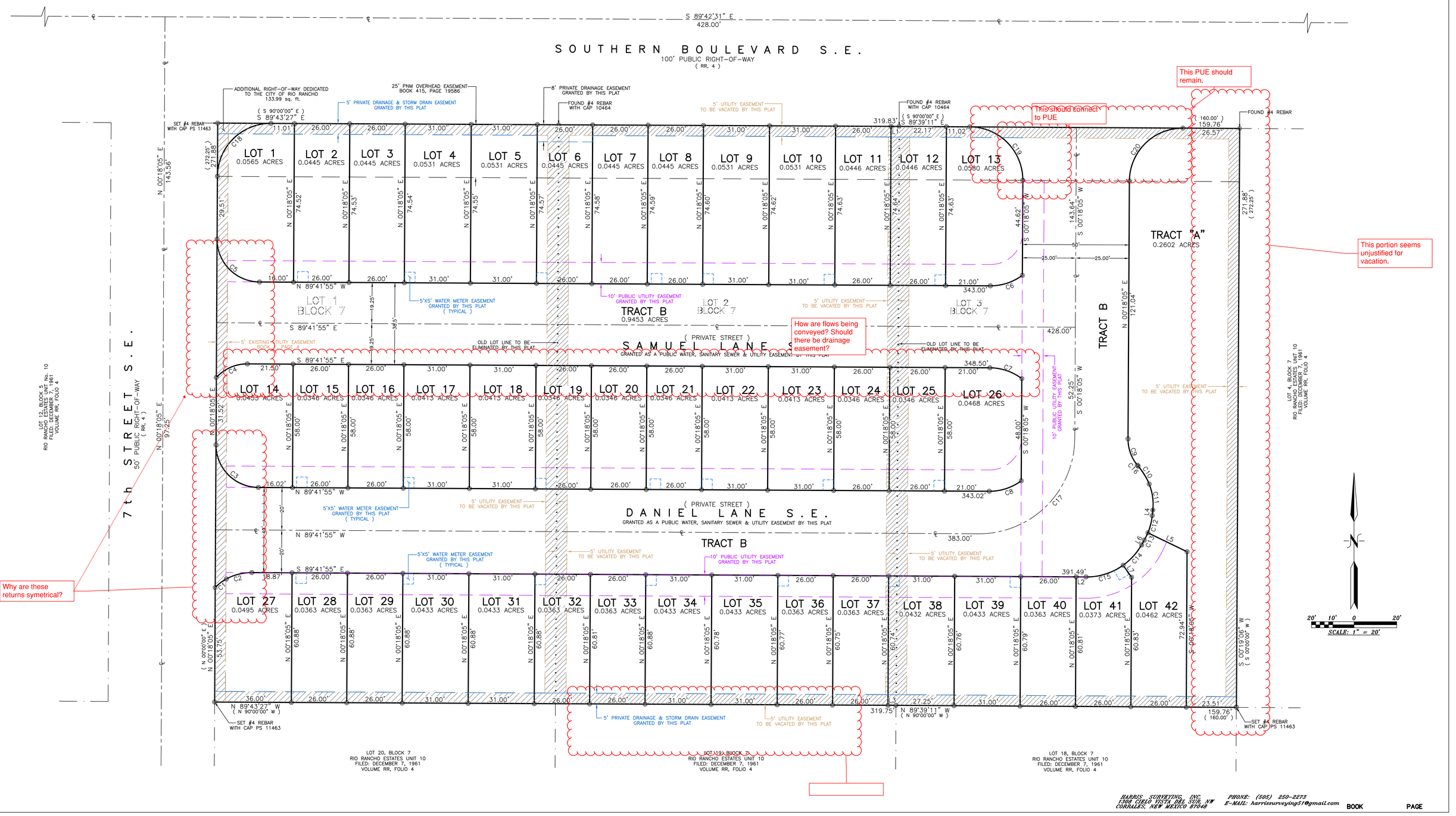
BOOK PAGE

Engineering Comments Page 2 of 2

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Not sure that the 5' PUE should be vacated along southern or along tract A

Cross lot drainage not permitted
how are flows on the middle row being routed



HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR, NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2278
E-MAIL: harrissurveying31@gmail.com

BOOK PAGE

23-0827 PLAT(2024 FOLDER).DWG

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: April 17, 2025

TO:
- (X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Peter Prukop
- (X) Fire and Rescue – Brian Johnson, Gerard Bauer
- (X) Police – Scott Pope
- (X) SSCAFCA – Andy Edmondson, Sara Rassa
- (X) Parks and Recreation - Dyane Sonier
- (X) Rio Rancho Public Schools – Michael Baker
- (X) MRCOG – Peach Anderson-Tauzer
- (X) Ezee Fiber – John Muldrow

FROM: Development Services Department, Planning & Zoning Division

RE: DSD #25-210-00002 – Dos Soles Subdivision / Preliminary Plat
(RRE Unit 10, Block 7, Lots 1-3; 700, 704 & 708 Southern Blvd SE)

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the proposed Dos Soles Subdivision. The proposed plat will create 42 lots and 1 tract, all zoned SU: Special Use for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, April 30, 2025**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
- (_) RECOMMENDED FOR APPROVAL
- (_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
- (_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

The proposed plat (and previous site plan 23-160-00007) do not show any allocation for park land. The proposed subdivision is 3.07 acres in total size, has a proposed 42 residences, and is within 0.5 or less miles from the closest, existing park (Rainbow Park). However, Rainbow Park was developed to meet the needs of the existing homes, not necessarily new growth. By Code, the number of anticipated residents for this subdivision (42 residences x 2.83 residents/residence = 119 residents; 3 acres developed park land/1,000 residents = 0.36 acres) would indicate an allocation of 0.36 acres of developed park land. The development is less than 25 acres in size, therefore the City may not require actual park land dedication or allocation. If it is required, the City will not accept dedication of parks less than 3 acres in size. Smaller parks will be owned and maintained by an HOA. Per the Subdivision Code 155.46 E1, fair market value for the 0.36 acres may be required in lieu of a park land allocation. Regarding page 10 of the application PDF and the last item of the "PRELIMINARY PLAT APPLICATION EXPLANATION" document, Park and Trail Impact Fees will be paid per residence.

Dyane N. Soiner *05/01/2025*

Reviewer Date

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: April 17, 2025

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Peter Prukop
(X) Fire and Rescue – Brian Johnson, Gerard Bauer
(X) Police – Scott Pope
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer
(X) Ezee Fiber – John Muldrow

FROM: Development Services Department, Planning & Zoning Division

RE: DSD #25-210-00002 – Dos Soles Subdivision / Preliminary Plat
(RRE Unit 10, Block 7, Lots 1-3; 700, 704 & 708 Southern Blvd SE)

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the proposed Dos Soles Subdivision. The proposed plat will create 42 lots and 1 tract, all zoned SU: Special Use for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, April 30, 2025**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(X) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

Approved with requirements:
- Follow the IFC 2021 Appendix D
-Fire Hydrant spacing every 500 ft.
- A Fire 1 Plan shall be submitted to the Fire Marshals office before full plan set is submitted for plan review

Fire Marshal BRIAN JOHNSON — Reviewer
4/17/2025 — Date

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: September 18, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Jordan Yutzy, Cedric Smith, Peter Prukop, Brian Babyak
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer
(X) Police - Justin Garcia
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Site Plan: DSD #23-160-00007 (RRE U10, Block 7, Lot 1-3)

The applicant, Matthew Herrera X2D, LLC., requests site plan approval for the properties of 700, 704, and 708 Southern Blvd SE. The subject properties are legally described as Rio Rancho Estates Unit 10, Block 7, Lot 1-3 and comprise approx. 3 acres. The subject properties are zoned SU: Special Use for Townhomes.

The Special Use Ordinance for these properties requires site plan approval by the Planning and Zoning Board in addition to the Governing Body.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Monday October 2, 2023**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(_) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

RRFR Comments: International Fire Code 2021 shall be followed.

1. Confirm fire hydrants are in approved distances and locations
2. Follow IFC Appendix D – Inside turning radius of turns shall be 28'.
3. No parking on Road ways. Fire lane required.
4. Fire Sprinkler system required.
    a. Fire hydrant within 100' of FDC(s)
5. Fire Alarm may be required.
6. Deferred Submittals for Fire Alarm and Fire Suppression systems.
7. Knox box for emergency access.
8. More requirements may be necessary upon plan review phase.

Gerard Bauer 10/2/2023

Gerard Bauer — Reviewer
10/2/2023 — Date

Timothy Dvorak

From: GERARD BAUER
Sent: Wednesday, October 11, 2023 10:57 AM
To: Timothy Dvorak; JESSICA DURON-MARTINEZ
Cc: JAMES WENZEL
Subject: RE: Questions on Fire Lane Comments for Southern Townhomes

Good Morning Tim,

The road width shown is 28'. If a car would park on this road it would then reduce the size of this road to under the required 26' for Aerial fire apparatus and the required 26' for Access road width with a hydrant. Due to the size constraints on this property no parking will be allowed on the roadways. Please let me know if you have any further questions.

Thank you,

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.
D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

Gerard Bauer
Lieutenant|Fire Prevention Officer

RRFR / Fire Marshal's Office

O:505.896.8357 **C:**505.389.7296

RRNM.gov |

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR DENIAL
Case No. 25-280-00002

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.43, ALLOWING FOR SOLELY 10' PUBLIC UTILITY EASEMENTS ALONG ALL FRONT LOT LINES, AND ON ALL TRACTS AS NEEDED, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 10, BLOCK 7, LOTS 1-3.

Applicant: X2D, LLC.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to easement requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT:

1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.43.

THEREFORE, the application for a Subdivision Variance to the required improvements of a subdivision, is DENIED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR APPROVAL
Case No. 25-280-00002

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.43, ALLOWING FOR SOLELY 10' PUBLIC UTILITY EASEMENTS ALONG ALL FRONT LOT LINES, AND ON ALL TRACTS AS NEEDED, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 10, BLOCK 7, LOTS 1-3.

Applicant: X2D, LLC.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to easement requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT AND CONDITIONS OF APPROVAL:

1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.43 is approved for the Dos Soles Subdivision, Preliminary Plat case #25-210-00002.
3. The Applicant shall provide for 5 ft Public Utility Easements along perimeter of the subdivision, adjacent to properties abutting subdivision.

THEREFORE, the application for a Subdivision Variance to the required improvements of a subdivision, is APPROVED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 25-210-00002

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Preliminary Plat. The Applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprising 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes. Staff contact is Tim Dvorak and staff recommends approval with findings and conditions.

BACKGROUND AND ANALYSIS:
The Applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision. The proposed plat will create 42 lots and 2 tracts, all zoned SU: Special Use for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3.

A Site Plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

The subject properties are zoned SU: Special Use District for Townhomes per Ordinance No. 43, Enactment No. 07-42, adopted by the Governing Body on July 11, 2007.

The subject properties are additionally within the Unit 10 Specific Area Plan, adopted by the Governing Body on August 24, 2016 via Resolution No. 68, Enactment No. 16-065 and most recently amended on June 27, 2024 under Resolution No. 52, Enactment No. 24-051.

I. GENERAL INFORMATION

1. Layout: Dos Soles is comprised of 42 lots and 2 tracts.
2. Acreage: Lot Acres: Approximately 1.7877 acres; Tract acres: Approximately 1.2055 acres.
3. Access: Dos Soles will be accessed via Southern Blvd SE, a principal arterial. The subdivision will additionally be accessed via 7th St SE, a residential road; the current plat configuration illustrates both streets within the Dos Soles Subdivision as accessing off of 7th St SE (Samuel Lane SE & Daniel Lane SE); however, it will be determined during subdivision improvement and infrastructure review whether both of these streets can directly connect to 7th St SE, due to SAMM street spacing requirements.
4. Zoning: The subject properties are zoned SU: Special Use District for Townhomes under Ordinance No. 43, Enact. 07-42.
5. Dry Utilities/Gas: The applicant is responsible for coordinating the installation of all dry utilities with Sparklight, Comcast, Centurylink, PNM, and Gas Company of New Mexico.
6. Water and Wastewater Availability: A Water/Wastewater Availability Letter for the Dos Soles

Subdivision area was granted by the Utilities Department on September 28, 2023.
7. Drainage: Drainage is per the Dos Soles Subdivision Drainage Plan, dated September 5, 2024.
8. Roads and Sidewalks: Road widths within the Dos Soles neighborhood range from 38.5' to 50', with 4' sidewalks on each side. As some street widths do not meet the minimum residential width of 50', the streets within Dos Soles are being dedicated as private roads under "Tract B" to the future Homeowner's Association. Per Rio Rancho Fire and Rescue comments for the Site Plan, no on-street parking shall be allowed within the subdivision.
9. Recreation Facilities/Open Space: Tract A will be dedicated to the future Homeowner's Association and will serve as a drainage pond area. This area will need to be landscaped per R.O. 2003 Chapter 154 and has the opportunity for future recreational uses.
10. Easements: 10' Public Utility Easements (PUEs) are provided across all front lot lines, and all tracts as needed. 5' Drainage Easements are additionally provided along the northern and southern boundaries of the subdivision.
12. Vacations: Existing 5' internal PUEs shall be vacated on the plat as shown.
13. Variances: Concurrent with this application, the applicant is requesting solely 10' Public Utility Easements on the front of all lots, and all tracts as necessary, within Dos Soles (Case No. 25-280-00002).

CONFORMANCE WITH THE SUBDIVISION REQUIREMENTS:
Staff recommends the Planning and Zoning Board find the proposed Preliminary Plat conforms to the requirements of R.O. 2003 Chapter 155 Subdivisions pending approval of the requested Subdivision Variance (Case #25-280-00002). Criteria may be satisfied.

CONFORMANCE WITH THE ZONING ORDINANCE:
The proposed lots mostly comply with the residential dimensional standards as laid out in R.O. 2003 § 154.50 for R-3: Mixed Residential District (Attached). The proposed Preliminary Plat contains lots with an acreage range of approximately 0.0346 acres (1,507.17 sf) to 0.0580 acres (2,526.48 sf) and a lot width range of 26' at front setback to 46.36'. There are multiple lots which do not meet the minimum R-3 Attached lot width requirement of 28'; however the Special Use Ordinance for the subject properties allows for flexibility of lot widths, to be determined at Site Plan approval. All lot widths shown on the plat were previously approved under Site Plan Case 23-160-00007, and therefore the proposed lots and lot layout conform.

Staff recommends the Planning and Zoning Board find the proposed Preliminary Plat conforms to the requirements of R.O. 2003 Chapter 154 Planning and Zoning, and Zoning Ordinance No. 43, Enactment No. 07-042 where applicable. Criteria is satisfied.

CONFORMANCE WITH CITY COMPREHENSIVE PLAN:
In Chapter 5, Land Use Element, Goal L-2 states, "Encourage consolidation of lots to promote a variety of land uses in a planned manner."
This application would be an action in meeting the policy of encouraging lot consolidation, as the subject Special Use ordinance for the subject properties requires consolidation of the subject lots in order to move forward with development.

The Preliminary Plat submission accomplishes this requirement, while additionally providing for a higher density housing type (attached townhomes), which will diversify housing options within Unit 10. Staff recommends the Planning and Zoning Board finds the criteria is satisfied.

CONFORMANCE WITH THE UNIT 10 SPECIFIC AREA PLAN:
The Unit 10 Specific Area Plan is primarily comprised of R-1: Single-Family Residential zoning; however, it is stated in Section 4.4.1 that all future master planned developments within Unit 10 are encouraged to support medium and higher density developments. While Dos Soles is not part of a Master Plan, the subject properties comprising the Dos Soles Subdivision were rezoned together as SU: Special Use District for Townhomes with the intention of higher residential density. The subject

Special Use ordinance provides specific guidance for how these properties are to develop to ensure they develop in line with the Unit 10 Specific Area Plan. Staff recommends the Planning and Zoning Board find that the proposed subdivision layout is in conformance with the Unit 10 Specific Area Plan; criteria is satisfied.

CONFORMANCE WITH CITY POLICIES AND REGULATIONS:
Application materials for this Preliminary Plat request were sent to the below agencies for review:

Development Services Planning	Comments throughout ABM & in "Reviewer Comments."
Development Services Engineering	Comments attached in "Reviewer Comments."
Rio Rancho Fire & Rescue	Comments attached in "Reviewer Comments."
Rio Rancho Police	No comments received.
SSCAFCA	No adverse comments.
Parks, Recreation, and Community Services	Comments attached in "Reviewer Comments."
Rio Rancho Public Schools	No comments received.
MRMPO	No comments received.
Ezee Fiber	No adverse comments.

SURROUNDING LAND USE/ZONING:
The proposed Dos Soles Subdivision is bounded by R-1: Single-Family Residential District in all directions.

NOTIFICATIONS: Notice of pending development application was sent together with Subdivision Variance request (#25-280-00002) via certified mail to property owners within 100' of the subject property and first class postcards to property owners within 300' of the subject property 15 days prior to the hearing. A legal notice was published in the Albuquerque Journal on May 12, 2025. A public notice sign was posted to the property as required by ordinance.

IMPACT:

The Development Services Department recommends the Planning and Zoning Board approve Preliminary Plat Case no. 25-210-00002 subject to the following findings of fact and conditions of approval:

General Findings of Fact:
1. The Planning and Zoning Board has jurisdiction over the Applicant’s request for approval of a Preliminary Plat.
2. The Applicant has the authority to apply for a Preliminary Plat

Specific Findings of Fact and Conditions of Approval:
1. The Preliminary Plat has been prepared, reviewed, and conforms to the City of Rio Rancho plans and policies.
2. The Preliminary Plat conforms to the requirements of the Rio Rancho Code of Ordinance (R.O. 2003) Chapter 155 Subdivisions.
3. The Preliminary Plat conforms to the requirements of Special Use Ordinance No. 43, Enactment No. 07-42.
4. The Preliminary Plat conforms to the Unit 10 Specific Area Plan and the City of Rio Rancho Comprehensive Plan.
5. In accordance with R.O. 2003 § 155.24(A), the final plat shall be recorded within 12 months following approval of the Preliminary Plat, or the Planning and Zoning Board approval shall become

null and void.
6. Infrastructure shall be installed and accepted prior to the recording of the Final Plat or the applicant shall submit for staff review and approval of a subdivision improvement agreement and financial guarantee prior to the Final Plat hearing.
7. Impact Fee assessment will be based on the date of this Preliminary Plat approval and valid for four (4) years from the date of this approval.
8. The Applicant shall address all of the Preliminary Plat reviewers' comments prior to submission for Final Plat, including but not limited to the attached document entitled, "Reviewer Comments."
9. HOA formation documents shall be submitted prior to the Final Plat hearing.

ALTERNATIVES:

The Planning and Zoning Board may:

1. Approve the Preliminary Plat with staff recommendations and conditions.
2. Approve the Preliminary Plat with amendments to recommendations and/or conditions.
3. Deny the Preliminary Plat.
4. Postpone the item and continue the public hearing for the Preliminary Plat for further review.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends approval of the Preliminary Plat with findings and conditions.

ATTACHMENT: Zoning, Location Map
ATTACHMENT: Application & Authorization
ATTACHMENT: Dos Soles Preliminary Plat
ATTACHMENT: Reproduction of Notices, Legal Ad
ATTACHMENT: Reviewer Comments

DOS SOLES SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE
RRE UNIT 7, BLOCK 7, LOTS 1-3



RioRancho
City of Vision

0 60 120 240 360 480
Feet

Subject Properties
Roads
Zoning
R-1
SU

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by:Tim Dvorak on 5/9/2025

City of Rio Rancho
Development Services
3900 Southern Boulevard, Ste 103
Rio Rancho, NM 87124
(505) 891-5005 Fax: (505) 896-8994

Preliminary Plat Application

Applicant

Name (Print): X2D, LLC
Address: P.O. Box 10492
City: Albuquerque **State:** NM **Zip:** 87184
Phone: 505-933-4411 **Fax:**

Agent

Name (Print): Sheldon Greer, PE / Development Management Consultants
Job Site Address: Dos Soles Subdivision / southeast corner of Southern Blvd and 7th Street
City: Rio Rancho **State:** NM **Zip:**
Phone: 505.264.0472 **Fax:**

Legal Description of Property

Existing

Subdivision/Unit: UNIT 10 **Block:** 7 **Lot:** 1-3
Tract/Parcel: **Zoning:** SU

Proposed

Subdivision/Unit: **Block:** 7 **Lot:** 1-42
Tract/Parcel: A & B **Zoning:** SU
Atlas Grid Location: 44
Subdivider:

I have reviewed the application for Preliminary Plat and it is complete.

(Print) Name: Sheldon Greer
☐ Applicant ☒ Agent
Signature: **Date:** 04/16/2025

City of Rio Rancho
Development Services
3900 Southern Boulevard, Ste 103
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Preliminary Plat Checklist

Important Notice

Preliminary Plat will not be accepted for review by City Staff until all items listed above in the Preliminary Plat Checklist Certification of Completeness are provided. The Department of Public Infrastructure requires thirty (30) days to review all elements of the Preliminary Plat from the submittal date of a complete application.

The following information shall be submitted as part of the Subdivision Application. A "Yes" indicated the information is complete; a "N/A" indicates that the information is not applicable, and "No" indicates that the information is not complete. **Please not that both "N/A" and "No" responses shall be clarified with a written explanation by the applicant or agent.**

Fees

Less than one (1) acre	$ 133.00 + $13.00 per lot
One (1) to 4.99 acres	$ 266.00 + $13.00 per lot
Five (5) to 9.99 acres	$ 531.00 + $13.00 per lot
Ten (10) to 49.99 acres	$1,063.00 + $13.00 per lot
Fifty (50) to 100 acres	$1,328.00 + $13.00 per lot
Over 100 acres	$1,328.00 for the first 100 acres + $ 266.00 per additional 100 acres, or portion thereof, plus $ 13.00 per lot.

City of Rio Rancho
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Preliminary Plat Checklist

Plat Information – *15 paper copies folded to 8.5"x11"*

Yes	No	N/A	
☒	☐	☐	Proposed subdivision name.
☒	☐	☐	Present legal description.
☒	☐	☐	Location map showing the site as displayed in current Rio Rancho City Atlas.
☒	☐	☐	Names of the subdivider/agent and principle persons preparing the preliminary plat.
☒	☐	☐	Scale and North Arrow; at least to a scale of one inch (1") to two hundred feet (200') or in increments of 50 feet for clarity (e.g. 1":100' or 1":50').
☒	☐	☐	Book(s) and page(s) of any previous plat(s), including those for adjacent property.
☒	☐	☐	Proposed benchmark locations and method of tie to permanent survey monuments an proposed location and type of subdivision control monument found or set.
☒	☐	☐	Plat boundary lines, bearing in degrees, minutes and seconds, with basis for bearings noted or shown.
☒	☐	☐	Dimensions in feet and hundredths of feet.
☒	☐	☐	Easements on site (present and proposed) include location, width, and purpose (e.g. public utilities).
☒	☐	☐	Public right(s)-of-way and/or private easements (present and proposed) providing access to the site, including name and width.
☒	☐	☐	Proposed lot lines and public right-of-way lines, street names and widths; indicate roadways intended to be private and any limitations thereof.
☒	☐	☐	Numbers to identify each lot and block within and abutting the platted area.
☒	☐	☐	Letters to identify each parcel (a lot dedicated to the City) and each tract (a lot to remain in the developer's ownership) within the platted area.
☒	☐	☐	Purposes of lots proposed to be dedicated or reserved for public uses.
☒	☐	☐	Total area of the proposed plat to the nearest one-thousandth (1/1000) acre.
☒	☐	☐	Lot lines, easement lines, and public right-of-way are to be shown as hatched areas.

Subdivision Date Sheet – *8 copies*

Yes	No	N/A	
☒	☐	☐	Character and location of development in each direction from site.
☒	☐	☐	Zoning both on, and adjacent to, the site.
☒	☐	☐	Sites and approximate areas for any multi-family dwellings or non-residential uses.
☒	☐	☐	Proposed ground elevation changes to specified design standards shall be summarized
☐	☐	☒	Soils analysis report shall be summarized as to the adequacy of the solid for the proposed construction.
☐	☒	☐	Schedule of lot development; estimates as to when street paving, water service, and sewer service will be provided.
☐	☐	☒	Special problem analysis shall be summarized to briefly describe any issues such as difficult topography, traffic circulation, or other geographic hazards to life, health or property.
☐	☐	☒	Other significant conditions on the site, such as major rock outcrops, trees, structures, etc. shall be summarized.

Proposed Construction Plans – *8 copies*

☒	☐	☐	Existing utilities on, and adjacent to, the site, location and, if obtainable, size of water wells, water reservoirs, water lines, sanitary and storm sewers; location of gas lines, fire hydrants, electric and telephone lines/poles, and street lights. If water mains and sewers are not on or adjacent to the tract, indication of the direction, distance to, and size of the nearest ones showing invert elevation of sewer.
☒	☐	☐	Proposed utilities on and adjacent to the site (fire hydrants, streetlights, etc)
☒	☐	☐	Storm drainage facilities on and adjacent to the site.
☒	☐	☐	Streetscape plan including details on any proposed landscaping in right(s)-of-way, any supporting irrigation system, and the subdivision wall.
☒	☐	☐	Plan for sidewalks (external and internal), streetlight, and all traffic control signs, signals (to be installed consistent with the Manual of Uniform Traffic Control Devices, latest edition).
☐	☐	☒	Miscellaneous – any other proposed infrastructure not covered above.

Grading Plan – *8 copies; usually part of construction plan submittal*

Yes	No	N/A	
☒	☐	☐	Existing topography
			Slopes less than 1% - Contour lines at intervals of not more than 1' and spot elevations at all breaks in grade along all drainage channels and swales and at selected points not more than 100' apart.
			Slopes between 1% and 5% - Contour lines at intervals of not more than 2'.
			Slopes over 5% - Contour lines at intervals of not more than 5'
			Elevation shall be based on mean sea level datum as established by the U.S. Geodetic Survey.
			Topography data shall extend at least 25' beyond the perimeter of the plat.
			Conditions on adjacent land significantly affecting the design of the subdivision including the approximate direction and gradients of ground slope.
☒	☐	☐	Proposed grading
			Sufficient spot elevations or contours as appropriate to clearly define proposed grade changes.
☒	☐	☐	Erosion control provisions
			Text or graphics as appropriate addressing proposed erosion control practices to be implemented by the contractor during construction of the project.
☒	☐	☐	Location and elevation of project benchmark.
☒	☐	☐	North arrow and scale.
☐	☐	☒	Professional Engineer's Stamp, signed, and dated.

Preliminary Drainage Report – *4 copies*

☒	☐	☐	A preliminary drainage report shall be prepared in accordance with the City grading and drainage design requirements and policies and shall include the following: Hydrology and hydraulics
			Calculations sufficient to conservatively define easements and parcels (ponds, channels, etc.)
			Flood Plain Analysis, if within a designated flood hazard area. The Flood Plain Analysis shall conform to requirements as specified in Chapters 152 and 153 (Rio Rancho Ordinance) and, if applicable, SSCAFCA and/or AMAFCA policies. Any additional information that the Department of Public Infrastructure may deem necessary Compliance with approved DMP and DIP, if applicable.

Traffic Impact Analysis – *5 copies*

☒	☐	☐	Traffic Impact Analysis includes counts on major intersections near subdivision and quantified analysis of the impact of the proposed subdivision on traffic flow (TIA guidelines available from the Department of Public Infrastructure).

Soils Analysis – *4 copies*

☐	☐	☒	Soils analysis report, written by a qualified soils scientist, shall be provided by the subdivider to determine the adequacy of the soil for the proposed construction.

Special Problem Analysis – *if applicable, 8 copies*

Yes	No	N/A	
☐	☐	☒	Special problem analysis shall be prepared, subject to the approval of the City Engineer, to address any issues such as difficult topography, traffic circulation, or other Geographic hazards to life, health, or property.

Letter of Water and Sewer Availability – *8 copies*

☒	☐	☐	Letter of Availability that documents either: 1. The subdivider has made necessary arrangements to serve each lot from water and sewer mains of the central systems serving the City, where feasible and in conformity to City Council policy, or **2.** Where, for any reason, municipal services cannot be provided, the subdivider has evidence that adequate water and sewer service to each lot will be provided in compliance with the requirements of the New Mexico Environmental Department and in conformity to the standard specifications of the City Utilities Division and New Mexico Office of Engineers.

Proposed Financial Guarantee – *8 copies*

☐	☐	☒	Proposed Financial Guarantee for assurance of improvements installation as per Article 155.27 (Rio Rancho Ordinance).

Proposed Subdivision Infrastructure – *5 copies*

☒	☐	☐	A list of all proposed infrastructure improvements for the proposed subdivision, including onsite and offsite roads (street name, description of improvement, "from" and "to" points); drainage (proposed legal description, description of improvement, location); water and wastewater lines (line size, location, "from" and "to" points); and other improvements proposed in the City right-of-way.
☐	☐	☒	A list of all proposed system level improvements per proposed development agreement or master drainage plan (separated as noted above).

Estimated Costs for Subdivision Infrastructure List – *8 copies*

☒	☐	☐	A list of costs for the subdivision and infrastructure.

Proposed Development Agreement – *8 copies*

☐	☐	☒	Spreadsheet showing system level infrastructure to be dedicated to the City for impact fee credits. The developer must negotiate an agreement with the city prior to approval of the final plat and construction of this infrastructure. A standardized spreadsheet has been developed and will be provided to the Agent upon request.

I have reviewed the checklist for Preliminary Plat and it is complete.

(Print) Name: [redacted]reer, PE

☐ **Applicant** ☒ **Agent**

Signature: _____ **Date:** [redacted]11/2025

City of Rio Rancho
Development Services
3900 Southern Boulevard, Ste 103
Rio Rancho, NM 87124
(505) 891-5005 Fax: (505) 896-8994

Certificate of Completeness

The following elements constitute a complete application and are to be submitted to the Development Services department

- [x] 15 paper copies of the plat (folded to 8.5" x 11")
- Preliminary Construction Plans including
  - [x] Fire Hydrant Placement Plan
  - [x] Streets/Sidewalks/Streetlight Plans
  - [x] Proposed Utility Plans
  - [ ] Streetscape/Landscape Plan
  - [ ] Traffic Control Plan
  - [x] Preliminary Grading Plan
  - [ ] Offsite improvements
- [x] Preliminary Plat Checklist and Written Explanation
- [ ] Approval letter from NMDOT if access is requested to a State Highway
- Proposed Financial Guarantee
  - [x] Proposed Infrastructure List
  - [x] Related Cost Estimate
  - [ ] Impact Fee Credit Spreadsheet
- [x] Application
- [x] Letter of Water/Wastewater Availability
- [ ] Soils Analysis
- [ ] Subdivision Data Sheet
- [ ] Special Problems Analysis
- [ ] SSCAFCA approval (if required)
- [x] Preliminary Drainage Report
- [ ] Proposed Development Agreement
- [x] Traffic Impact Analysis

I have reviewed the application and checklist for Preliminary Plat and it is complete.

Signature of Agent Submitting Subdivision _____ **Date Review Completed** _____

Notary Signature _____ **Date Notarized** _____

For Office Use Only

I have reviewed the application for Preliminary Plat Approval and find it ☐ Complete ☐ Incomplete

Signature of Planner Conducting Review _____ **Date Review Completed** _____

05-210000-----

Subdivision Number

City of Rio Rancho
Development Services
3900 Southern Boulevard, Ste 103
Rio Rancho, NM 87124
(505) 891-5005 Fax: (505) 896-8994

Certificate of Completeness

The following elements constitute a complete application and are to be submitted to the Development Services department

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- Preliminary Construction Plans including
  - [X] Fire Hydrant Placement Plan
  - [X] Streets/Sidewalks/Streetlight Plans
  - [X] Proposed Utility Plans
  - [ ] Streetscape/Landscape Plan
  - [ ] Traffic Control Plan
  - [X] Preliminary Grading Plan
  - [ ] Offsite improvements
- [X] Application
- [X] Letter of Water/Wastewater Availability
- [ ] Soils Analysis
- [ ] Subdivision Data Sheet
- [ ] Special Problems Analysis
- [ ] SSCAFCA approval (if required)
- [X] Preliminary Drainage Report
- [ ] Proposed Development Agreement
- [X] Traffic Impact Analysis
- [X] Preliminary Plat Checklist and Written Explanation
- [ ] Approval letter from NMDOT if access is requested to a State Highway
- Proposed Financial Guarantee
  - [X] Proposed Infrastructure List
  - [X] Related Cost Estimate
  - [ ] Impact Fee Credit Spreadsheet

STATE OF NEW MEXICO
NOTARY PUBLIC
HADLEY K WINGATE
Commission Number 1135464
My Commission Expires Sept. 09, 2025

I have reviewed the application and checklist for Preliminary Plat and it is complete.

Signature of Agent Submitting Subdivision	**Date Review Completed** 4/16/25
Notary Signature Hadley K Wingate	**Date Notarized** 4.16.25

For Office Use Only

I have reviewed the application for Preliminary Plat Approval and find it [ ] Complete [ ] Incomplete

Signature of Planner Conducting Review	**Date Review Completed**

05-210000-----
Subdivision Number

:X2Dllc, Po Box 10492, Albuquerque, NM 87184, DS.Civ.Auth

February 15th, 2025

RE: Preliminary Plat and related submittals – Dos Soles

Dear Madam/Sir:

On behalf of X2D, LLC, this letter is to authorize Sheldon Greer of Development Management Consultants, as agent to X2D, LLC to submit all applications and make all representations regarding the preliminary and final plat of Dos Soles Subdivision located in Rio Rancho NM. Dos Soles Subdivision consists of a replat of Lots 1-3, Block 7, Unit 10, Rio Rancho Estates.

Feel free to contact me if you have any questions or concerns.

Respectfully,

Matthew Herrera
X2Dllc
505-933-4411

PRELIMINARY PLAT APPLICATION EXPLANATION: **PROPOSED DOS SOLES SUBDIVSION**

City of Rio Rancho
Development Services
3900 Southern Blvd. Ste 103
Rio Rancho, NM 87124

Development Services Staff:

The following items in the preliminary plat checklist have been marked “No” or “N/A” and/or include the following explanation as required by the checklist:

Subdivision Data Sheet

- Soils Analysis Report: To be provided prior to construction of subdivision improvements.
- Schedule of lot development: It is anticipated that the development will begin in 2025. The improvements are anticipated to take 12 months to complete.
- Special problem analysis: No special problems have been identified.
- Other significant conditions: Significant conditions have not been identified at the site.

Proposed Construction Plans

- Streetscape: Proposed landscaping will follow the approved site plan.

Soils Analysis

- Soils Analysis Report: To be provided prior to construction of subdivision improvements.

Special Problems Analysis

- Special problem analysis: No special problems have been identified.

Proposed Financial Guarantee

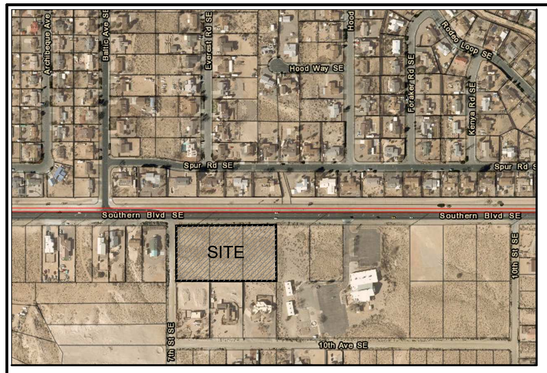
- Proposed FG to be provided at final plat.

Proposed Subdivision Infrastructure

- List of system level improvements: No impact fee credits to be obtained.

Proposed Development Agreement

- System level improvements: No impact fee credits to be obtained.



VICINITY MAP

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ADMINISTRATIVELY BY THE RIO RANCHO CITY DEVELOPMENT DEPARTMENT DIRECTOR ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS THAT MAY BE CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL) SS

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
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F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
L4	S 08°15'52" W	2.63'
L5	S 64°11'16" E	20.45'
L6	S 29°43'07" W	2.57'
L7	S 35°19'50" E	6.87'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
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C5	20.00'	31.42'	28.28'	N 44°41'55" W	90°00'00"
C6	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C7	25.00'	16.09'	15.81'	S 71°15'50" E	36°52'12"
C8	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C9	19.50'	13.42'	13.16'	S 19°24'48" E	39°25'46"
C10	30.50'	9.90'	9.86'	S 31°36'07" E	18°35'58"
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C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

_____
SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

_____
PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

_____
CITY OF RIO RANCHO DATE

_____
PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

_____
NEW MEXICO GAS COMPANY DATE

_____
QWEST CORPORATION D/B/A CENTURYLINK QC DATE

_____
SPARKLIGHT DATE

_____
COMCAST DATE

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

_____ _____ _____
ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

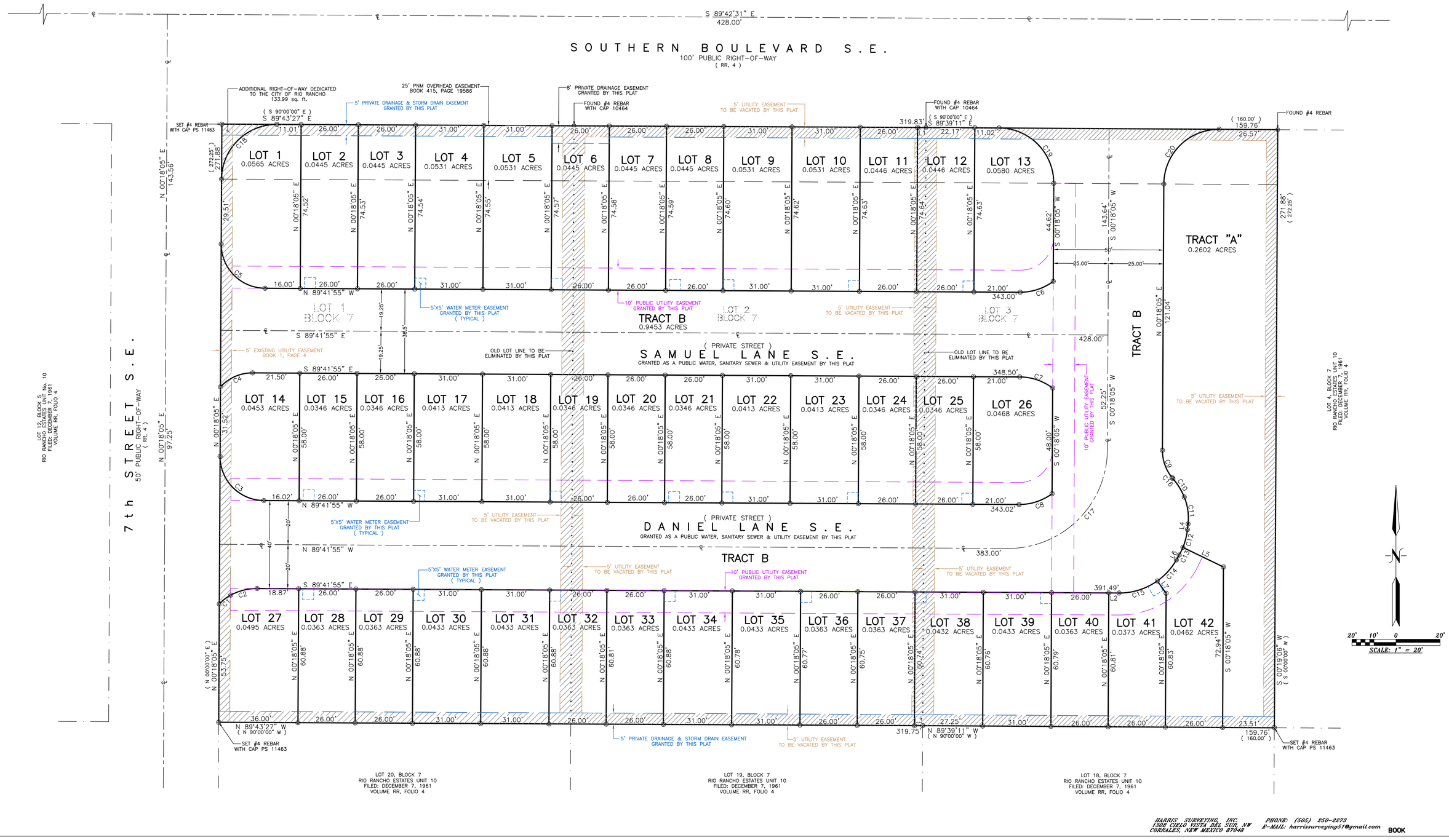
I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

_____
ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DR. SUR. NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024



23-0827 PLAT(2024 FOLDER).DWG

HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

City of Rio Rancho
Development Services Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 Fax (505) 896-8994

May 9, 2025

RE: **Dos Soles Subdivision: Preliminary Plat (Case # 25-210-00002) & Subdivision Variance: (Case # 25-280-00002).**

Dear Property Owner:

You are receiving this notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

In a concurrent request, the applicant additionally requests approval of a Subdivision Variance to Chapter 155.43 *Easements* requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision. The applicant is requesting solely 10-ft public utility easements within the front of all lots, and all tracts as necessary. Public utility easements are internal to property lines and serve as portions of land allocated for placement of utilities as necessary.

The Planning and Zoning Board will consider this request at a public hearing on **Tuesday, May 27, 2025** starting at 6:00 pm in the **Council Chambers of City Hall, located at 3200 Civic Center Circle**. If you would like to comment on this application, you are encouraged to send in comments in writing to tdvorak@rrnm.gov, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

For the **Planning and Zoning Board meeting**, to participate virtually: Join via computer:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: **026819** Join via phone: 1-253-215-8782 US

Please do not hesitate to contact me at 505-896-8361 or e-mail me at tdvorak@rrnm.gov if you have any questions about the application or accessing the meeting. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Tim Dvorak

Tim Dvorak
Municipal Planner II
Development Services Department
Planning Division
City of Rio Rancho

DOS SOLES SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE
RRE UNIT 7, BLOCK 7, LOTS 1-3



Rio Rancho
City of Vision

0 60 120 240 360 480
Feet

Subject Properties
Roads
Zoning
R-1
SU

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by Tim Dvorak on 5/9/2025

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
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NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision. The applicant additionally requests approval of a Subdivision Variance to Chapter 155.43 *Easements.* The PZB will hear the request on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



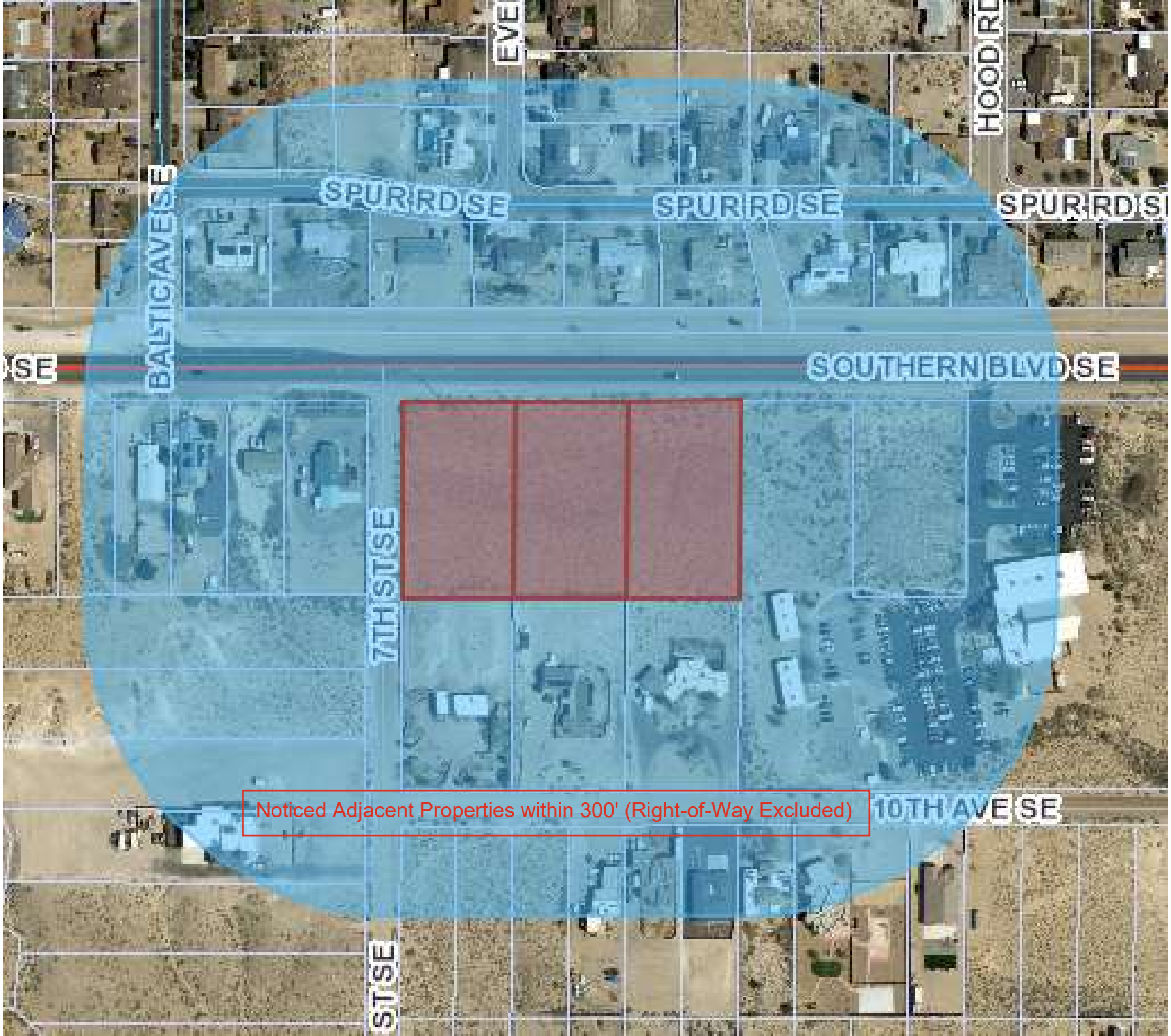
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SPUR RD SE
SPUR RD SE
BALTIC AVE SE
635
655
675
701
715
735
9999
779
793
807
9999
SOUTHERN BLVD SE
SOUTHERN BLVD SE
620
624
628
632
700
701
708
812
7TH ST SE
900
1001
1005
701
705
709
1009
10TH AVE SE
Noticed Adjacent Properties within 100' (Right-of-Way Excluded)


SPUR RD SE
SPUR RD SE
SPUR RD S
BALTIC AVE SE
SOUTHERN BLVD SE
7TH ST SE
10TH AVE SE
Noticed Adjacent Properties within 300' (Right-of-Way Excluded)

CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

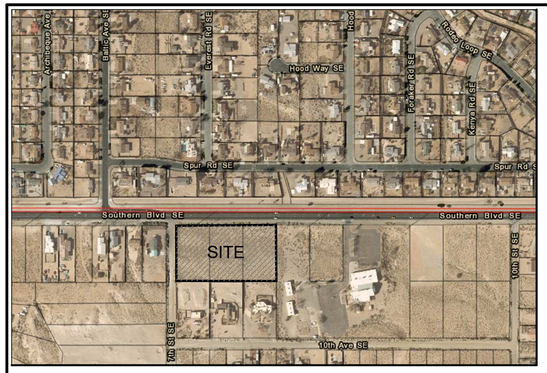
Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.



VICINITY MAP

Correct to 42 lots & 2 tracts

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

Reflect total lot and tract acres

Reflect total acreage of ROW dedicated to the City

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ~~ADMINISTRATIVELY~~ BY THE RIO RANCHO ~~CITY DEVELOPMENT DEPARTMENT DIRECTOR~~ ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

Reflect current Clerk, Noel C. Davis

Remove "administratively"

Remove Director and reflect "Planning and Zoning Board"

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

Remove Director Block

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS ~~THAT MAY BE~~ CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
SS
COUNTY OF SANDOVAL)

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

Owner/proprieter names need to be shown for each signature line.

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
D: City of Rio Rancho for installation, maintenance, and service of storm drain lines, manholes, and inlets, sanitary sewer lines, manholes and service lines, water lines, valves and other equipment and facilities reasonably necessary to provide storm, sanitary sewer and water services
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F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

Underline City of Rio Rancho & Sparklight so they are more easily visible. Additionally include Comcast & Ezee Fiber under this section.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
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L7	S 35°19'50" E	6.87'

CURVE TABLE

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C13	29.83'	3.87'	3.87'	S 25°59'59" W	7°26'16"
C14	29.83'	12.99'	12.89'	S 42°11'39" W	24°57'03"
C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Add language in plat title after "Plat of Dos Soles Subdivision" to reflect (Being a Replat of Lots 1 thru 3, Block 7, Rio Rancho Estates Unit 10)

Zoning Comments Page 1 of 2

Reformat P&Z Board signature block to below:

Rio Rancho Planning & Zoning Board

Approved the __ day of __, 20__

_____

By Fred Radosevich, P&Z Chairman

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

CITY OF RIO RANCHO DATE

PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

NEW MEXICO GAS COMPANY DATE

QWEST CORPORATION D/B/A CENTURYLINK QC DATE

SPARKLIGHT DATE

COMCAST DATE

Add Ezee Fiber signature line.

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DRIVE NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

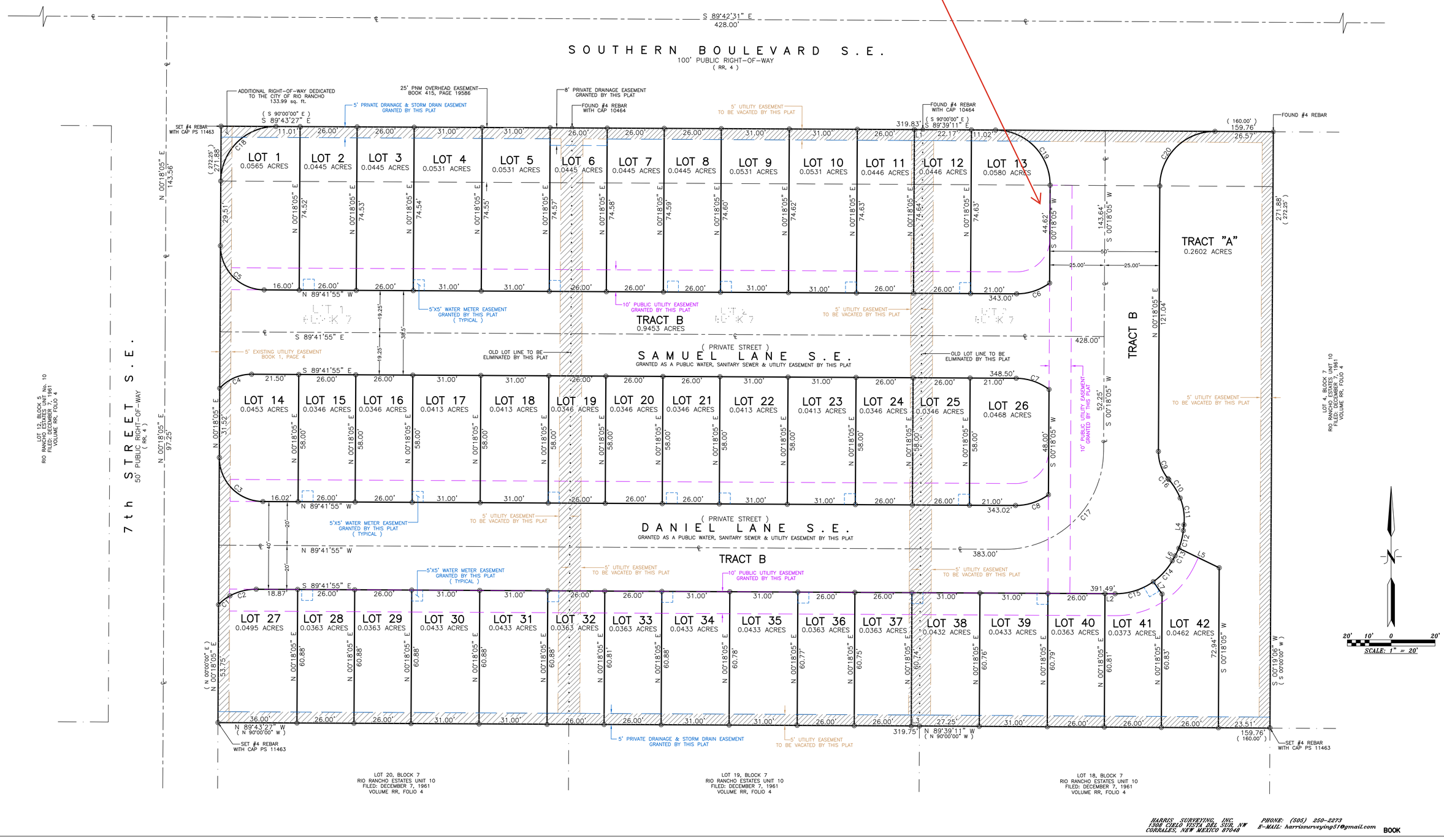
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Zoning Comments Page 2 of 2

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Please notate Non-Vehicular Access Easements for lots with side property lines adjacent to streets



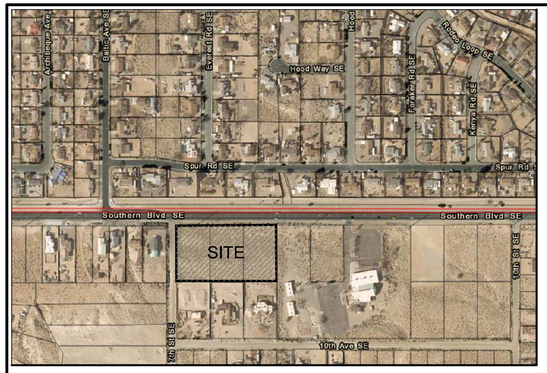
HARRIS SURVEYING, INC.
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PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

BOOK PAGE

23-0827 PLAT(2024 FOLDER).DWG

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Engineering Comments Page 1 of 2



VICINITY MAP

DISCLOSURE STATEMENT:

THE PURPOSE OF THE PLAT IS TO CREATE A 44 LOT SUBDIVISION FROM LOTS 1, 2 & 3, BLOCK 7, RIO RANCHO ESTATES, UNIT 10 VACATE PUBLIC UTILITY EASEMENTS AND TO GRANT ALL NEW EASEMENTS AS SHOWN.

GENERAL NOTES:

1: UNLESS NOTED, NO.4 REBAR WITH CAP STAMPED P.S.#11463 WERE SET AT ALL PROPERTY CORNERS.

2: BASIS OF BEARINGS IS THE PLAT OF RIO RANCHO ESTATES UNIT 10 FILED: DECEMBER 7, 1961, VOLUME RR, FOLIO 4

3: TOTAL AREA OF PLAT: 2.9932 ACRES.

4: THIS PLAT SHOWS ALL KNOWN EASEMENTS OF RECORD.

5: FIELD WORK PERFORMED ON: AUGUST 2024

6: THE COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE NAD 1983

SANDOVAL COUNTY CLERK CERTIFICATE:

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL)ss

THIS INSTRUMENT WAS FILED FOR RECORD ON _____, 20_____,

AT_____O' CLOCK_____M., RECORDED IN VOLUME_____, OF RECORDS OF

SAID COUNTY, FOLIO_____, AS DOCUMENT NO._____,

ANNE BRADY-ROMERO, CLERK AND RECORDER,

(RIO RANCHO ESTATES PLAT BOOK No._____ , PAGE_____).

BY: _____
DEPUTY.

CITY CLERK'S CERTIFICATE

I, REBECCA MARTINEZ, CITY CLERK OF THE CITY OF RIO RANCHO, NEW MEXICO DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS APPROVED ADMINISTRATIVELY BY THE RIO RANCHO CITY DEVELOPMENT DEPARTMENT DIRECTOR ON THE _____ DAY OF _____ 20_____.

_____
REBECCA A. MARTINEZ, CITY CLERK

DEVELOPMENT SERVICES DIRECTOR

APPROVED THIS _____ DAY OF _____, 20_____.

_____
AMY RINCON, DIRECTOR

FREE CONSENT & DEDICATION

THE LAND DIVISION SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNERS(S) AND PROPRIETORS(S) AND DO HEREBY REPRESENT THAT I/WE ARE THE AUTHORIZED AGENTS TO DO SO. WE ALSO DO HEREBY GRANT ANY AND ALL EASEMENTS THAT MAY BE CREATED BY THIS PLAT. THOSE SIGNING AS OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE TO THE LAND SUBDIVIDED AND ALSO DO HEREBY DEDICATE ADDITIONAL RIGHT-OF-WAY TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS.

_____

STATE OF NEW MEXICO)
COUNTY OF SANDOVAL) SS

ON THIS _____ DAY OF _____, 20_____, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY:

_____
OWNER

_____
OWNER

BY: _____ MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

23-0827 PLAT(2024 FOLDER).DWG

LEGAL DESCRIPTION:

LOTS NUMBERED ONE (1), TWO (2) AND THREE (3) IN BLOCK NUMBERED SEVEN (7) OF A PORTION OF UNIT TEN, RIO RANCHO ESTATES, TOWN OF ALAMEDA GRANT, SANDOVAL COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO ON DECEMBER 7, 1961 IN RIO RANCHO PLAT BOOK NO. 1, PAGE 4.

TRACT DEDICATION NOTES

TRACTS A & B DEDICATED TO DOS SOLES HOME OWNERS ASSOCIATION TO OWN AND MAINTAIN TOGETHER WITH GRANTING A BLANKET PRIVATE DRAINAGE EASEMENT WITH THE FILING OF THIS PLAT.

SUBDIVISION DATA

A: EXISTING LOTS: 3

B: 42 LOTS & 2 TRACTS BEING CREATED

C: MILEAGE OF FULL WIDTH STREETS CREATED: 0.1852

PUBLIC UTILITY EASEMENTS

Public Utility Easements shown on this plat are granted for the common and joint use of:
A. Public Service Company of New Mexico ("PNM"), a New Mexico corporation, (PNM Electric) for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical services.
B. New Mexico Gas Company for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas services.
C. QWEST D/B/A CENTURYLINK for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services.
D: City of Rio Rancho for installation, maintenance, and service of storm drain lines, manholes, and inlets, sanitary sewer lines, manholes and service lines, water lines, valves and other equipment and facilities reasonably necessary to provide storm, sanitary sewer and water services
E: Sparklight for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.
F: Cable TV for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable services.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, replace, modify, renew, operate and maintain facilities for purposes described above, together with free access to, from, and over said easements, with the right and privilege of going upon, over and across adjoining lands of Grantor for the purposes set forth herein and with the right to utilize the right of way and easement to extend services to customers of Grantee, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.
Easements for electric transformer/switchgears, as installed, shall extend ten (10) feet in front of transformer/switchgear doors and five (5) feet on each side.

Disclaimer
In approving this plat, Public Service Company of New Mexico (PNM), QWEST D/B/A CENTURYLINK and New Mexico Gas Company (NMGC) did not conduct a Title Search of the properties shown hereon. Consequently, PNM, QWEST D/B/A CENTURYLINK and NMGC do not waive or release any easement or easement rights which may have been granted by prior plat, replat or other document and which are not shown on this plat.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 89°43'27" E	3.83'
L2	S 89°41'55" E	4.62'
L3	N 89°43'27" W	3.75'
L4	S 08°15'52" W	2.63'
L5	S 64°11'16" E	20.45'
L6	S 29°43'07" W	2.57'
L7	S 35°19'50" E	6.87'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	19.50'	6.62'	6.59'	N 51°59'39" E	19°27'43"
C2	25.00'	12.47'	12.34'	N 76°00'48" E	28°34'34"
C3	20.00'	31.44'	28.30'	N 44°40'12" W	90°03'28"
C4	19.50'	16.35'	15.87'	N 66°16'56" E	48°02'17"
C5	20.00'	31.42'	28.28'	N 44°41'55" W	90°00'00"
C6	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C7	25.00'	16.09'	15.81'	S 71°15'50" E	36°52'12"
C8	25.00'	16.09'	15.81'	S 71°51'59" W	36°52'12"
C9	19.50'	13.42'	13.16'	S 19°24'48" E	39°25'46"
C10	30.50'	9.90'	9.86'	S 31°36'07" E	18°35'58"
C11	25.00'	12.46'	12.34'	S 08°01'08" E	28°34'00"
C12	29.83'	8.34'	8.31'	S 14°16'21" W	16°00'59"
C13	29.83'	3.87'	3.87'	S 25°59'59" W	7°26'16"
C14	29.83'	12.99'	12.89'	S 42°11'39" W	24°57'03"
C15	29.83'	18.55'	18.25'	S 72°29'07" W	35°37'54"
C16	20.22'	0.60'	0.60'	S 40°00'31" E	1°41'54"
C17	45.00'	70.69'	63.64'	S 45°18'05" W	90°00'00"
C18	25.00'	39.26'	35.35'	N 45°17'19" E	89°58'28"
C19	25.00'	39.25'	35.34'	S 44°40'33" E	89°57'15"
C20	25.00'	39.29'	35.37'	N 45°19'27" E	90°02'45"

SANDOVAL COUNTY TREASURER CERTIFICATE

THE FIRST HALF/SECOND HALF OF _____ PROPERTY TAXES FOR THE PROPERTY SHOWN HEREON ARE PAID IN FULL.

OWNER # _____

_____
SANDOVAL COUNTY TREASURER DATE

CITY OF RIO RANCHO APPROVALS

_____
PLANNING AND ZONING, CITY OF RIO RANCHO DATE

UTILITY APPROVALS:

THE UTILITY COMPANY SIGNATURES SHOWN HEREON ARE BY AUTHORIZED UTILITY COMPANY REPRESENTATIVES

_____
CITY OF RIO RANCHO DATE

_____
PUBLIC SERVICE COMPANY OF NEW MEXICO DATE

_____
NEW MEXICO GAS COMPANY DATE

_____
QWEST CORPORATION D/B/A CENTURYLINK QC DATE

_____
SPARKLIGHT DATE

_____
COMCAST DATE

Ezee Fiber

I, ANTHONY L. HARRIS, NEW MEXICO PROFESSIONAL SURVEYOR No. 11463, HEREBY AFFIRM THAT THE PROPERTY DESCRIBED HEREON DOES LIE WITHIN THE PLATTING AND EXTRATERRITORIAL SUBDIVISION JURISDICTION OF THE CITY OF RIO RANCHO

_____ _____ _____
ANTHONY L. HARRIS NMPS No. 11463 DATE

SURVEYORS CERTIFICATE:

I, ANTHONY L. HARRIS, NEW MEXICO REGISTERED LAND SURVEYOR No. 11463, DO HEREBY CERTIFY THAT THIS PLAT SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND I AM RESPONSIBLE FOR SAID PLAT AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY CONFORMS TO LAND SURVEYING STANDARDS AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND THE CITY OF RIO RANCHO SUBDIVISION ORDINANCE.

_____
ANTHONY L. HARRIS, N.M.P.L.S. # 11463 DATE

HARRIS SURVEYING, INC.
1308 CIELO VISTA DR, SUR, NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2273
E-MAIL: harrissurveying51@gmail.com

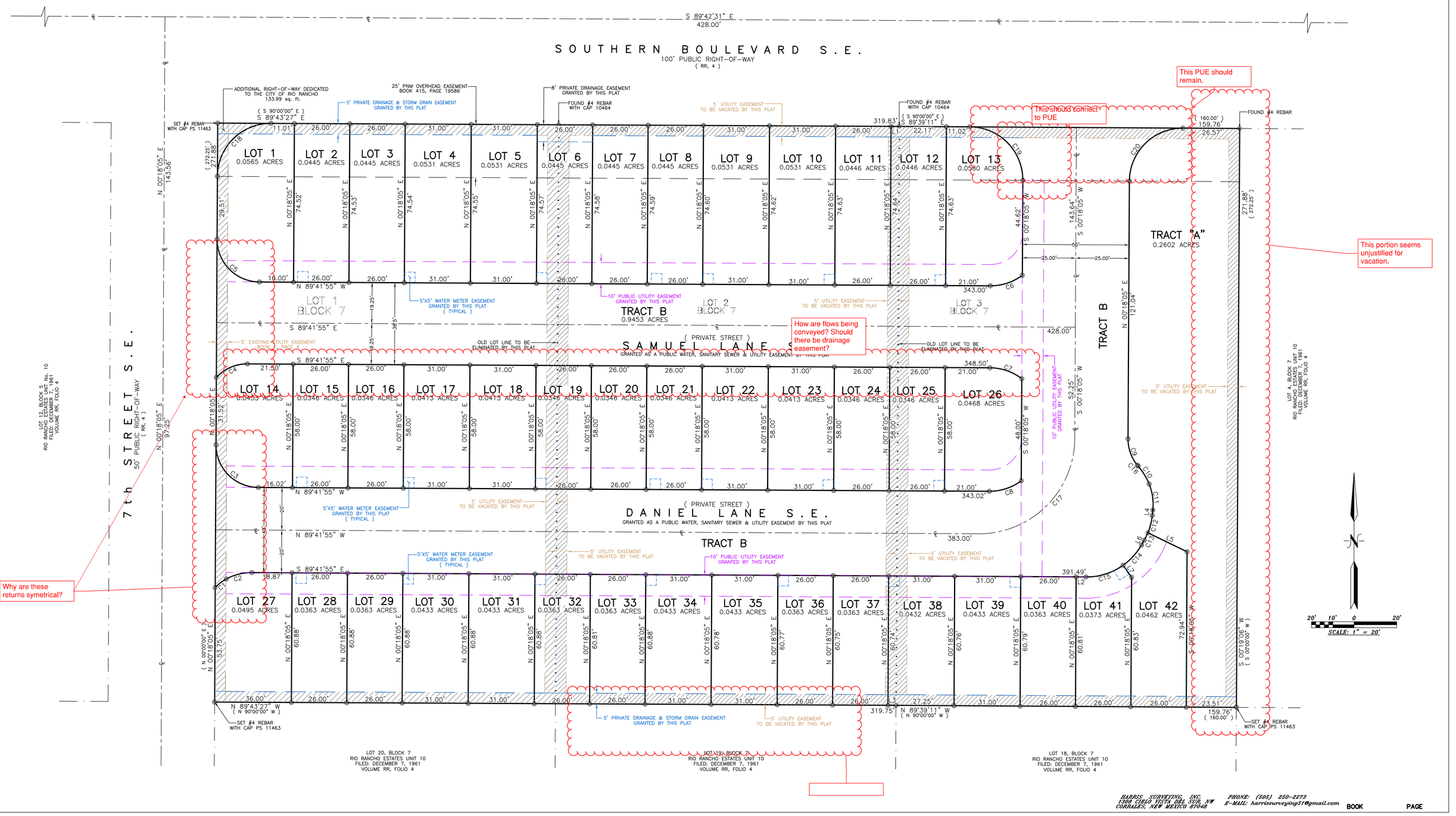
BOOK PAGE

Engineering Comments Page 2 of 2

PLAT OF
DOS SOLES SUBDIVISION
WITHIN
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 27, T.12N., R.2E., N.M.P.M.
CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO
AUGUST 2024

Not sure that the 5' PUE should be vacated along southern or along tract A

Cross lot drainage not permitted
how are flows on the middle row being routed



HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR, NW
CORRALES, NEW MEXICO 87048
PHONE: (505) 250-2278
E-MAIL: harrissurveying31@gmail.com

BOOK PAGE

23-0827 PLAT(2024 FOLDER).DWG

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: April 17, 2025

TO:
- (X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Peter Prukop
- (X) Fire and Rescue – Brian Johnson, Gerard Bauer
- (X) Police – Scott Pope
- (X) SSCAFCA – Andy Edmondson, Sara Rassa
- (X) Parks and Recreation - Dyane Sonier
- (X) Rio Rancho Public Schools – Michael Baker
- (X) MRCOG – Peach Anderson-Tauzer
- (X) Ezee Fiber – John Muldrow

FROM: Development Services Department, Planning & Zoning Division

RE: DSD #25-210-00002 – Dos Soles Subdivision / Preliminary Plat
(RRE Unit 10, Block 7, Lots 1-3; 700, 704 & 708 Southern Blvd SE)

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the proposed Dos Soles Subdivision. The proposed plat will create 42 lots and 1 tract, all zoned SU: Special Use for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, April 30, 2025**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
- (_) RECOMMENDED FOR APPROVAL
- (_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
- (_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

The proposed plat (and previous site plan 23-160-00007) do not show any allocation for park land. The proposed subdivision is 3.07 acres in total size, has a proposed 42 residences, and is within 0.5 or less miles from the closest, existing park (Rainbow Park). However, Rainbow Park was developed to meet the needs of the existing homes, not necessarily new growth. By Code, the number of anticipated residents for this subdivision (42 residences x 2.83 residents/residence = 119 residents; 3 acres developed park land/1,000 residents = 0.36 acres) would indicate an allocation of 0.36 acres of developed park land. The development is less than 25 acres in size, therefore the City may not require actual park land dedication or allocation. If it is required, the City will not accept dedication of parks less than 3 acres in size. Smaller parks will be owned and maintained by an HOA. Per the Subdivision Code 155.46 E1, fair market value for the 0.36 acres may be required in lieu of a park land allocation. Regarding page 10 of the application PDF and the last item of the "PRELIMINARY PLAT APPLICATION EXPLANATION" document, Park and Trail Impact Fees will be paid per residence.

Dyane N. Soiner *05/01/2025*

Reviewer Date

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: April 17, 2025

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Peter Prukop
(X) Fire and Rescue – Brian Johnson, Gerard Bauer
(X) Police – Scott Pope
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer
(X) Ezee Fiber – John Muldrow

FROM: Development Services Department, Planning & Zoning Division

RE: DSD #25-210-00002 – Dos Soles Subdivision / Preliminary Plat
(RRE Unit 10, Block 7, Lots 1-3; 700, 704 & 708 Southern Blvd SE)

The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the proposed Dos Soles Subdivision. The proposed plat will create 42 lots and 1 tract, all zoned SU: Special Use for Townhomes. The subject properties consist of approximately 2.9932 acres and are currently legally described as Rio Rancho Estates Unit 10, Block 7, Lots 1-3. A site plan for the subject properties was approved by the Governing Body on October 26, 2023 under Case No. 23-160-00007.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, April 30, 2025**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(X) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

Approved with requirements:
- Follow the IFC 2021 Appendix D
-Fire Hydrant spacing every 500 ft.
- A Fire 1 Plan shall be submitted to the Fire Marshals office before full plan set is submitted for plan review

Fire Marshal BRIAN JOHNSON — Reviewer
4/17/2025 — Date

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: September 18, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Jordan Yutzy, Cedric Smith, Peter Prukop, Brian Babyak
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer
(X) Police - Justin Garcia
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Site Plan: DSD #23-160-00007 (RRE U10, Block 7, Lot 1-3)

The applicant, Matthew Herrera X2D, LLC., requests site plan approval for the properties of 700, 704, and 708 Southern Blvd SE. The subject properties are legally described as Rio Rancho Estates Unit 10, Block 7, Lot 1-3 and comprise approx. 3 acres. The subject properties are zoned SU: Special Use for Townhomes.

The Special Use Ordinance for these properties requires site plan approval by the Planning and Zoning Board in addition to the Governing Body.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Monday October 2, 2023**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(_) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

RRFR Comments: International Fire Code 2021 shall be followed.

1. Confirm fire hydrants are in approved distances and locations
2. Follow IFC Appendix D – Inside turning radius of turns shall be 28'.
3. No parking on Road ways. Fire lane required.
4. Fire Sprinkler system required.
    a. Fire hydrant within 100' of FDC(s)
5. Fire Alarm may be required.
6. Deferred Submittals for Fire Alarm and Fire Suppression systems.
7. Knox box for emergency access.
8. More requirements may be necessary upon plan review phase.

Gerard Bauer 10/2/2023

Gerard Bauer — Reviewer
10/2/2023 — Date

Timothy Dvorak

From: GERARD BAUER
Sent: Wednesday, October 11, 2023 10:57 AM
To: Timothy Dvorak; JESSICA DURON-MARTINEZ
Cc: JAMES WENZEL
Subject: RE: Questions on Fire Lane Comments for Southern Townhomes

Good Morning Tim,

The road width shown is 28'. If a car would park on this road it would then reduce the size of this road to under the required 26' for Aerial fire apparatus and the required 26' for Access road width with a hydrant. Due to the size constraints on this property no parking will be allowed on the roadways. Please let me know if you have any further questions.

Thank you,

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.
D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

Gerard Bauer
Lieutenant|Fire Prevention Officer

RRFR / Fire Marshal's Office

O:505.896.8357 **C:**505.389.7296

RRNM.gov |

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 23-280-00009

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Subdivision Variance. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.

BACKGROUND AND ANALYSIS:
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision. The subject properties comprising the Broadmoor Hill Subdivision are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.4899 acres.

The subject properties are zoned R-2: Single-Family Residential District per Ordinance No. 33, Enactment No. 21-34, adopted by the Governing Body on October 14, 2021.

The subject properties are part of the Broadmoor Drive Specific Area Plan, adopted by the Governing Body on August 22, 2007 via Resolution No. 79, Enactment No. 07-078 and most recently amended on August 24, 2023 via Resolution No. 97, Enactment No. 23-098.

Lots 16A-20A are additionally under Overlay Ordinance No. 63, Enactment No. 07-75, adopted October 10, 2007 by the Governing Body. This ordinance established a Corridor Overlay Zone over identified lots within the Broadmoor Drive Specific Area Plan, including Lots 16A-20A.

This Subdivision Variance request is for the proposed Broadmoor Hill Subdivision, being heard concurrently under case #23-210-00013. The proposed subdivision is located on the east side of Broadmoor Blvd NE, a minor arterial, between Picuris Ave NE and Fruta Rd NE, both residential roads (see attached map). Broadmoor Hill comprises approximately 10.4899 plat acres and would create 56 lots, 2 tracts, and 1 parcel, all zoned R-2: Single-Family Residential District. A concurrent Subdivision Variance application is being heard under case #23-280-00010 for a proposed dead-end street stub for Salado Loop NE, within the Broadmoor Hill Subdivision.

The subject Subdivision Variance application requests approval of a dead-end street stub for Mimbres Dr NE, located in the northeast section of the subdivision.

REVIEW CRITERIA:

R.O. 2003 § 155.60 (A) addresses Subdivision Variances, stating “(A) Variance from the strict

application of design standards may be allowed in cases where unusual conditions exist, or a variance would provide an improved design. Financial gain, loss or monetary savings cannot be considered solely as a basis for a variance request."

In their justification letter, the Applicant states, "The current layout of Broadmoor Hill Subdivision includes a stub street at the north end of Mimbres Drive. This layout offers the best solution to optimize the land use. The length of the stub street on Mimbres Drive is 109' and meets the criteria for a maximum stub street length of 150'."

Staff finds the subject Subdivision Variance would not adversely impact the proposed subdivision. As Broadmoor Hill has two proposed points of ingress and egress (Blue Corn Avenue NE & Puerco Drive NE), creation of a dead-end stub for Mimbres Drive NE would not impede the necessity of two access points for the subdivision. Criteria is satisfied.

CONFORMANCE WITH CITY POLICIES AND REGULATIONS:
Application materials for this Subdivision Variance request were sent to the below agencies for review:

Development Services Planning	Comments throughout ABM.
Development Services Engineering	No adverse comments.
Rio Rancho Fire & Rescue	Comments attached in "Reviewer Comments."
Rio Rancho Police	No comments received.
SSCAFCA	No adverse comments.
Parks, Recreation, and Community Services	No adverse comments.
Rio Rancho Public Schools	No comments received.
MRMPO	No comments received.

SURROUNDING LAND USE/ZONING:
Broadmoor Hill is surrounded by the following zoning:

To the North:
- R-1: Single-Family Residential District
- R-6: Multi-Family Residential District
- NC: Neighborhood Commercial District

To the South:
- R-1: Single-Family Residential District
- C-1: Retail Commercial District

To the East:
- R-1: Single-Family Residential District
- R-4: Single-Family Residential District

To the West:
- R-1: Single-Family Residential District
- R-3: Mixed Residential District
- SU: Special Use District for Commercial Land Uses

NOTIFICATIONS: Notice of pending development application was sent together with Preliminary Plat request (#23-210-00013) and Subdivision Variance request (#23-280-00010) via certified mail to property owners within 100' of the subject property and first class postcards to property owners within 300' of the subject property 15 days prior to the hearing. A legal notice was published in the Albuquerque Journal on May 12, 2025. A public notice sign was posted to the property as required

by ordinance.

IMPACT:

The Development Services Department recommends approval of Subdivision Variance request #23-280-00009 subject to the findings set forth below:

General Findings of Fact:
1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

Specific Findings of Fact for Approval:
1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.41(M) is approved for Mimbres Drive NE, within the Broadmoor Hill Subdivision, Preliminary Plat case #23-210-00013.

If the Planning and Zoning Board determines that the application does not adequately meet the criteria for granting a Subdivision Variance, then the following specific findings of fact for denial are recommended:

Specific Findings of Fact for Denial:
1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.41(M).

ALTERNATIVES:

The Planning and Zoning Board may:
1. Approve the Subdivision Variance with findings.
2. Approve the Subdivision Variance with amendments to the findings.
3. Deny the Subdivision Variance.
4. Postpone the Subdivision Variance to allow for further review and information.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends the Planning and Zoning Board approve the requested Subdivision Variance with findings.

ATTACHMENT: Zoning, Location Map
ATTACHMENT: Application
ATTACHMENT: Authorization
ATTACHMENT: Justification
ATTACHMENT: Preliminary Plat
ATTACHMENT: Reproduction of Notices, Legal Ad
ATTACHMENT: Reviewer Comments
ATTACHMENT: Findings_of_Fact_.docx

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



Rio Rancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by:Tim Dvorak on 5/9/2025

Development Services Department, Ste. 130
3200 Civic Center Circle NE, Rio Rancho, NM 87144
(505) 891-5005

PLANNING & ZONING LAND USE APPLICATION

Please check appropriate box (Fees are listed on the back)

Administrative Permit	Plan	Subdivision	Zoning
☐ Community Residential Care Facility	☐ Comprehensive Plan Amendment	☐ Final Plat	☐ Annexation
☐ Development Review Committee (DRC)	☐ Corridor Plan Amendment	☐ Preliminary Plat	☐ Appeal
☐ Home Occupation	☐ Master Plan	☐ Summary Plat	☐ Conditional Use Permit
☐ Model Home / Sales Office	☐ Master Plan Amendment	☐ Vacation of Plat	☐ Master Sign Plan
☐ Residential Child Care Facility 6 or <	☐ Specific Area Plan Amendment	☐ Street Name Change	☐ Site Plan
☐ Sign Permit	☐ Text Amendment	☐ Subdivision Interpretation	☐ Special Exception
☐ Other		☒ Subdivision Variance	☐ Variance
			☐ Zone Map Amendment
			☐ Zoning Certification
			☐ Zoning Interpretation

Please Print In Ink Only or Type
Application must be complete. Please attach the appropriate checklist for the action you are requesting, if applicable.

APPLICANT/AGENT INFORMATION

Applicant Name:	LAS VENTANAS NM, INC.	Phone:	505-600-3377
Address:	8330 WASHINGTON PL NE	E-Mail:	Tscott@lasventanasnm.com
City:	Albuquerque	State: NM	Zip: 87113
Proprietary Interest:	OWNER	List Owners:	LAS VENTANAS NM, INC.
Deed or Ownership Verification Provided: (Initials)		Letter of Authorization Provided: (Initials)	

Agent Name:	HUITT-ZOLLARS, INC.	Phone:	505-892-5141
Address:	333 RIO RANCHO DRIVE NE, SUITE 101	E-Mail:	nvilla@huitt-zollars.com
City:	RIO RANCHO	State: NM	ZIP Code: 87124

DESCRIPTION OF REQUEST: (PLEASE ADD ADDITIONAL SHEET(S) IF NECESSARY)

SUBDIVISION VARIANCE REQUESTS FOR BROADMOOR HILL SUBDIVISION

SITE INFORMATION: (PLEASE PROVIDE ACCURATE LEGAL DESCRIPTION)

Subdivision/Unit : RRE UNIT 13	Block(s): 118	Lot(s): 1-9 AND 16A-20A
Existing Zoning: R-2	Proposed Zoning: R-2	
No. of existing lots: 14	No. of proposed lots: 56	Total area of site (acres) 10.5

ACKNOWLEDGEMENT

I hereby acknowledge that I have read this entire application and affirm that all information provided is correct. I agree to comply with the requirements of the City of Rio Rancho as outlined in all applicable laws, ordinances and regulations.

Print Name:	NINA VILLA	Applicant:	Agent: HUITT-ZOLLARS, INC.
Signature:			Date: 12-26-23

FOR OFFICIAL USE ONLY

H.T.E. PROJECT #	FEE	RECEIPT #

APPLICATION ACCEPTED BY: _____ **DATE:** _____

Form revised June 2014

LAS VENTANAS HOMES

March 27, 2023

City of Rio Rancho
Planning and Zoning Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144

Re: Property Owner Letter of Authorization

To Whom It May Concern:

Las Ventanas NM, Inc., hereby authorizes Huitt Zollars to obtain information, submit and process applications, represent the project at meetings and public hearings, and act as our agent related to the properties located at Broadmoor Subdivision SE Corner Broadmoor Avenue and Picuris Avenue

Sincerely,

Las Ventanas NM, Inc.

By: _____

Printed Name: T. Scott Ashcraft

Title: President

Las Ventanas Homes
8330 Washington Pl. NE
Albuquerque, NM 87113
Phone: 505.600-3377 E-Mail: Tscott@LasVentanasNM.com

HUITT-ZOLLARS

HUITT-ZOLLARS, INC. ı 333 Rio Rancho Dr. NE ı Suite 101 ı Rio Rancho, NM 87124-1450 ı 505.892.5141 phone ı 505.892.3259 fax ı huitt-zollars.com

December 26, 2023

City of Rio Rancho
Development Services
Attn: Tim Dvorak
3200 Civic Circle NE
Rio Rancho, NM 87144

RE: Broadmoor Hill Subdivision Preliminary Plat
Subdivision Variance Request for Mimbres Drive
Case #23-210-00013

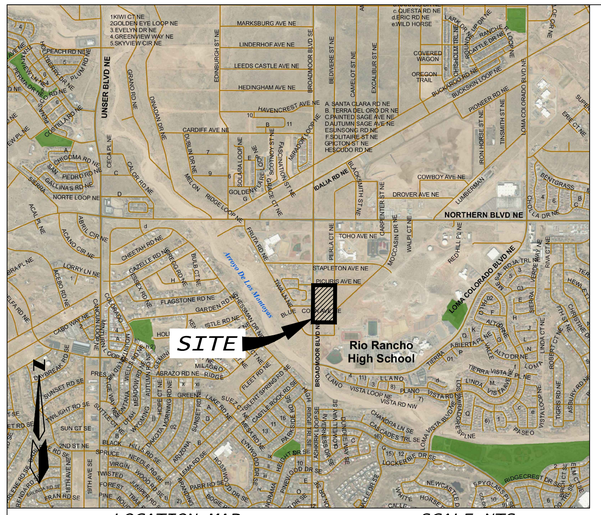
Dear Mr. Dvorak,

We are requesting a subdivision variance for Mimbres Drive. The current layout of Broadmoor Hill Subdivision includes a stub street at the north end of Mimbres Drive. This layout offers the best solution to optimize the land use. The length of the stub street on Mimbres Drive is 109' and meets the criteria for a maximum stub street length of 150'. This design is similar to existing designs at Mesa Grande Loop and at the Del Webb at Alegria Subdivision.

If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

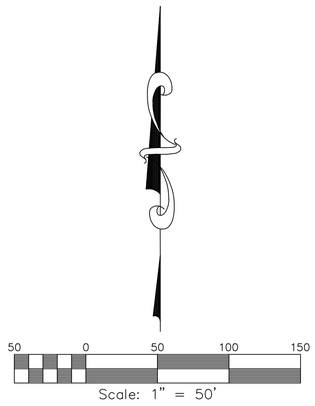
Nina Villa, P.E.

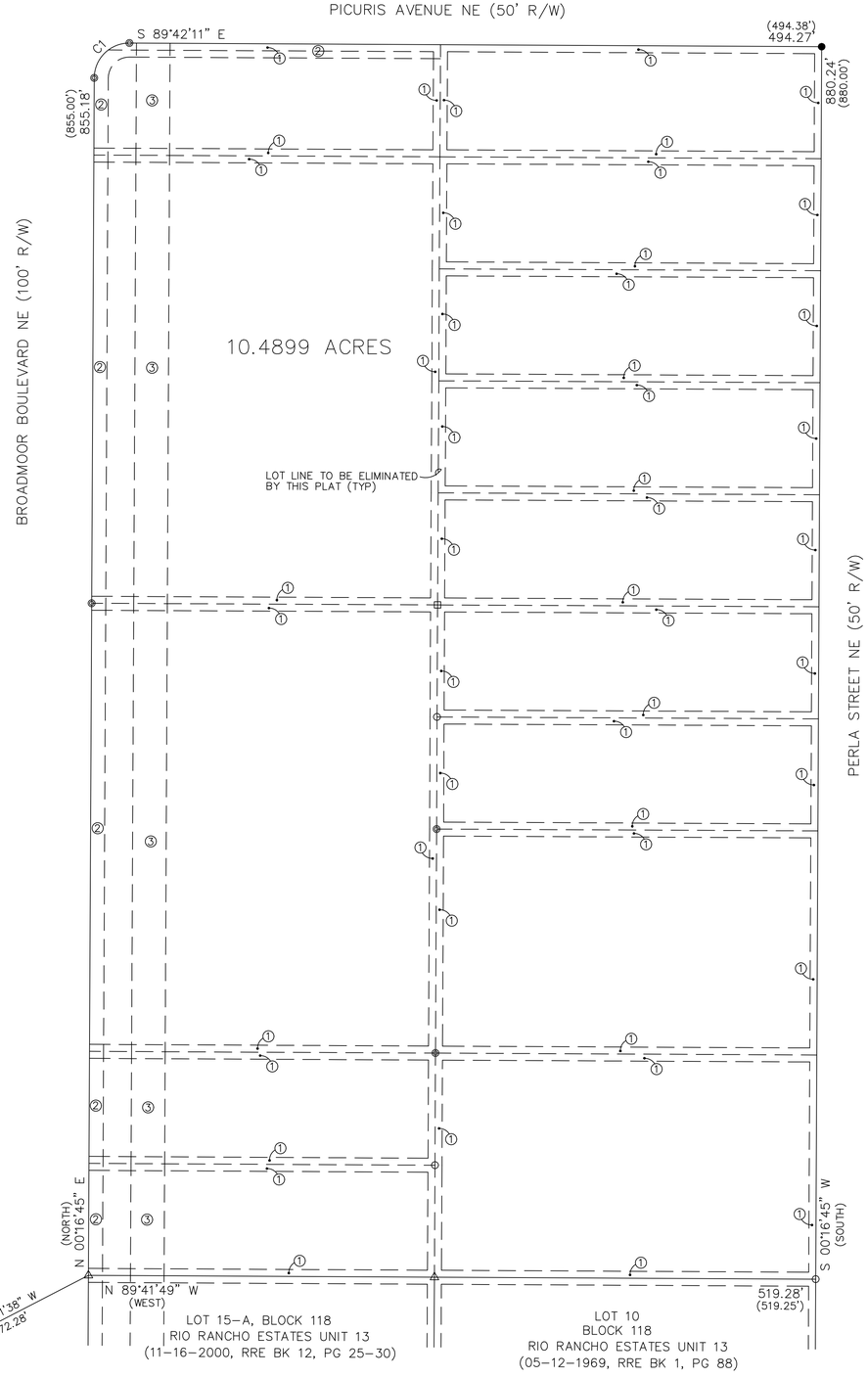

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2 GOLDEN EYE LOOP NE
3 EVELYN DR NE
4 GREENVIEW WAY NE
5 SKYVIEW CIR NE
c QUESTA RD NE
d BRIC RD NE
e WILD HORSE
MARKSBURG AVE NE
LINDERHOF AVE NE
LEEDS CASTLE AVE NE
HEDINGHAM AVE NE
HAVENCREST AVE NE
A SANTA CLARA RD NE
B TERRA DEL ORO DR NE
C PAINTED SAGE AVE NE
D AUTUMN SAGE AVE NE
E SUNSONG RD NE
F SUTTAIRE ST NE
G PECTON ST NE
H ESQUIDO RD NE
CARDIFF AVE NE
GOLDEN EYE LOOP NE
UNSER BLVD NE
COVERED WAGON
OREGON TRAIL
BUCKBOARD LOOP NE
PIONEER RD NE
NORTHERN BLVD NE
COWBOY AVE NE
DROVER AVE NE
LUMBERJACK RD NE
ITAPLETON AVE NE
TOHO AVE NE
SAN COLORADO BLVD NE
Arroyo De La Manzanita
SITE
Rio Rancho High School
BROADMOOR BLVD NE
LLANO VISTA LOOP NE
LLANO VISTA AVE NW
CHAMISA LN SE
CHAMISA TRS SE
LOCKER DR SE
NEWCASTLE DR SE
CRATER RD NE
MONTE VISTA DR NE
TIERRA VISTA PL NE
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DESCRIPTION

A tract of land situate within the Town of Alameda Grant, projected Section 13, Township 12 North, Range 2 East, New Mexico Principal Meridian, City of Rio Rancho, Sandoval County, New Mexico being all of LOTS 1–9, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on May 12, 1969, in Rio Rancho Estates Plat Book No. 1, Page 88 and all of LOTS 16–A THRU 20–A, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on November 16, 2000, in Rio Rancho Estates Plat Book No. 12, Pages 25–30, and containing 10.4899 acres more or less.

PRELIMINARY PLAT FOR
BROADMOOR HILL
(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024





PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ◎ SET 5/8" REBAR W/CAP "LS 7719"

EASEMENTS

① EXISTING 5' UTILITY & DRAINAGE EASEMENT (TYPICAL)
(05–12–1969, RRE BOOK 1, PAGE 88)
(ALL VACATED BY THIS PLAT)

② EXISTING 10' PUE (TYPICAL)
(11–16–2000, RRE BOOK 12, PAGE 25–30)

③ EXISTING 24' RECIPROCAL INGRESS AND EGRESS EASEMENT
DECLARATION, ACCEPTANCE AND MAINTENANCE
(05–23–2007, 200721588) (20–A)
(08–28–2007, 200735001) (19–A)
(08–28–2007, 200735002) (18–A)
(08–28–2007, 200735003) (17–A)
(08–28–2007, 200735004) (16–A)
(ALL VACATED BY THIS PLAT)

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary is from the plat of record entitled:

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (05–12–1969, RRE BOOK 1, PAGE 88)

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (11–16–2000, RRE BOOK 12, PAGE 25–30 [VOL 3, FOLIO 2024A])

   all being records of Sandoval County, New Mexico.

5. Field Survey: February 19, 2015.
6. Title Report: Fidelity National Title Insurance Company File No. FT000171566–RUTLEDGED (Effective Date: December 15, 2014)
7. City of Rio Rancho, New Mexico Zone: R–2
8. 100 Year Flood Zone Designation: Zone X, Panel 1893 of 2225, Flood Insurance Rate Map, City of Rio Rancho, Sandoval County, New Mexico, dated March 18, 2008. This property does not lie in the 100 Year Flood Plain.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

10–31–2023 REV
01–06–2022 REV

Drawn By:	TA	Date:	02–25–2015
Checked By:	TA	Drawing Name:	15011PLT.DWG
Job No.:	15–011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505–884–1990

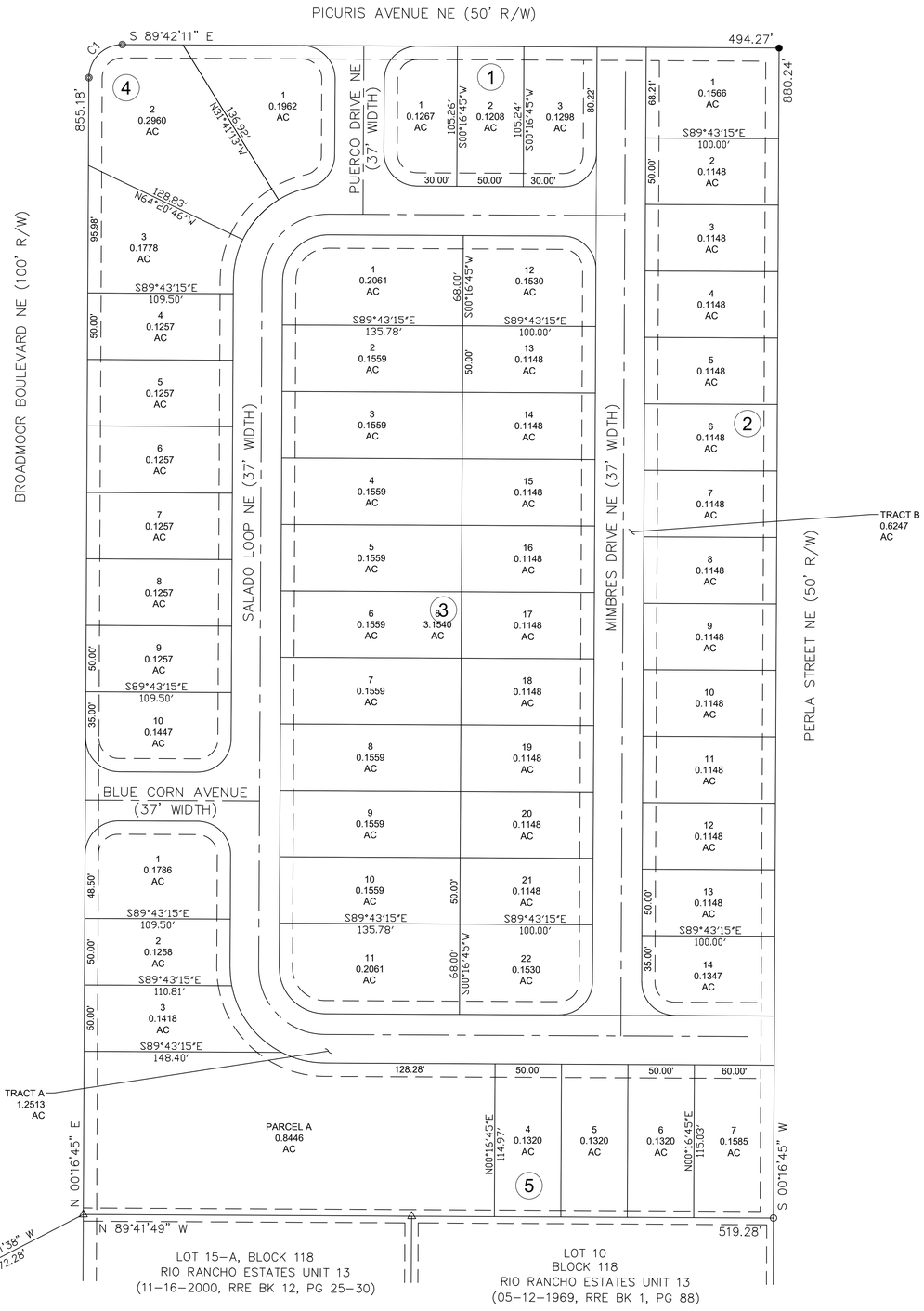
Book _____, Page _____

PRELIMINARY PLAT FOR

BROADMOOR HILL

(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024

50 0 50 100 150
Scale: 1" = 50'



PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ⊙ SET 5/8" REBAR W/CAP "LS 7719"

NOTES: UNLESS OTHERWISE INDICATED:

There is a ten (10) foot wide public utility easement within all new lots adjacent to private roadways and public road rights-of-way being granted herein. There is also a five (5) foot wide public utility easement within all lots and tracts on all other side and rear property lines.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

Drawn By:	TA	Date:	10-31-2023
Checked By:	TA	Drawing Name:	15011PL3.DWG
Job No.:	15-011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505-884-1990

Book _____, Page _____

City of Rio Rancho
Development Services Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 Fax (505) 896-8994

May 9, 2025

RE: **Broadmoor Hill Subdivision: Preliminary Plat (Case # 23-210-00013)**
& Subdivision Variance to allow for Stub Street (x2): (Case # 23-280-00009, Mimbres Dr NE), (Case # 23-280-00010, Salado Lp NE).

Dear Property Owner:

You are receiving this notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

In two concurrent requests, the applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end street stubs for Mimbres Drive NE and Salado Loop NE within the proposed Broadmoor Hill Subdivision.

The Planning and Zoning Board will consider these requests at a public hearing on **Tuesday, May 27, 2025** starting at 6:00 pm in the **Council Chambers of City Hall, located at 3200 Civic Center Circle**. If you would like to comment on these applications, you are encouraged to send in comments in writing to tdvorak@rrnm.gov, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

For the **Planning and Zoning Board meeting**, to participate virtually: Join via computer:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: **026819** Join via phone: 1-253-215-8782 US

Please do not hesitate to contact me at 505-896-8361 or e-mail me at tdvorak@rrnm.gov if you have any questions about the applications or accessing the meeting. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Tim Dvorak

Tim Dvorak
Municipal Planner II
Development Services Department
Planning Division
City of Rio Rancho

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



RioRancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by Tim Dvorak on 5/9/2025

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision. The applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end stub streets. The PZB will hear the requests on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



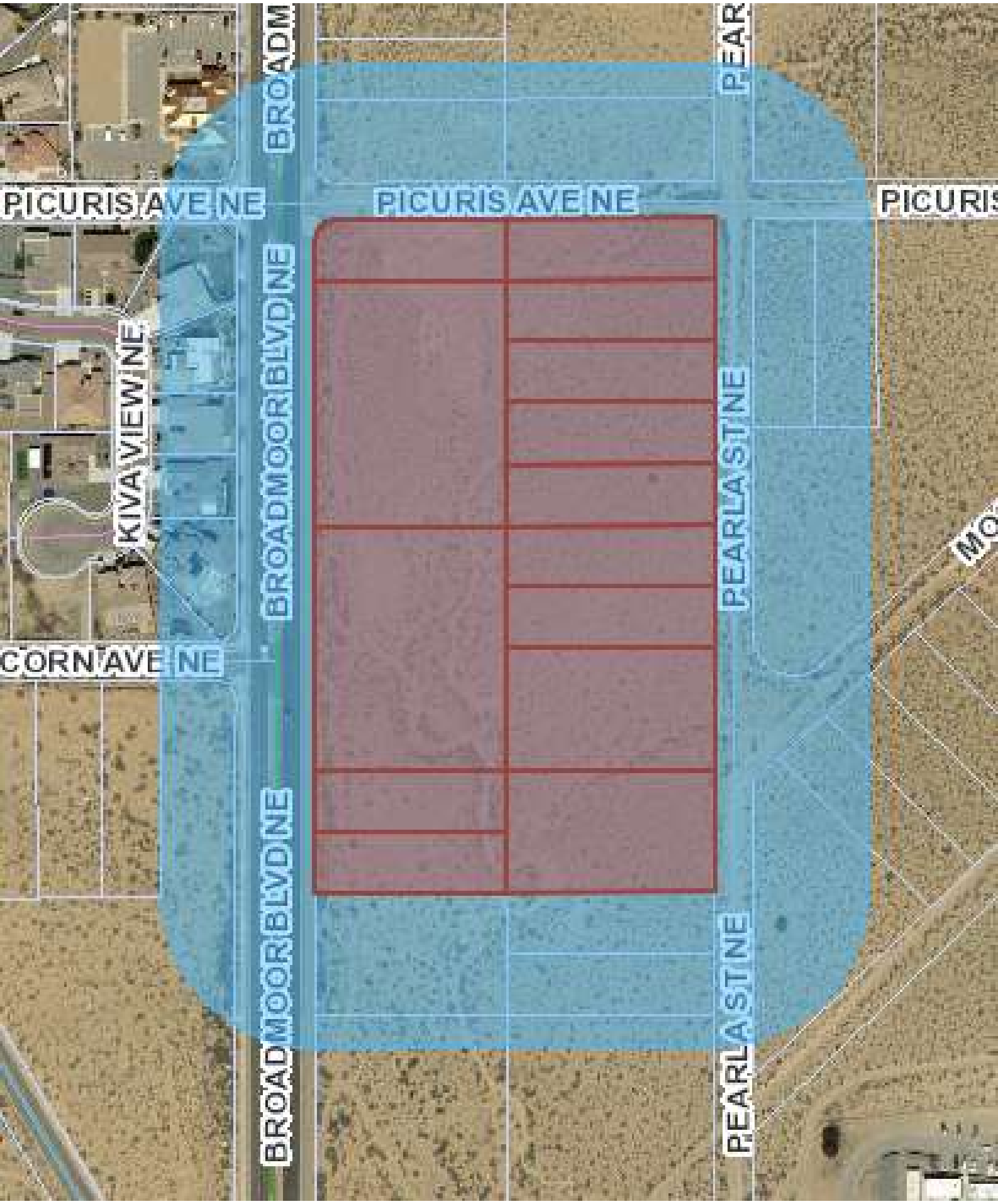
Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision. The applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end stub streets. The PZB will hear the requests on May 27, 2025.

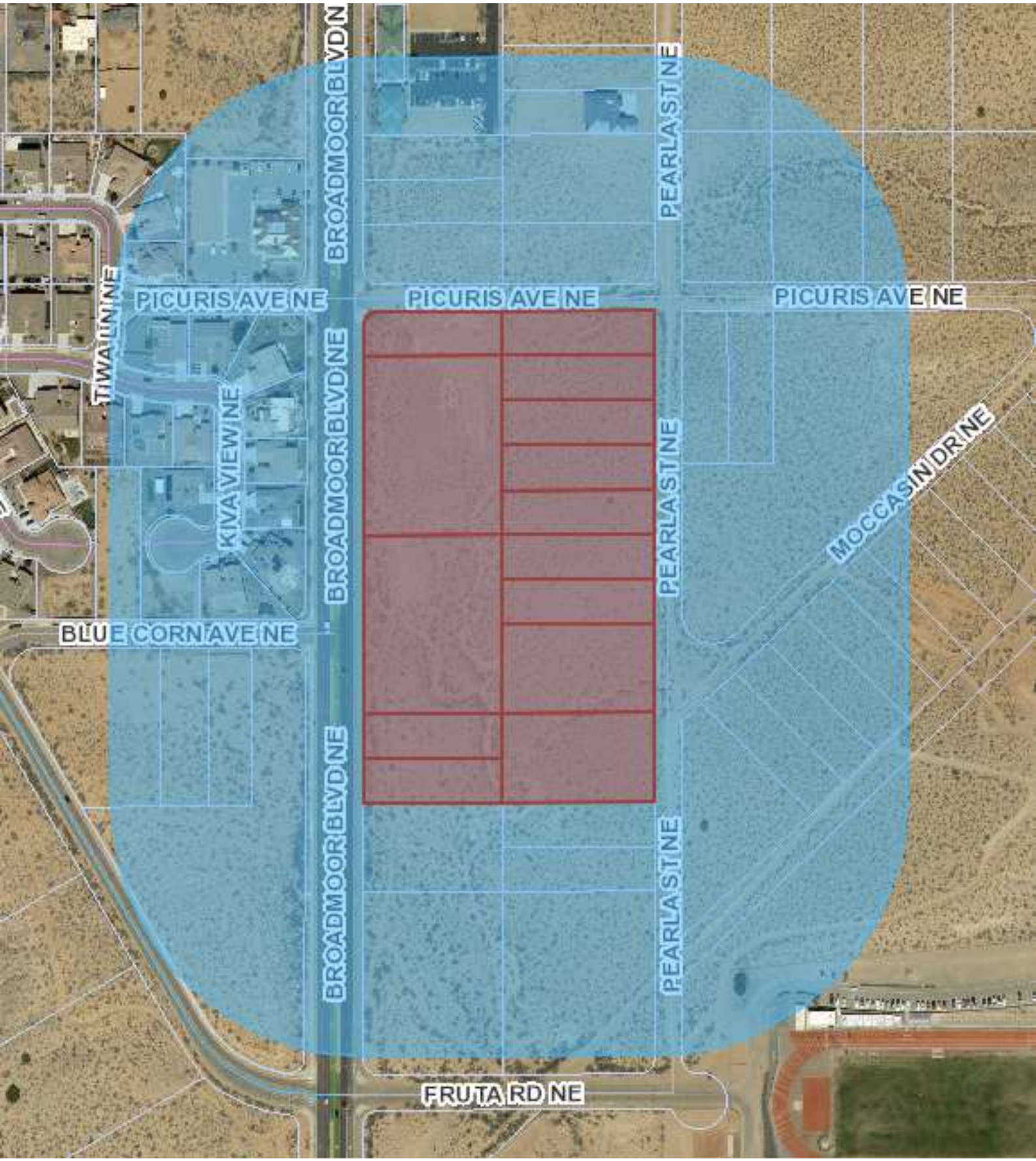
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Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



Noticed Adjacent Properties within 100' (Right-of-Way Excluded)



Noticed Adjacent Properties within 300' (Right-of-Way Excluded)



CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: December 28, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Cedric Smith, Peter Prukop
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer, James Wenzel
(X) Police - Justin Garcia
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Subdivision Variance (x2): DSD #23-280-00009, #23-280-00010 (Two Street Stubs, Mimbres Dr NE & Salado Lp NE, Broadmoor Hill Subdivision)

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of two separate subdivision variances for two street stubs—one for Mimbres Dr NE, and one for Salado Lp NE. Both streets will be located within the proposed Broadmoor Hill Subdivision, which will comprise 56 single-family lots zoned R-2: Single-Family Residential. The subject properties for the proposed subdivision are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Friday, January 12, 2024**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(X) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

Fire approves this variance as it is allowed by the Fire Code.

Gerard Bauer — Reviewer
1/10/2024 — Date

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR DENIAL
Case No. 23-280-00009

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.41(M), ALLOWING FOR A DEAD END STREET STUB FOR MIMBRES DRIVE NE WITHIN THE BROADMOOR HILL SUBDIVISION, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 13, BLOCK 118, LOTS 1-9 & 16A-20A.

Applicant: Las Ventanas NM, Inc.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT:

1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.41(M).

THEREFORE, the application for a Subdivision Variance to dead end street stub requirements, is DENIED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR APPROVAL
Case No. 23-280-00009

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.41(M), ALLOWING FOR A DEAD END STREET STUB FOR MIMBRES DRIVE NE WITHIN THE BROADMOOR HILL SUBDIVISION, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 13, BLOCK 118, LOTS 1-9 & 16A-20A.

Applicant: Las Ventanas NM, Inc.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT AND CONDITIONS OF APPROVAL:

1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.41(M) is approved for Mimbres Drive NE, within the Broadmoor Hill Subdivision, Preliminary Plat case #23-210-00013.

THEREFORE, the application for a Subdivision Variance to dead end street stub requirements, is APPROVED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 23-280-00010

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Subdivision Variance. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision. Staff contact is Tim Dvorak and staff recommends approval with findings.

BACKGROUND AND ANALYSIS:
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision. The subject properties comprising the Broadmoor Hill Subdivision are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.4899 acres.

The subject properties are zoned R-2: Single-Family Residential District per Ordinance No. 33, Enactment No. 21-34, adopted by the Governing Body on October 14, 2021.

The subject properties are part of the Broadmoor Drive Specific Area Plan, adopted by the Governing Body on August 22, 2007 via Resolution No. 79, Enactment No. 07-078 and most recently amended on August 24, 2023 via Resolution No. 97, Enactment No. 23-098.

Lots 16A-20A are additionally under Overlay Ordinance No. 63, Enactment No. 07-75, adopted October 10, 2007 by the Governing Body. This ordinance established a Corridor Overlay Zone over identified lots within the Broadmoor Drive Specific Area Plan, including Lots 16A-20A.

This Subdivision Variance request is for the proposed Broadmoor Hill Subdivision, being heard concurrently under case #23-210-00013. The proposed subdivision is located on the east side of Broadmoor Blvd NE, a minor arterial, between Picuris Ave NE and Fruta Rd NE, both residential roads (see attached map). Broadmoor Hill comprises approximately 10.4899 plat acres and would create 56 lots, 2 tracts, and 1 parcel, all zoned R-2: Single-Family Residential District. A concurrent Subdivision Variance application is being heard under case #23-280-00009 for a proposed dead-end street stub for Mimbres Drive NE, within the Broadmoor Hill Subdivision.

The subject Subdivision Variance application requests approval of a dead-end street stub for Salado Loop NE, located in the southeast section of the subdivision.

REVIEW CRITERIA:

R.O. 2003 § 155.60 (A) addresses Subdivision Variances, stating “(A) Variance from the strict

application of design standards may be allowed in cases where unusual conditions exist, or a variance would provide an improved design. Financial gain, loss or monetary savings cannot be considered solely as a basis for a variance request."

In their justification letter, the Applicant states, "The current layout of Broadmoor Hill Subdivision includes a stub street at the east end of Salado Loop. This layout offers the best solution to optimize the land use. The length of the stub street on Salado Loop is 96' and meets the criteria for a maximum stub street length of 150'."

Staff finds the subject Subdivision Variance would not adversely impact the proposed subdivision. As Broadmoor Hill has two proposed points of ingress and egress (Blue Corn Avenue NE & Puerco Drive NE), creation of a dead-end stub for Salado Loop NE would not impede the necessity of two access points for the subdivision. Criteria is satisfied.

CONFORMANCE WITH CITY POLICIES AND REGULATIONS:
Application materials for this Subdivision Variance request were sent to the below agencies for review:

Development Services Planning	Comments throughout ABM.
Development Services Engineering	No adverse comments.
Rio Rancho Fire & Rescue	Comments attached in "Reviewer Comments."
Rio Rancho Police	No comments received.
SSCAFCA	No adverse comments.
Parks, Recreation, and Community Services	No adverse comments.
Rio Rancho Public Schools	No comments received.
MRMPO	No comments received.

SURROUNDING LAND USE/ZONING:
Broadmoor Hill is surrounded by the following zoning:

To the North:
- R-1: Single-Family Residential District
- R-6: Multi-Family Residential District
- NC: Neighborhood Commercial District

To the South:
- R-1: Single-Family Residential District
- C-1: Retail Commercial District

To the East:
- R-1: Single-Family Residential District
- R-4: Single-Family Residential District

To the West:
- R-1: Single-Family Residential District
- R-3: Mixed Residential District
- SU: Special Use District for Commercial Land Uses

NOTIFICATIONS: Notice of pending development application was sent together with Preliminary Plat request (#23-210-00013) and Subdivision Variance request (#23-280-00009) via certified mail to property owners within 100' of the subject property and first class postcards to property owners within 300' of the subject property 15 days prior to the hearing. A legal notice was published in the Albuquerque Journal on May 12, 2025. A public notice sign was posted to the property as required

by ordinance.

IMPACT:

The Development Services Department recommends approval of Subdivision Variance request #23-280-00010 subject to the findings set forth below:

General Findings of Fact:
1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

Specific Findings of Fact for Approval:
1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.41(M) is approved for Salado Loop NE, within the Broadmoor Hill Subdivision, Preliminary Plat case #23-210-00013.

If the Planning and Zoning Board determines that the application does not adequately meet the criteria for granting a Subdivision Variance, then the following specific findings of fact for denial are recommended:

Specific Findings of Fact for Denial:
1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.41(M).

ALTERNATIVES:

The Planning and Zoning Board may:
1. Approve the Subdivision Variance with findings.
2. Approve the Subdivision Variance with amendments to the findings.
3. Deny the Subdivision Variance.
4. Postpone the Subdivision Variance to allow for further review and information.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends the Planning and Zoning Board approve the requested Subdivision Variance with findings.

ATTACHMENT: Zoning, Location Map
ATTACHMENT: Application
ATTACHMENT: Authorization
ATTACHMENT: Justification
ATTACHMENT: Reproduction of Notices, Legal Ad
ATTACHMENT: Preliminary Plat
ATTACHMENT: Reviewer Comments
ATTACHMENT: Findings_of_Fact_.docx

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



Rio Rancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by:Tim Dvorak on 5/9/2025

Development Services Department, Ste. 130
3200 Civic Center Circle NE, Rio Rancho, NM 87144
(505) 891-5005

PLANNING & ZONING LAND USE APPLICATION

Please check appropriate box (Fees are listed on the back)

Administrative Permit	Plan	Subdivision	Zoning
☐ Community Residential Care Facility	☐ Comprehensive Plan Amendment	☐ Final Plat	☐ Annexation
☐ Development Review Committee (DRC)	☐ Corridor Plan Amendment	☐ Preliminary Plat	☐ Appeal
☐ Home Occupation	☐ Master Plan	☐ Summary Plat	☐ Conditional Use Permit
☐ Model Home / Sales Office	☐ Master Plan Amendment	☐ Vacation of Plat	☐ Master Sign Plan
☐ Residential Child Care Facility 6 or <	☐ Specific Area Plan Amendment	☐ Street Name Change	☐ Site Plan
☐ Sign Permit	☐ Text Amendment	☐ Subdivision Interpretation	☐ Special Exception
☐ Other		☒ Subdivision Variance	☐ Variance
			☐ Zone Map Amendment
			☐ Zoning Certification
			☐ Zoning Interpretation

Please Print In Ink Only or Type
Application must be complete. Please attach the appropriate checklist for the action you are requesting, if applicable.

APPLICANT/AGENT INFORMATION

Applicant Name:	LAS VENTANAS NM, INC.	Phone:	505-600-3377
Address:	8330 WASHINGTON PL NE	E-Mail:	Tscott@lasventanasnm.com
City:	Albuquerque	State: NM	Zip: 87113
Proprietary Interest:	OWNER	List Owners:	LAS VENTANAS NM, INC.
Deed or Ownership Verification Provided: (Initials)		Letter of Authorization Provided: (Initials)	

Agent Name:	HUITT-ZOLLARS, INC.	Phone:	505-892-5141
Address:	333 RIO RANCHO DRIVE NE, SUITE 101	E-Mail:	nvilla@huitt-zollars.com
City:	RIO RANCHO	State: NM	ZIP Code: 87124

DESCRIPTION OF REQUEST: (PLEASE ADD ADDITIONAL SHEET(S) IF NECESSARY)

SUBDIVISION VARIANCE REQUESTS FOR BROADMOOR HILL SUBDIVISION

SITE INFORMATION: (PLEASE PROVIDE ACCURATE LEGAL DESCRIPTION)

Subdivision/Unit : RRE UNIT 13	Block(s): 118	Lot(s): 1-9 AND 16A-20A
Existing Zoning: R-2	Proposed Zoning: R-2	
No. of existing lots: 14	No. of proposed lots: 56	Total area of site (acres) 10.5

ACKNOWLEDGEMENT

I hereby acknowledge that I have read this entire application and affirm that all information provided is correct. I agree to comply with the requirements of the City of Rio Rancho as outlined in all applicable laws, ordinances and regulations.

Print Name:	NINA VILLA	Applicant:	Agent: HUITT-ZOLLARS, INC.
Signature:			Date: 12-26-23

FOR OFFICIAL USE ONLY

H.T.E. PROJECT #	FEE	RECEIPT #

APPLICATION ACCEPTED BY: _____ **DATE:** _____

Form revised June 2014

LAS VENTANAS HOMES

March 27, 2023

City of Rio Rancho
Planning and Zoning Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144

Re: Property Owner Letter of Authorization

To Whom It May Concern:

Las Ventanas NM, Inc., hereby authorizes Huitt Zollars to obtain information, submit and process applications, represent the project at meetings and public hearings, and act as our agent related to the properties located at Broadmoor Subdivision SE Corner Broadmoor Avenue and Picuris Avenue

Sincerely,

Las Ventanas NM, Inc.

By: _____

Printed Name: T. Scott Ashcraft

Title: President

Las Ventanas Homes
8330 Washington Pl. NE
Albuquerque, NM 87113
Phone: 505.600-3377 E-Mail: Tscott@LasVentanasNM.com

HUITT-ZOLLARS

HUITT-ZOLLARS, INC. ı 333 Rio Rancho Dr. NE ı Suite 101 ı Rio Rancho, NM 87124-1450 ı 505.892.5141 phone ı 505.892.3259 fax ı huitt-zollars.com

December 26, 2023

City of Rio Rancho
Development Services
Attn: Tim Dvorak
3200 Civic Circle NE
Rio Rancho, NM 87144

RE: Broadmoor Hill Subdivision Preliminary Plat
Subdivision Variance Request for Salado Loop
Case #23-210-00013

Dear Mr. Dvorak,

We are requesting a subdivision variance for Salado Loop. The current layout of Broadmoor Hill Subdivision includes a stub street at the east end of Salado Loop. This layout offers the best solution to optimize the land use. The length of the stub street on Salado Loop is 96' and meets the criteria for a maximum stub street length of 150'. This design is similar to existing designs at Mesa Grande Loop and at the Del Webb at Alegria Subdivision.

If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Nina Villa, P.E.

City of Rio Rancho
Development Services Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 Fax (505) 896-8994

May 9, 2025

RE: **Broadmoor Hill Subdivision: Preliminary Plat (Case # 23-210-00013)**
& Subdivision Variance to allow for Stub Street (x2): (Case # 23-280-00009, Mimbres Dr NE), (Case # 23-280-00010, Salado Lp NE).

Dear Property Owner:

You are receiving this notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

In two concurrent requests, the applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end street stubs for Mimbres Drive NE and Salado Loop NE within the proposed Broadmoor Hill Subdivision.

The Planning and Zoning Board will consider these requests at a public hearing on **Tuesday, May 27, 2025** starting at 6:00 pm in the **Council Chambers of City Hall, located at 3200 Civic Center Circle**. If you would like to comment on these applications, you are encouraged to send in comments in writing to tdvorak@rrnm.gov, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

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Meeting ID: 851 8074 1871 Passcode: **026819** Join via phone: 1-253-215-8782 US

Please do not hesitate to contact me at 505-896-8361 or e-mail me at tdvorak@rrnm.gov if you have any questions about the applications or accessing the meeting. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Tim Dvorak

Tim Dvorak
Municipal Planner II
Development Services Department
Planning Division
City of Rio Rancho

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



RioRancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by Tim Dvorak on 5/9/2025

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

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Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision. The applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end stub streets. The PZB will hear the requests on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



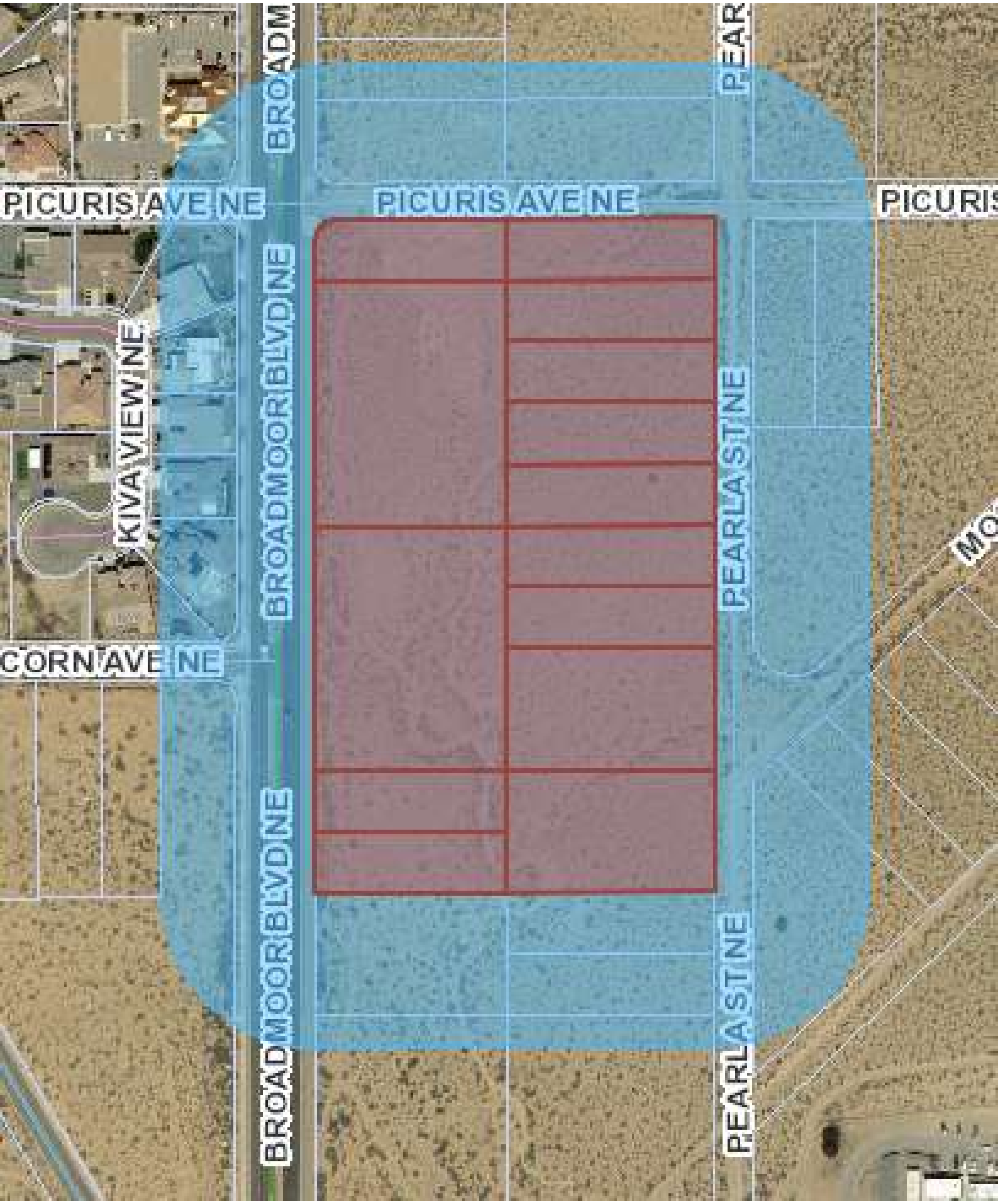
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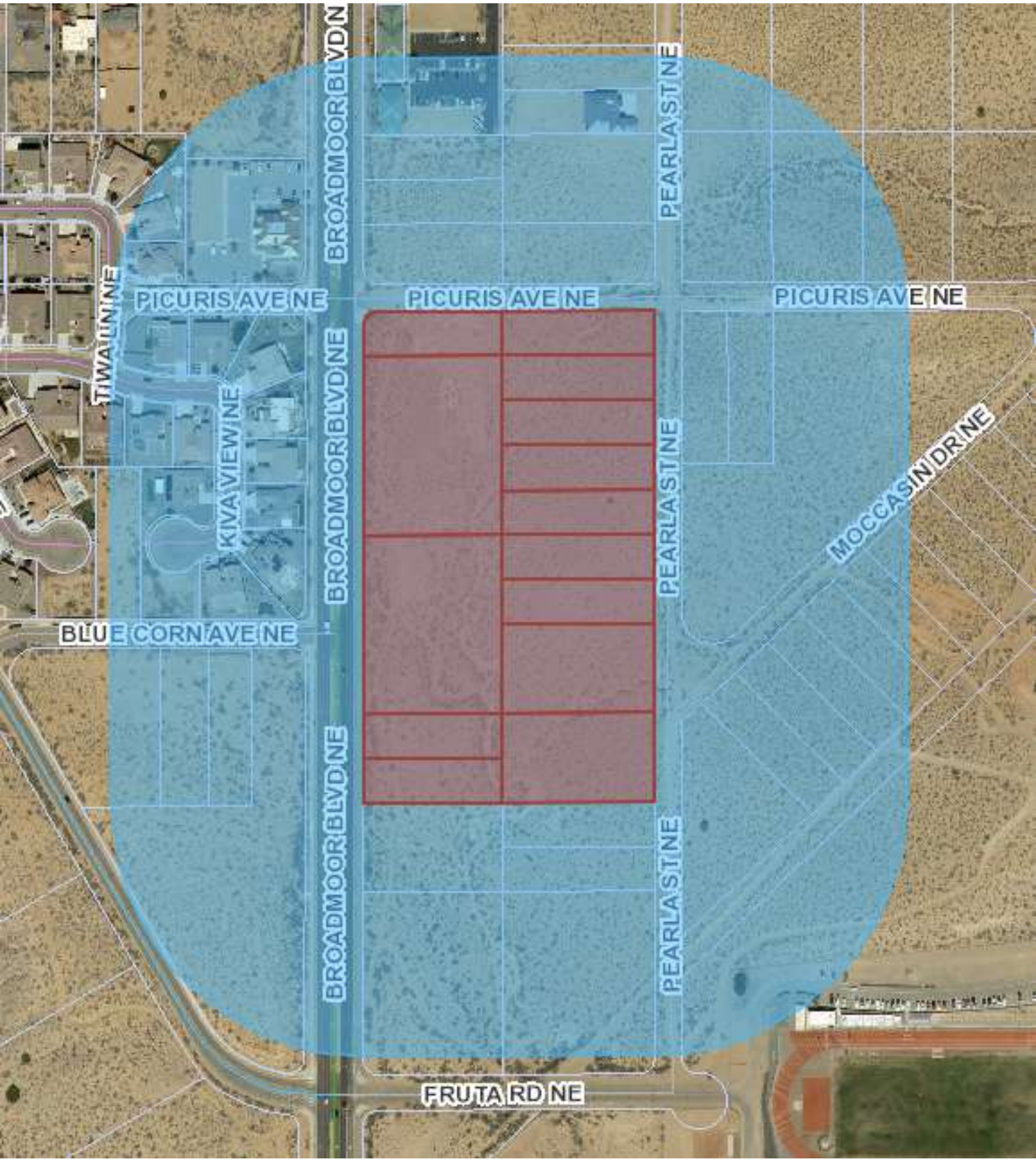
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Noticed Adjacent Properties within 100' (Right-of-Way Excluded)



Noticed Adjacent Properties within 300' (Right-of-Way Excluded)



CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

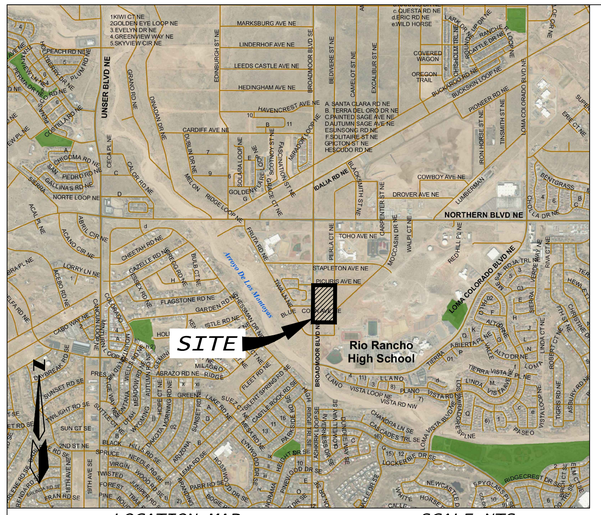
Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

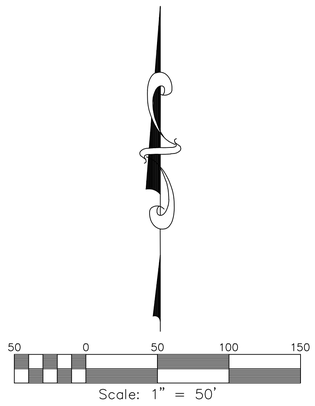
Journal: May 12, 2025.

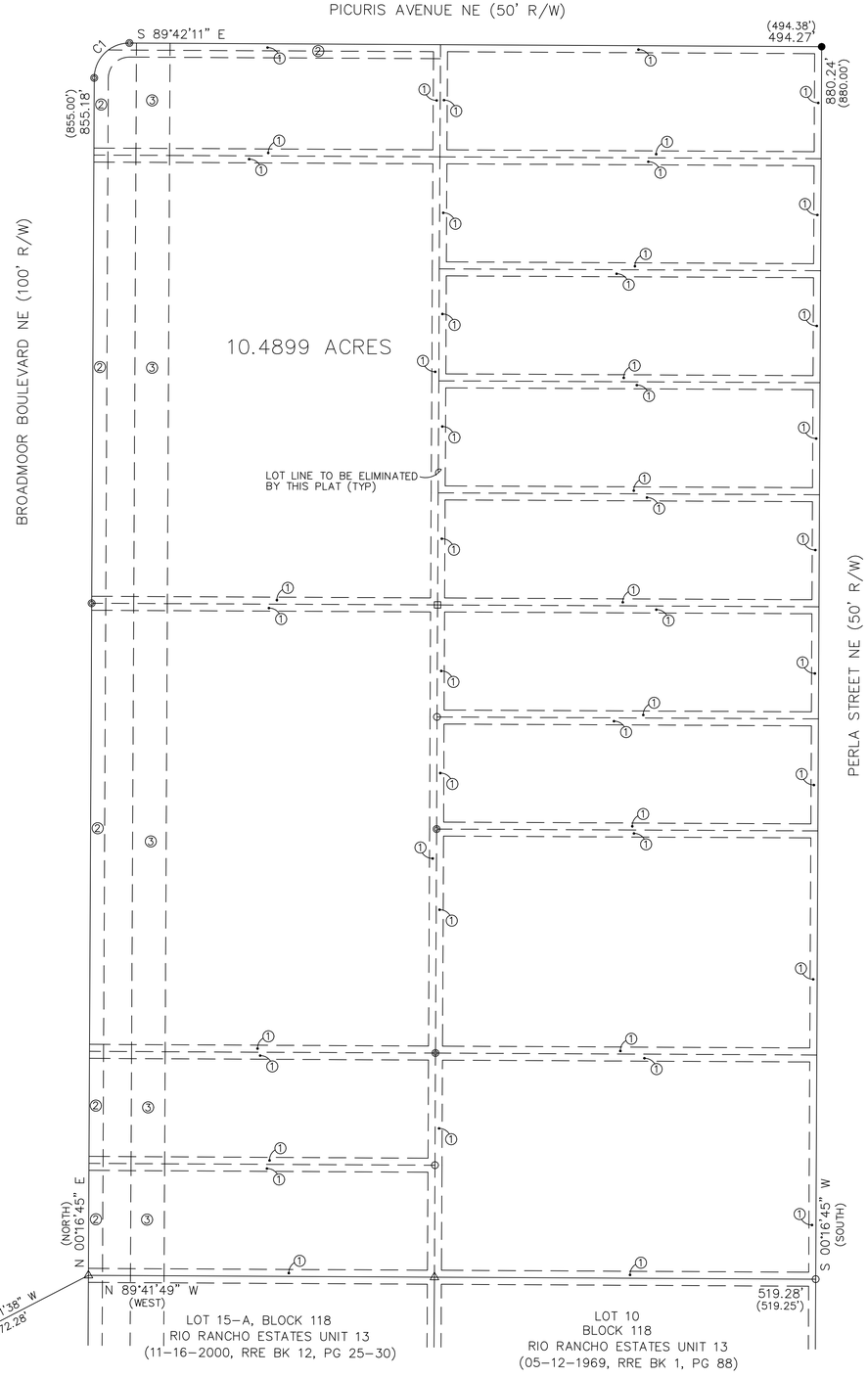

1 KIWI CT NE
2 GOLDEN EYE LOOP NE
3 EVELYN DR NE
4 GREENVIEW WAY NE
5 SKYVIEW CIR NE
c QUESTA RD NE
d BRIC RD NE
e WILD HORSE
MARKSBURG AVE NE
LINDERHOF AVE NE
LEEDS CASTLE AVE NE
HEDINGHAM AVE NE
HAVENCREST AVE NE
A SANTA CLARA RD NE
B TERRA DEL ORO DR NE
C PAINTED SAGE AVE NE
D AUTUMN SAGE AVE NE
E SUNSONG RD NE
F SUTTAIRE ST NE
G PECTON ST NE
H ESQUIDO RD NE
CARDIFF AVE NE
GOLDEN EYE LOOP NE
UNSER BLVD NE
COVERED WAGON
OREGON TRAIL
BUCKBOARD LOOP NE
PIONEER RD NE
NORTHERN BLVD NE
COWBOY AVE NE
DROVER AVE NE
LUMBERJACK RD NE
ITAPLETON AVE NE
TOHO AVE NE
SAN COLORADO BLVD NE
Arroyo De La Manzanita
SITE
Rio Rancho High School
BROADMOOR BLVD NE
LLANO VISTA LOOP NE
LLANO VISTA AVE NW
CHAMISA LN SE
CHAMISA TRS SE
LOCKER DR SE
NEWCASTLE DR SE
CRATER RD NE
MONTE VISTA DR NE
TIERRA VISTA PL NE
TIERRA VISTA DR NE
TIERRA VISTA LOOP NE
TIGRE RD NE
ARROYO MESA NE
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DESCRIPTION

A tract of land situate within the Town of Alameda Grant, projected Section 13, Township 12 North, Range 2 East, New Mexico Principal Meridian, City of Rio Rancho, Sandoval County, New Mexico being all of LOTS 1–9, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on May 12, 1969, in Rio Rancho Estates Plat Book No. 1, Page 88 and all of LOTS 16–A THRU 20–A, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on November 16, 2000, in Rio Rancho Estates Plat Book No. 12, Pages 25–30, and containing 10.4899 acres more or less.

PRELIMINARY PLAT FOR
BROADMOOR HILL
(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024





PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ◎ SET 5/8" REBAR W/CAP "LS 7719"

EASEMENTS

① EXISTING 5' UTILITY & DRAINAGE EASEMENT (TYPICAL)
(05–12–1969, RRE BOOK 1, PAGE 88)
(ALL VACATED BY THIS PLAT)

② EXISTING 10' PUE (TYPICAL)
(11–16–2000, RRE BOOK 12, PAGE 25–30)

③ EXISTING 24' RECIPROCAL INGRESS AND EGRESS EASEMENT
DECLARATION, ACCEPTANCE AND MAINTENANCE
(05–23–2007, 200721588) (20–A)
(08–28–2007, 200735001) (19–A)
(08–28–2007, 200735002) (18–A)
(08–28–2007, 200735003) (17–A)
(08–28–2007, 200735004) (16–A)
(ALL VACATED BY THIS PLAT)

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary is from the plat of record entitled:

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (05–12–1969, RRE BOOK 1, PAGE 88)

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (11–16–2000, RRE BOOK 12, PAGE 25–30 [VOL 3, FOLIO 2024A])

   all being records of Sandoval County, New Mexico.

5. Field Survey: February 19, 2015.
6. Title Report: Fidelity National Title Insurance Company File No. FT000171566–RUTLEDGED (Effective Date: December 15, 2014)
7. City of Rio Rancho, New Mexico Zone: R–2
8. 100 Year Flood Zone Designation: Zone X, Panel 1893 of 2225, Flood Insurance Rate Map, City of Rio Rancho, Sandoval County, New Mexico, dated March 18, 2008. This property does not lie in the 100 Year Flood Plain.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

10–31–2023 REV
01–06–2022 REV

Drawn By:	TA	Date:	02–25–2015
Checked By:	TA	Drawing Name:	15011PLT.DWG
Job No.:	15–011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505–884–1990

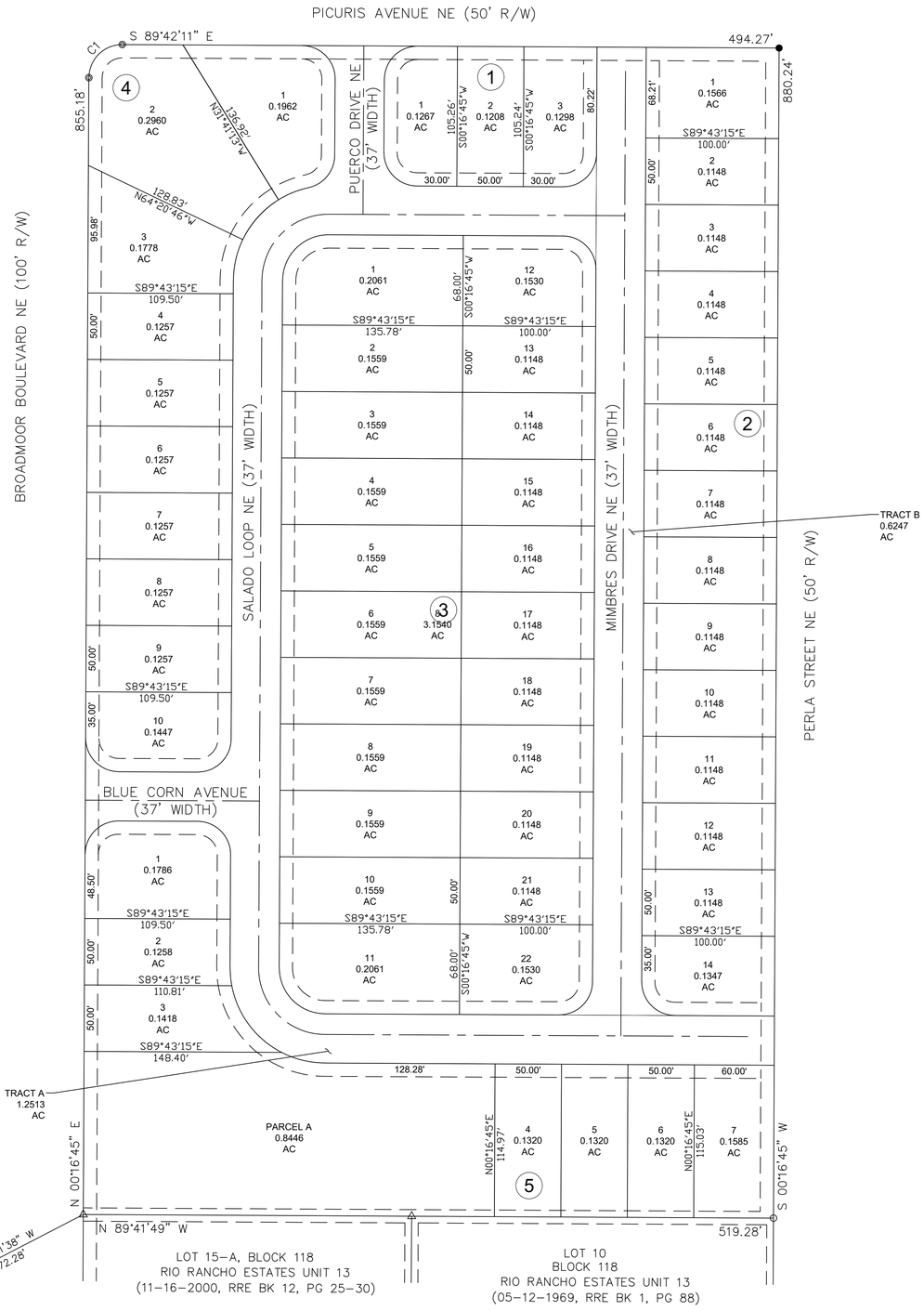
Book _____, Page _____

PRELIMINARY PLAT FOR

BROADMOOR HILL

(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024

50 0 50 100 150
Scale: 1" = 50'



PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ⊙ SET 5/8" REBAR W/CAP "LS 7719"

NOTES: UNLESS OTHERWISE INDICATED:

There is a ten (10) foot wide public utility easement within all new lots adjacent to private roadways and public road rights-of-way being granted herein. There is also a five (5) foot wide public utility easement within all lots and tracts on all other side and rear property lines.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

Drawn By:	TA	Date:	10-31-2023
Checked By:	TA	Drawing Name:	15011PL3.DWG
Job No.:	15-011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505-884-1990

Book _____, Page _____

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: December 28, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Cedric Smith, Peter Prukop
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer, James Wenzel
(X) Police - Justin Garcia
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Subdivision Variance (x2): DSD #23-280-00009, #23-280-00010 (Two Street Stubs, Mimbres Dr NE & Salado Lp NE, Broadmoor Hill Subdivision)

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of two separate subdivision variances for two street stubs—one for Mimbres Dr NE, and one for Salado Lp NE. Both streets will be located within the proposed Broadmoor Hill Subdivision, which will comprise 56 single-family lots zoned R-2: Single-Family Residential. The subject properties for the proposed subdivision are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Friday, January 12, 2024**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(X) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

Fire approves this variance as it is allowed by the Fire Code.

Gerard Bauer — Reviewer
1/10/2024 — Date

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR DENIAL
Case No. 23-280-00010

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.41(M), ALLOWING FOR A DEAD END STREET STUB FOR SALADO LOOP NE WITHIN THE BROADMOOR HILL SUBDIVISION, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 13, BLOCK 118, LOTS 1-9 & 16A-20A.

Applicant: Las Ventanas NM, Inc.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT:

1. The Applicant has not provided adequate justification for a Subdivision Variance, in accordance with the criteria set forth in R.O. 2003 § 155.60.
2. The Applicant has not provided adequate justification for a modification or exception to the subdivision requirements as required by R.O. 2003 §155.41(M).

THEREFORE, the application for a Subdivision Variance to dead end street stub requirements, is DENIED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

BEFORE THE PLANNING and ZONING BOARD
OF THE
CITY OF RIO RANCHO, NEW MEXICO
FINDINGS OF FACT FOR APPROVAL
Case No. 23-280-00010

REQUEST FOR VARIANCE TO RIO RANCHO CODE OF ORDINANCES CHAPTER 155.41(M), ALLOWING FOR A DEAD END STREET STUB FOR SALADO LOOP NE WITHIN THE BROADMOOR HILL SUBDIVISION, ON THE PROPERTY LEGALLY DESCRIBED AS RIO RANCHO ESTATES UNIT 13, BLOCK 118, LOTS 1-9 & 16A-20A.

Applicant: Las Ventanas NM, Inc.

THIS MATTER, having come before the Planning & Zoning Board of the City of Rio Rancho, New Mexico on the 27th day of May, 2025, the Planning & Zoning Board having taken evidence and considered the merits, has determined and found:

GENERAL FINDINGS OF FACT:

1. In accordance with R.O. 2003 § 155.60, the Planning and Zoning Board has jurisdiction over approval of the Applicant's request for a Subdivision Variance to dead end street stub requirements.
2. Following procedures for approval of a Subdivision Variance, proper notice of hearing on this matter was given.
3. The Applicant has the authority to make an application for a Subdivision Variance.

SPECIFIC FINDINGS OF FACT AND CONDITIONS OF APPROVAL:

1. The Applicant has adequately addressed the criteria for granting a Subdivision Variance as set forth in R.O. 2003 §155.60.
2. A Variance to R.O. 2003 §155.41(M) is approved for Salado Loop NE, within the Broadmoor Hill Subdivision, Preliminary Plat case #23-210-00013.

THEREFORE, the application for a Subdivision Variance to dead end street stub requirements, is APPROVED by the Planning & Zoning Board of the City of Rio Rancho on May 27, 2025, subject to the conditions, restrictions and stipulations specified above.

Date

Planning & Zoning Board Chairman

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 23-210-00013

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Preliminary Plat. The Applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, to be comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. Staff contact is Tim Dvorak and staff recommends approval with findings and conditions.

BACKGROUND AND ANALYSIS:
The Applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.4899 acres.

The subject properties are zoned R-2: Single-Family Residential District per Ordinance No. 33, Enactment No. 21-34, adopted by the Governing Body on October 14, 2021.

The subject properties are part of the Broadmoor Drive Specific Area Plan, adopted by the Governing Body on August 22, 2007 via Resolution No. 79, Enactment No. 07-078 and most recently amended on August 24, 2023 via Resolution No. 97, Enactment No. 23-098.

Lots 16A-20A are additionally under Overlay Ordinance No. 63, Enactment No. 07-75, adopted October 10, 2007 by the Governing Body. This ordinance established a Corridor Overlay Zone over identified lots within the Broadmoor Drive Specific Area Plan, including Lots 16A-20A.

I. GENERAL INFORMATION

1. Layout: Broadmoor Hill is comprised of 56 lots, 2 tracts, and 1 parcel.
2. Acreage: Lot Acres: Approximately 7.7693 acres; Tract acres: Approximately 1.876 acres; Parcel Acres: Approximately 0.8446 acres.
3. Access: Broadmoor Hill will be accessed via Blue Corn Ave NE, a residential road, via Broadmoor Blvd NE, a minor arterial; and via Puerco Dr NE, a residential road, via Picuris Ave NE, a residential road.
4. Zoning: The subject properties are zoned R-2: Single-Family Residential District per Ordinance No. 33, Enactment No. 21-34.
5. Dry Utilities/Gas: The applicant is responsible for coordinating the installation of all dry utilities with Sparklight, Comcast, Ezee Fiber, Centurylink, PNM, and Gas Company of New Mexico.
6. Water and Wastewater Availability: A Water/Wastewater Availability Letter for the Broadmoor Hill Subdivision area was granted by the Utilities Department on April 26, 2022.
7. Drainage: Drainage is per the Drainage Study for Broadmoor Hill Subdivision Development,

dated October 2023.
8. Roads and Sidewalks: Road widths within the Broadmoor Hill Subdivision are proposed to be 37' in width, with 5' sidewalks on each side. All internal streets within the subdivision are private roads; these streets are dedicated as Tracts A & B to the future Homeowner's Association.
9. Recreation Facilities/Open Space: Parcel A shall be dedicated to the City of Rio Rancho as a regional facility pond.
10. Easements: 10' public utility easements (PUEs) are provided across all front lot lines. 5' public utility easements (PUEs) are additionally provided along all side and rear lot lines. There is an existing 10' public utility easement along the western boundary of the subdivision which will remain, per Easement Note 2.
12. Vacations: 5' internal public utility and drainage easements shall be vacated as shown on the plat under Easement Note 1. An Existing 24' reciprocal ingress and egress easement shall be vacated, as per Easement Note 3.
13. Variances: Concurrent with this application, the applicant is requesting two separate Subdivision Variances for two proposed dead-end stub streets (Case No. 23-280-00009, Mimbres Drive NE) & (Case No. 23-280-00010, Salado Loop NE).

CONFORMANCE WITH THE SUBDIVISION REQUIREMENTS:
Staff recommends the Planning and Zoning Board find the proposed Preliminary Plat conforms to the requirements of R.O. 2003 Chapter 155 Subdivisions pending approval of the requested Subdivision Variances (Cases #23-280-00009, & #23-280-00010). Criteria may be satisfied.

CONFORMANCE WITH THE ZONING ORDINANCE:
The proposed lots comply with the minimum dimensional standards of 5,000 sq ft and 50 ft lot widths, as laid out in R.O. 2003 § 154.50 for R-2: Single-Family Residential District. The proposed Preliminary Plat contains lots with an acreage range of approximately 0.1148 acres (5,000.68 sf) to 0.2960 acres (12,893.76 sf) and a lot width range of 50' to 68.21'.

Staff recommends the Planning and Zoning Board find the proposed Preliminary Plat conforms to the requirements of R.O. 2003 Chapter 154 Planning and Zoning. Criteria is satisfied.

CONFORMANCE WITH CITY COMPREHENSIVE PLAN:
In Chapter 5, Land Use Element, Goal L-1 states, "Encourage mixed uses - retail, office, and residential centered on pedestrian-oriented developments along principal arterial roads." While Broadmoor Blvd NE is a minor arterial, the corridor between Stapleton Ave NE and Fruta Rd NE hosts a variety of residential and nonresidential zones. There is established Neighborhood Commercial to the immediate north of the proposed Broadmoor Hill Subdivision, while C-1 Commercial zoning is available directly south of the proposed subdivision. Staff finds the additional development of R-2: Single-Family in the area will in turn help commercial uses develop in this area. Staff recommends the Planning and Zoning Board finds the criteria is satisfied.

CONFORMANCE WITH THE BROADMOOR DRIVE SPECIFIC AREA PLAN:
Under 3.1 Land Use Goal 2, the Broadmoor Specific Area Plan states, "Encourage mixed uses, retail, office, residential, and community uses, pedestrian-oriented and clustered around corridors and activity centers." This goal is very similar to Goal L-1 of the Comprehensive Plan above, but additionally identifies corridor areas and activity centers to facilitate mixed uses within the Broadmoor Drive Specific Area Plan. Staff finds that development of the future Broadmoor Hill Subdivision will complement the existent commercial and community uses and tie these uses together. Staff recommends the Planning and Zoning Board find that the proposed subdivision layout is in conformance with the Broadmoor Hill Specific Area Plan; criteria is satisfied.

CONFORMANCE WITH CITY POLICIES AND REGULATIONS:
Application materials for this Preliminary Plat request were sent to the below agencies for review:

Development Services Planning	Comments throughout ABM.
Development Services Engineering	Comments attached in "Reviewer Comments."
Rio Rancho Fire & Rescue	Comments attached in "Reviewer Comments."
Rio Rancho Police	No comments received.
SSCAFCA	No adverse comments.
Parks, Recreation, and Community Services	Comments attached in "Reviewer Comments."
Rio Rancho Public Schools	No comments received.
MRMPO	No comments received.

SURROUNDING LAND USE/ZONING:
Broadmoor Hill is surrounded by the following zoning:

To the North:
- R-1: Single-Family Residential District
- R-6: Multi-Family Residential District
- NC: Neighborhood Commercial District

To the South:
- R-1: Single-Family Residential District
- C-1: Retail Commercial District

To the East:
- R-1: Single-Family Residential District
- R-4: Single-Family Residential District

To the West:
- R-1: Single-Family Residential District
- R-3: Mixed Residential District
- SU: Special Use District for Commercial Land Uses

NOTIFICATIONS: Notice of pending development application was sent together with Subdivision Variance requests (#23-280-00009 & #23-280-00010) via certified mail to property owners within 100' of the subject property and first class postcards to property owners within 300' of the subject property 15 days prior to the hearing. A legal notice was published in the Albuquerque Journal on May 12, 2025. A public notice sign was posted on the properties as required by ordinance.

IMPACT:

The Development Services Department recommends the Planning and Zoning Board approve Preliminary Plat case no. 23-210-00013 subject to the following findings of fact and conditions of approval:

General Findings of Fact:
1. The Planning and Zoning Board has jurisdiction over the Applicant’s request for approval of the Preliminary Plat.
2. The Applicant has the authority to apply for a Preliminary Plat.

Specific Findings of Fact and Conditions of Approval:
1. The Preliminary Plat has been prepared, reviewed, and conforms to the City of Rio Rancho plans and policies.

2. The Preliminary Plat conforms to the requirements of the Rio Rancho Code of Ordinance (R.O. 2003) Chapter 155 Subdivisions.
3. The Preliminary Plat conforms to the requirements of the R-2: Single-Family Residential Zoning District.
4. The Preliminary Plat conforms to the Broadmoor Drive Specific Area Plan and the City of Rio Rancho Comprehensive Plan.
5. In accordance with R.O. 2003 § 155.24(A), the final plat shall be recorded within 12 months following approval of the Preliminary Plat, or the Planning and Zoning Board approval shall become null and void.
6. Infrastructure shall be installed and accepted prior to the recording of the Final Plat or the applicant shall submit for staff review and approval of a subdivision improvement agreement and financial guarantee prior to the Final Plat hearing.
7. Impact Fee assessment will be based on the date of this preliminary plat approval and valid for four (4) years from the date of this approval.
8. The Applicant shall address all of the Preliminary Plat reviewers' comments prior to submission for Final Plat, including but not limited to the attached document entitled, "Reviewer Comments" and the following:
a. Add Ezee Fiber and Comcast to the "Public Utility Easements" list and the "Utility Approvals" signature block
b. Update City Clerk name to Noel Davis
9. The Developer shall construct full roadway improvements adjacent to the property's boundaries pursuant to the City's Development Process Manual, Vol. II, Section 3.8.1, or payment in lieu of this requirement for future roadway improvement projects shall be made to the City to meet future infrastructure needs in close proximity to the development.
10. HOA formation documents shall be submitted prior to the Final Plat hearing.

ALTERNATIVES:

The Planning and Zoning Board may:

1. Approve the Preliminary Plat with staff recommendations and conditions.
2. Approve the Preliminary Plat with amendments to recommendations and/or conditions.
3. Deny the Preliminary Plat.
4. Postpone the item and continue the public hearing for the Preliminary Plat for further review.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends approval of the Preliminary Plat with findings and conditions.

ATTACHMENT: Zoning, Location Map
ATTACHMENT: Application
ATTACHMENT: Authorization
ATTACHMENT: Broadmoor Hill Preliminary Plat
ATTACHMENT: Reproduction of Notices, Legal Ad
ATTACHMENT: Reviewer Comments

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



Rio Rancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by:Tim Dvorak on 5/9/2025

Rio Rancho
City of Vision

Development Services Department, Ste. 130
3200 Civic Center Circle NE, Rio Rancho, NM 87144
(505) 891-5005

PLANNING & ZONING LAND USE APPLICATION

Please check appropriate box (Fees are listed on the back)

Administrative Permit	Plan	Subdivision	Zoning
☐ Community Residential Care Facility	☐ Comprehensive Plan Amendment	☐ Final Plat	☐ Annexation
☐ Development Review Committee (DRC)	☐ Corridor Plan Amendment	☒ Preliminary Plat	☐ Appeal
☐ Home Occupation	☐ Master Plan	☐ Summary Plat	☐ Conditional Use Permit
☐ Model Home / Sales Office	☐ Master Plan Amendment	☐ Vacation of Plat	☐ Master Sign Plan
☐ Residential Child Care Facility 6 or <	☐ Specific Area Plan Amendment	☐ Street Name Change	☐ Site Plan
☐ Sign Permit	☐ Text Amendment	☐ Subdivision Interpretation	☐ Special Exception
☐ Other		☐ Subdivision Variance	☐ Variance
			☐ Zone Map Amendment
			☐ Zoning Certification
			☐ Zoning Interpretation

Please Print in Ink Only or Type
Application must be complete. Please attach the appropriate checklist for the action you are requesting, if applicable.

APPLICANT/AGENT INFORMATION

Applicant Name:	LAS VENTANAS NM, INC.			Phone:	505-600-3377
Address:	8330 WASHINGTON PL NE			E-Mail:	Tscott@lasventanasnm.com
City:	Albuquerque	State:	NM	Zip:	87113
Proprietary Interest:	OWNER	List Owners:	LAS VENTANAS NM, INC.		
Deed or Ownership Verification Provided: (Initials)			Letter of Authorization Provided: (Initials)		
Agent Name:	HUITT-ZOLLARS, INC.			Phone:	505-892-5141
Address:	333 RIO RANCHO DRIVE NE, SUITE 101			E-Mail:	nvilla@huitt-zollars.com
City:	RIO RANCHO	State:	NM	ZIP Code:	87124

DESCRIPTION OF REQUEST: (PLEASE ADD ADDITIONAL SHEET(S) IF NECESSARY)

PRELIMINARY PLAT FOR BROADMOOR HILL SUBDIVISION

SITE INFORMATION: (PLEASE PROVIDE ACCURATE LEGAL DESCRIPTION)

Subdivision/Unit :	RRE UNIT 13	Block(s):	118	Lot(s):	1-9 AND 16A-20A
Existing Zoning:	R-2	Proposed Zoning:	R-2		
No. of existing lots:	14	No. of proposed lots:	56	Total area of site (acres)	10.5

ACKNOWLEDGEMENT

I hereby acknowledge that I have read this entire application and affirm that all information provided is correct. I agree to comply with the requirements of the City of Rio Rancho as outlined in all applicable laws, ordinances and regulations.

Print Name:	NINA VILLA	Applicant:	Agent: HUITT-ZOLLARS, INC.
Signature:			Date: 11-3-23

FOR OFFICIAL USE ONLY

H.T.E. PROJECT #	FEE	RECEIPT #

APPLICATION ACCEPTED BY: _____ **DATE:** _____

LAS VENTANAS HOMES

March 27, 2023

City of Rio Rancho
Planning and Zoning Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144

Re: Property Owner Letter of Authorization

To Whom It May Concern:

Las Ventanas NM, Inc., hereby authorizes Huitt Zollars to obtain information, submit and process applications, represent the project at meetings and public hearings, and act as our agent related to the properties located at Broadmoor Subdivision SE Corner Broadmoor Avenue and Picuris Avenue

Sincerely,

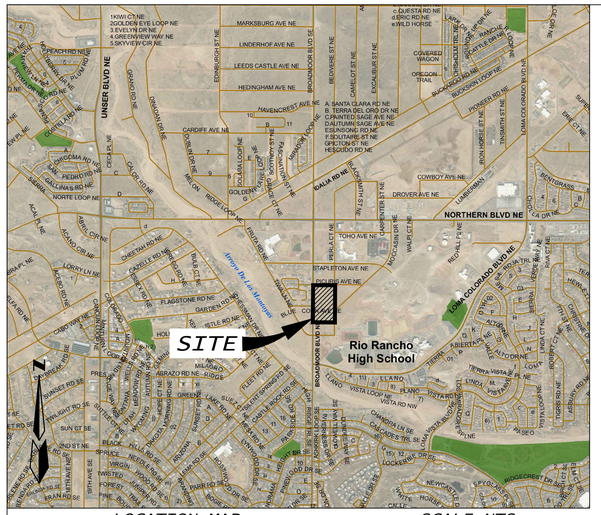
Las Ventanas NM, Inc.

By: _____

Printed Name: T. Scott Ashcraft

Title: President

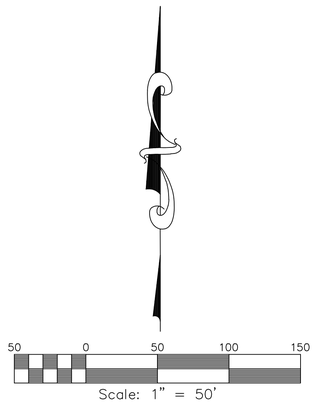
Las Ventanas Homes
8330 Washington Pl. NE
Albuquerque, NM 87113
Phone: 505.600-3377 E-Mail: Tscott@LasVentanasNM.com

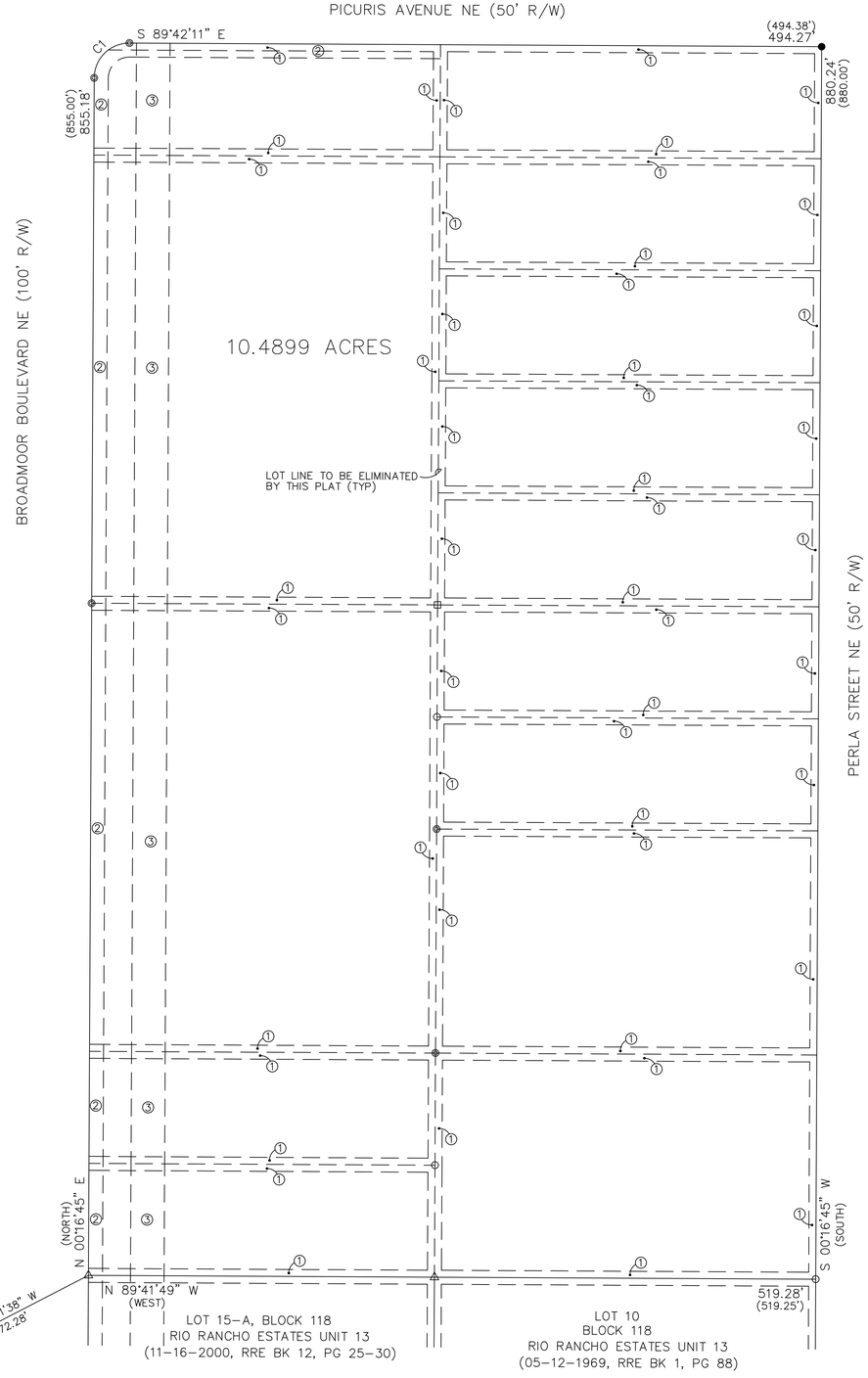

1 KIWI CT NE
2 GOLDEN EYE LOOP NE
3 EVELYN DR NE
4 GREENVIEW WAY NE
5 SKYVIEW CIR NE
c QUESTA RD NE
d BRIC RD NE
e WILD HORSE
MARKSBURG AVE NE
LINDERHOF AVE NE
LEEDS CASTLE AVE NE
HEDINGHAM AVE NE
HAVENCREST AVE NE
A SANTA CLARA RD NE
B TERRA DEL ORO DR NE
C PAINTED SAGE AVE NE
D AUTUMN SAGE AVE NE
E SUNSONG RD NE
F SUTTAIRE ST NE
G PECTON ST NE
H ESQUIDO RD NE
CARDIFF AVE NE
GOLDEN EYE LOOP NE
UNSER BLVD NE
COVERED WAGON
OREGON TRAIL
BUCKBOARD LOOP NE
PIONEER RD NE
NORTHERN BLVD NE
COWBOY AVE NE
DROVER AVE NE
LUMBERJACK RD NE
ITAPLETON AVE NE
TOHO AVE NE
SAN COLORADO BLVD NE
Arroyo De La Manzanita
SITE
Rio Rancho High School
BROADMOOR BLVD NE
LLANO VISTA LOOP NE
LLANO VISTA AVE NW
CHAMISA LN SE
CHAMISA TRS SE
LOCKER DR SE
NEWCASTLE DR SE
CRATER RD NE
MONTE VISTA DR NE
TIERRA VISTA PL NE
TIERRA VISTA DR NE
TIERRA VISTA LOOP NE
TIGRE RD NE
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DESCRIPTION

A tract of land situate within the Town of Alameda Grant, projected Section 13, Township 12 North, Range 2 East, New Mexico Principal Meridian, City of Rio Rancho, Sandoval County, New Mexico being all of LOTS 1–9, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on May 12, 1969, in Rio Rancho Estates Plat Book No. 1, Page 88 and all of LOTS 16–A THRU 20–A, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on November 16, 2000, in Rio Rancho Estates Plat Book No. 12, Pages 25–30, and containing 10.4899 acres more or less.

PRELIMINARY PLAT FOR
BROADMOOR HILL
(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024





PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ◎ SET 5/8" REBAR W/CAP "LS 7719"

EASEMENTS

① EXISTING 5' UTILITY & DRAINAGE EASEMENT (TYPICAL)
(05–12–1969, RRE BOOK 1, PAGE 88)
(ALL VACATED BY THIS PLAT)

② EXISTING 10' PUE (TYPICAL)
(11–16–2000, RRE BOOK 12, PAGE 25–30)

③ EXISTING 24' RECIPROCAL INGRESS AND EGRESS EASEMENT
DECLARATION, ACCEPTANCE AND MAINTENANCE
(05–23–2007, 200721588) (20–A)
(08–28–2007, 200735001) (19–A)
(08–28–2007, 200735002) (18–A)
(08–28–2007, 200735003) (17–A)
(08–28–2007, 200735004) (16–A)
(ALL VACATED BY THIS PLAT)

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary is from the plat of record entitled:

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (05–12–1969, RRE BOOK 1, PAGE 88)

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (11–16–2000, RRE BOOK 12, PAGE 25–30 [VOL 3, FOLIO 2024A])

   all being records of Sandoval County, New Mexico.

5. Field Survey: February 19, 2015.
6. Title Report: Fidelity National Title Insurance Company File No. FT000171566–RUTLEDGED (Effective Date: December 15, 2014)
7. City of Rio Rancho, New Mexico Zone: R–2
8. 100 Year Flood Zone Designation: Zone X, Panel 1893 of 2225, Flood Insurance Rate Map, City of Rio Rancho, Sandoval County, New Mexico, dated March 18, 2008. This property does not lie in the 100 Year Flood Plain.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

10–31–2023 REV
01–06–2022 REV

Drawn By:	TA	Date:	02–25–2015
Checked By:	TA	Drawing Name:	15011PLT.DWG
Job No.:	15–011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505–884–1990

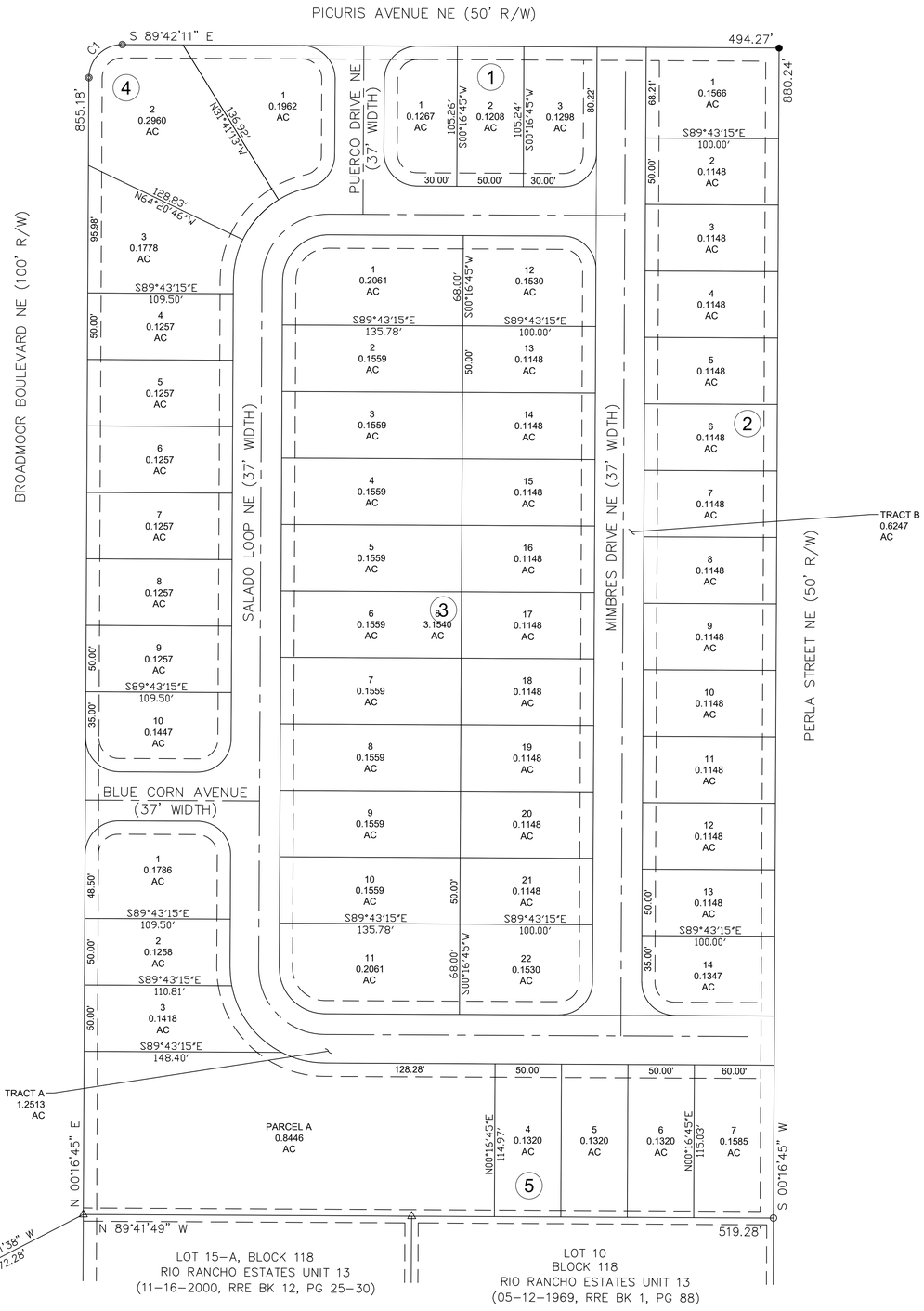
Book _____, Page _____

PRELIMINARY PLAT FOR

BROADMOOR HILL

(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
JANUARY 2024

50 0 50 100 150
Scale: 1" = 50'



PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ⊙ SET 5/8" REBAR W/CAP "LS 7719"

NOTES: UNLESS OTHERWISE INDICATED:

There is a ten (10) foot wide public utility easement within all new lots adjacent to private roadways and public road rights-of-way being granted herein. There is also a five (5) foot wide public utility easement within all lots and tracts on all other side and rear property lines.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

Drawn By:	TA	Date:	10-31-2023
Checked By:	TA	Drawing Name:	15011PL3.DWG
Job No.:	15-011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505-884-1990

Book _____, Page _____

City of Rio Rancho
Development Services Department
3200 Civic Center Circle NE
Rio Rancho, NM 87144
Phone (505) 891-5005 Fax (505) 896-8994

May 9, 2025

RE: **Broadmoor Hill Subdivision: Preliminary Plat (Case # 23-210-00013)**
& Subdivision Variance to allow for Stub Street (x2): (Case # 23-280-00009, Mimbres Dr NE), (Case # 23-280-00010, Salado Lp NE).

Dear Property Owner:

You are receiving this notice because your property abuts a site where a land development decision is required by the Planning and Zoning Board.

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

In two concurrent requests, the applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end street stubs for Mimbres Drive NE and Salado Loop NE within the proposed Broadmoor Hill Subdivision.

The Planning and Zoning Board will consider these requests at a public hearing on **Tuesday, May 27, 2025** starting at 6:00 pm in the **Council Chambers of City Hall, located at 3200 Civic Center Circle**. If you would like to comment on these applications, you are encouraged to send in comments in writing to tdvorak@rrnm.gov, which will be presented to the Planning and Zoning Board. This Planning and Zoning Board meeting will be hybrid with options to participate virtually or in person. The City highly encourages citizens to watch the meeting live on the City's website www.rrnm.gov or on Sparklight cable channel 56.

For the **Planning and Zoning Board meeting**, to participate virtually: Join via computer:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: **026819** Join via phone: 1-253-215-8782 US

Please do not hesitate to contact me at 505-896-8361 or e-mail me at tdvorak@rrnm.gov if you have any questions about the applications or accessing the meeting. The agenda for this hearing and related staff reports will be posted on the City's website, www.rrnm.gov, approximately one week before the hearing.

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the City Clerk, 505-891-5004, as soon as possible prior to the meeting. Public documents including the agenda and minutes can be provided in various accessible formats. Please contact the City Clerk if a summary or other type of accessible format is needed.

Respectfully,

Tim Dvorak

Tim Dvorak
Municipal Planner II
Development Services Department
Planning Division
City of Rio Rancho

BROADMOOR HILL SUBDIVISION
PRELIMINARY PLAT &
SUBDIVISION VARIANCE (STUB STREET X2)



RioRancho
City of Vision

0 65 130 260 390 520
Feet

DISCLAIMER: All information in this map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. This map is not a survey and should be used for graphical purposes only.

Map Created by Tim Dvorak on 5/9/2025

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Development Services Department
3200 Civic Center Circle NE, Suite 130
Rio Rancho NM, 87144
Phone: (505) 891-5005
Fax: (505) 896-8994

NOTICE OF PUBLIC HEARING

Meeting:	Planning & Zoning Board
Location:	Virtual (Zoom)/City Hall
Date:	**May 27, 2025**
Time:	6:00PM
Staff Contact:	Tim Dvorak (505) 896-8361 tdvorak@rrnm.gov

Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision. The applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end stub streets. The PZB will hear the requests on May 27, 2025.

We are promoting social distancing and running Planning and Zoning Board Meetings as a hybrid virtual and in person. If you'd like to present comments on the case while the meeting is occurring, please join the meeting from your computer, tablet or smartphone:
https://us06web.zoom.us/j/85180741871?pwd=T3BlSHVpWkp6d3dDRmlHd3k2VzYvUT09
Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



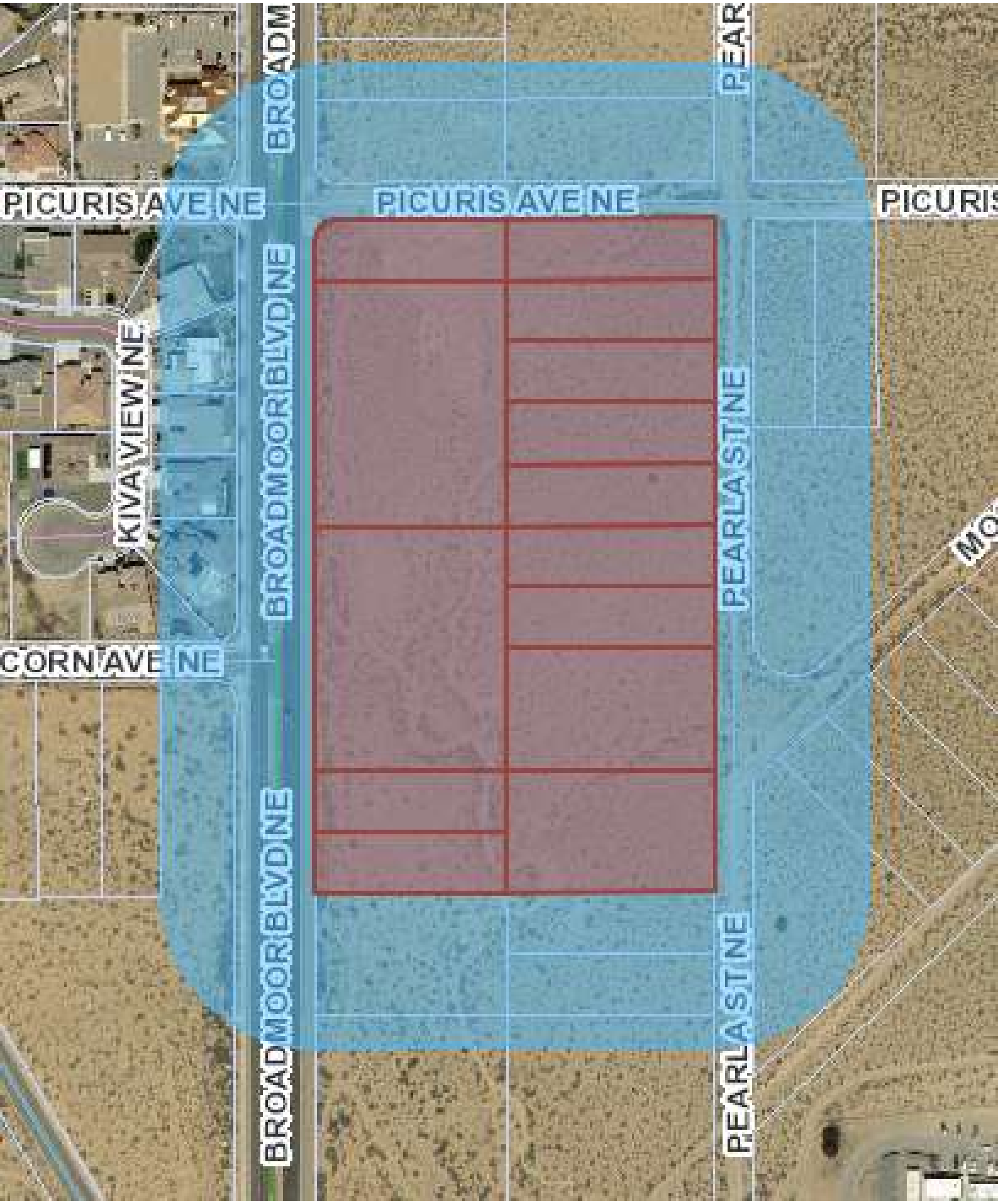
Application Information

You are receiving this notice because your property is within 300 feet of a site where a land development decision is required by the Planning and Zoning Board. The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision. The applicant additionally requests approval of two Subdivision Variances to Chapter 155.41(M) to allow for two separate dead-end stub streets. The PZB will hear the requests on May 27, 2025.

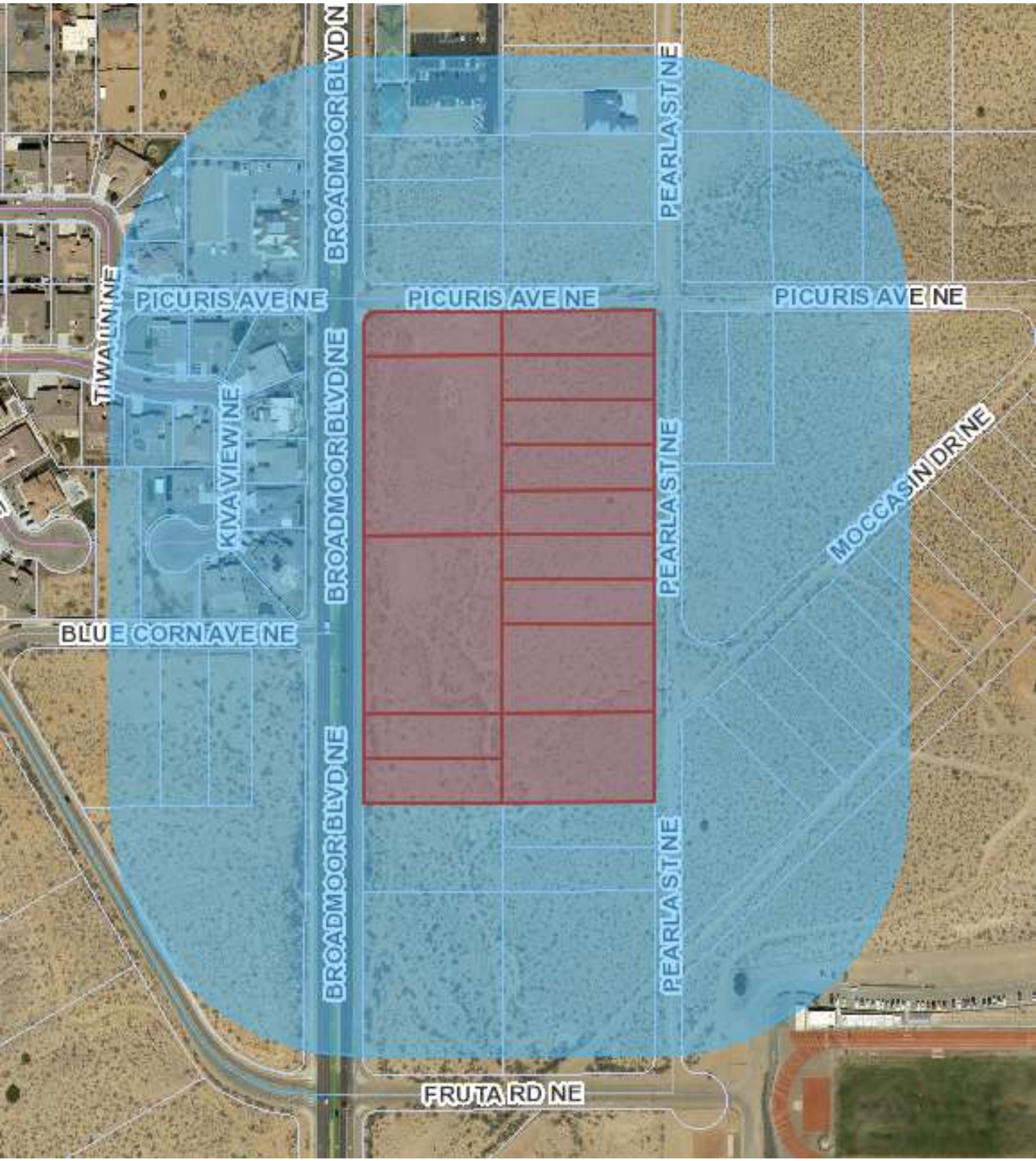
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Meeting ID: 851 8074 1871 Passcode: 026819 Join via phone: 1-253-215-8782 US



Noticed Adjacent Properties within 100' (Right-of-Way Excluded)



Noticed Adjacent Properties within 300' (Right-of-Way Excluded)



CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: November 3, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Jordan Yutzy, Cedric Smith, Peter Prukop
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer
(X) Police - Justin Garcia
(X) SSCAFCA – Andy Edmondson, Sara Rassa
(X) Parks and Recreation - Dyane Sonier
(X) Rio Rancho Public Schools – Michael Baker
(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Preliminary Plat: DSD #23-210-00013 (Broadmoor Hill Subdivision)

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a preliminary plat for the Broadmoor Hill Subdivision, creating 56 lots and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, January 10, 2024**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(X) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

-IFC 2021 shall be referenced for fire code.
-2 entrances shall be required.
- Fire hydrants shall be at a maximum distance of 500 feet apart.
-A Fire 1 plan shall be submitted to the Fire Marshals office for review prior to a full plan set submittal.

Fire Marshal Brian Johnson — Reviewer
5/15/2025 — Date

DEVELOPMENT SERVICES DEPARTMENT— TRANSMITTAL AND REVIEW SHEET

DATE: November 3, 2023

TO:
(X) Development Services – Matt Geisel, David Serrano, Amy Rincon, Brian Babyak, Jordan Yutzy, Cedric Smith, Peter Prukop
(X) Fire and Rescue - Jessica Duron-Martinez, Gerard Bauer
(X) Police - Justin Garcia
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(X) MRCOG – Peach Anderson-Tauzer

FROM: Development Services Department, Planning & Zoning Division

RE: Preliminary Plat: DSD #23-210-00013 (Broadmoor Hill Subdivision)

The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a preliminary plat for the Broadmoor Hill Subdivision, creating 56 lots and 1 parcel zoned R-2: Single-Family Residential District. The subject properties are legally described as Unit 13, Block 118, Lots 1-9 & 16A-20A and comprise approximately 10.5 acres.

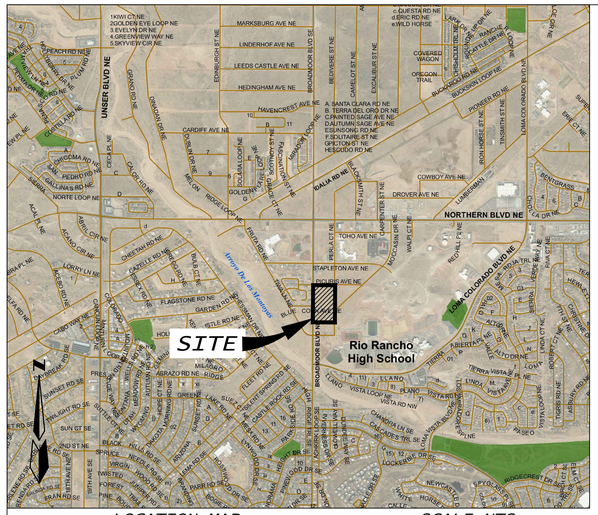
Please review and provide recommendations, comments or corrections on this form and return via hand delivery, fax or e-mail by **Wednesday, January 10, 2024**. If redline comments are made on the plan, please also provide me with a copy. Please contact Tim Dvorak at 505-896-8361 or e-mail tdvorak@rrnm.gov if you have any questions or would like to review a hard copy at my office.

This item has been reviewed and is hereby:
(_) RECOMMENDED FOR APPROVAL
(_) RETURNED FOR REVISIONS RESUBMITTAL REQUIRED
(_) RETURNED WITH COMMENTS RESUBMITTAL NOT REQUIRED

No new comments - As provided in November: No recommendation for or against approval of the proposed replat. No new comments from those provided for prior cases for this development, such as 22-210-00013, 22-280-00006 and 20-250-00025. Repeating previous comments (20-250-00025) that recommended some level of landscaping – at a minimum for the subdivision entryways-be provided with the construction plans, and to possibly be maintained by an HOA, and it would seem that some level of landscaping improvements would be required along Broadmoor Blvd. PRCS will continue to defer to DSD as to what ROW or other improvements are required for this development.

Dyane N. Sonier *12/28/2023*

Reviewer Date



LOCATION MAP SCALE:NTS

SUBDIVISION DATA

GROSS ACREAGE:	10.4899 AC.
NO. OF EXISTING LOTS:	14 LOTS
NO. OF EXISTING TRACTS:	0 TRACTS
NO. OF LOTS CREATED:	56 LOTS
NO. OF TRACTS CREATED:	2 TRACTS & 1 PARCEL
PUBLIC RIGHT OF WAY CREATED:	0.0 AC.
DATE OF SURVEY:	FEBRUARY 19th, 2015

FREE CONSENT AND DEDICATION

THE SUBDIVISION HEREON DESCRIBED IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S) AND/OR PROPRIETOR(S) THEREOF. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE CREATION OF LOTS AND PARCELS AS SHOWN HEREON. THE PRIVATE STREETS WILL BE DEEDED IN FEE SIMPLE TO THE BROADMOOR HILL HOME OWNERS ASSOCIATION AND WILL BE MAINTAINED BY SAME. THEY WILL BE FOR THE BENEFIT OF THE HOME OWNERS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE GRANTING OF PRIVATE STREETS AS SHOWN HEREON, INCLUDING THE RIGHT TO CONSTRUCT, OPERATE, INSPECT AND MAINTAIN FACILITIES THEREIN. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY GRANT ALL PUBLIC UTILITY EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRIC, WATER, SEWER AND COMMUNICATION SERVICES, WHERE SHOWN OR INDICATED, INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE DEDICATION OF PARCEL A FOR PUBLIC DRAINAGE AS SHOWN HEREON TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO ALL THE FOREGOING AND DO HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNER(S) WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE PROPERTY SUBDIVIDED HEREON.

OWNER(S): T. Scott Ashcraft, President, LAS VENTANAS NM, INC.
LOT 16-A AND 17-A

Scott Ashcraft, President — Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
BERNALILLO COUNTY) SS

On this _____ day of _____, 2023, this instrument was acknowledged before me by T. Scott Ashcraft, President for LAS VENTANAS NM, INC. on behalf of said Corporation.

Notary Public — My Commission Expires

LEGAL DESCRIPTION

A TRACT OF LAND SITUATE WITHIN THE TOWN OF ALAMEDA GRANT, PROJECTED SECTION 13, TOWNSHIP 12 NORTH, RANGE 2 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO BEING ALL OF LOTS 1-9, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT, FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO, ON MAY 12, 1969, IN RIO RANCHO ESTATES PLAT BOOK NO. 1, PAGE 88 AND ALL OF LOTS 16-A THRU 20-A, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT, FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK OF SANDOVAL COUNTY, NEW MEXICO, ON NOVEMBER 16, 2000, IN RIO RANCHO ESTATES PLAT BOOK NO. 12, PAGES 25-30, AND CONTAINING 10.4899 ACRES MORE OR LESS.

PURPOSE OF PLAT

1. To Subdivide 14 existing lots into 56 residential lots, 1 Parcel, 2 Tracts for private roadways, and to grant easements as shown hereon.
2. To eliminate existing property lines as shown.
3. To vacate existing 5' public utility & drainage easements as shown hereon.
4. To vacate existing 24' reciprocal ingress and egress easements as shown hereon.

SUBDIVISION NOTES

1. BEARINGS ARE NEW MEXICO STATE PLANE GRID BEARING (CENTRAL ZONE)
2. ALL DISTANCES ARE GROUND DISTANCES
3. BEARINGS AND DISTANCES IN PARENTHESIS RECORD.
4. BASIS OF BOUNDARY ARE THE FOLLOWING PLATS AND DOCUMENTS OF RECORD ENTITLED:

   "UNIT THIRTEEN, RIO RANCHO ESTATES"
   (05-12-1969, RRE BOOK 1, PAGE 88)

   "UNIT THIRTEEN, RIO RANCHO ESTATES"
   (11-16-2000, RRE BOOK 12, PAGE 25-30, VOL 3, FOLIO 2024A)

   ALL BEING RECORDS OF SANDOVAL COUNTY, NEW MEXICO
5. FIELD SURVEY PERFORMED ON FEBRUARY 19, 2015.
6. TITLE REPORT:

   TITLE COMPANY: FIDELITY NATIONAL TITLE INSURANCE COMPANY
   FILE NO.: FT000171566-RUTLEDGED (EFFECTIVE DATE: DECEMBER 15, 2014)
7. CITY OF RIO RANCHO , NEW MEXICO ZONE: R-2
8. 100 YEAR FLOOD ZONE DESIGNATION: ZONE X, PANEL 1893 OF 2225, FLOOD INSURANCE RATE MAP, CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO, DATED MARCH 18, 2008. THIS PROPERTY DOES NOT LIE IN THE 100 YEAR FLOOD PLAIN.

FREE CONSENT AND DEDICATION

THE SUBDIVISION HEREON DESCRIBED IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S) AND/OR PROPRIETOR(S) THEREOF. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE CREATION OF LOTS AND PARCELS AS SHOWN HEREON. THE PRIVATE STREETS WILL BE DEEDED IN FEE SIMPLE TO THE BROADMOOR HILL HOME OWNERS ASSOCIATION AND WILL BE MAINTAINED BY SAME. THEY WILL BE FOR THE BENEFIT OF THE HOME OWNERS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE GRANTING OF PRIVATE STREETS AS SHOWN HEREON, INCLUDING THE RIGHT TO CONSTRUCT, OPERATE, INSPECT AND MAINTAIN FACILITIES THEREIN. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY GRANT ALL PUBLIC UTILITY EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRIC, WATER, SEWER AND COMMUNICATION SERVICES, WHERE SHOWN OR INDICATED, INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE DEDICATION OF PARCEL A FOR PUBLIC DRAINAGE AS SHOWN HEREON TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO ALL THE FOREGOING AND DO HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNER(S) WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE PROPERTY SUBDIVIDED HEREON.

OWNER(S): Daniel Ashcraft, President, ASHCRAFT REAL ESTATE & DEVELOPMENT CORP
LOTS 1 THRU 9, 19-A AND 20-A

Daniel Ashcraft, President — Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
BERNALILLO COUNTY) SS

On this _____ day of _____, 2023, this instrument was acknowledged before me by Daniel Ashcraft, President, Ashcraft Real Estate & Development Corporation, on behalf of said corporation.

Notary Public — My Commission Expires

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:

1. PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM) FOR THE INSTALLATION, MAINTENANCE AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT, FIXTURES, STRUCTURES AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.
2. NEW MEXICO GAS COMPANY (NMGCO) FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.
3. LUMEN (LUMEN) FOR INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED AND AERIAL COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND ENCLOSURES.
4. SPARKLIGHT FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICES.
5. CITY OF RIO RANCHO UTILITIES (WATER AND SANITARY SEWER) FOR INSTALLATION, MAINTENANCE AND SERVICES OF LINES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE SERVICES.

INCLUDED, IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, MODIFY, RENEW, OPERATE, AND MAINTAIN FACILITIES FOR THE PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID RIGHT-OF-WAY AND EASEMENT, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT-OF-WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, AND TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN, POOL (ABOVE GROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

DISCLAIMER IN APPROVING THIS PLAT, PNM, NMGCO, LUMEN AND SPARKLIGHT DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM, NMGCO, SPARKLIGHT AND LUMEN DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN ON THIS PLAT.

NOTES: UNLESS OTHERWISE INDICATED:

There is a ten (10) foot wide public utility easement at the front of all new lots being granted hereon. There is also a five (5) foot wide public utility easement within all lots and tracts on all other side and rear property lines.

CITY CLERKS CERTIFICATE

I, Rebecca A. Martinez, CIty Clerk of the City of Rio Rancho, New Mexico do hereby certify that the plat shown hereon was approved by the Rio Rancho Planning and Zoning Board Chairman on the ____ day of _____, 2024.

Rebecca A. Martinez, City Clerk, City of Rio Rancho — Date

TREASURER'S CERTIFICATE

I, Jennifer Taylor, Treasurer of Sandoval County, New Mexico do hereby certify that the previous ten (10) years property taxes have been paid in full.

Jennifer Taylor, Sandoval County Treasurer — Date

FREE CONSENT AND DEDICATION

THE SUBDIVISION HEREON DESCRIBED IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S) AND/OR PROPRIETOR(S) THEREOF. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE CREATION OF LOTS AND PARCELS AS SHOWN HEREON. THE PRIVATE STREETS WILL BE DEEDED IN FEE SIMPLE TO THE BROADMOOR HILL HOME OWNERS ASSOCIATION AND WILL BE MAINTAINED BY SAME. THEY WILL BE FOR THE BENEFIT OF THE HOME OWNERS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE GRANTING OF PRIVATE STREETS AS SHOWN HEREON, INCLUDING THE RIGHT TO CONSTRUCT, OPERATE, INSPECT AND MAINTAIN FACILITIES THEREIN. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY GRANT ALL PUBLIC UTILITY EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRIC, WATER, SEWER AND COMMUNICATION SERVICES, WHERE SHOWN OR INDICATED, INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO THE DEDICATION OF PARCEL A FOR PUBLIC DRAINAGE AS SHOWN HEREON TO THE CITY OF RIO RANCHO IN FEE SIMPLE WITH WARRANTY COVENANTS. SAID OWNER(S) AND/OR PROPRIETOR(S) DO HEREBY CONSENT TO ALL THE FOREGOING AND DO HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNER(S) WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE PROPERTY SUBDIVIDED HEREON.

OWNER(S): T. Scott Ashcraft
LOT 18-A

T. Scott Ashcraft — Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
BERNALILLO COUNTY) SS

On this _____ day of _____, 2023, this instrument was acknowledged before me by T. Scott Ashcraft, President for LAS VENTANAS NM, INC. on behalf of said Corporation.

Notary Public — My Commission Expires

PRELIMINARY PLAT
FOR
BROADMOOR HILL

(BEING A REPLAT OF LOTS 1 THRU 9, AND 16-A THRU 20-A,BLOCK 118,
RIO RANCHO ESTATES, UNIT 13)
WITHIN
THE TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, N.M.P.M.
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
DECEMBER 2023

DSD CASE NO. _____

RIO RANCHO PLANNING AND ZONING BOARD

Approved on the _____ day of _____ 2024.

Fred Radosevich, Chairman — Date

UTILITY APPROVALS:

Comcast
Ezee Fiber

City of Rio Rancho — Date

New Mexico Gas Company — Date

Lumen — Date

Public Service Company of New Mexico — Date

Sparklight — Date

COUNTY CLERKS RECORDING INFORMATION

THIS INSTRUMENT WAS FILED FOR RECORD ON THE _____TH DAY OF_____, 2024 IN RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO, AND WAS RECORDED IN VOL_____, FOLIO_____, RECORDS OF SAID COUNTY.

(RIO RANCHO ESTATES PLAT BOOK _____, PAGE _____)

ANNE BRADY-ROMERO, COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

JURISDICTIONAL AFFIDAVIT

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby affirm that the property described does lie within the platting and extra-territorial subdivision jurisdiction of the City of Rio Rancho."

Timothy Aldrich, P.S. No. 7719 — Date

SURVEYOR'S CERTIFICATION

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat and description were prepared by me or under my supervision, shows all easements as shown on the plat of record or made known to me by the owners and/or proprietors of the subdivision shown hereon, utility companies and other parties expressing an interest and meets the Minimum Standards for Land Surveying in the State of New Mexico and the City of Rio Rancho Subdivision Ordinance and is true and correct to the best of my knowledge and belief."

Timothy Aldrich, P.S. No. 7719 — Date

Explicit Roadway Easement Designation: Add specific language in the dedication statement that explicitly grants drainage, water and sewer utility easements within the entirety of Tracts A and B (the private roadways). This should be a separate paragraph from the general PUE dedication.

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505-884-1990

Scale: as shown	Date: 12/16/21	Drawn: DER	Checked: ALS
Job: A20033	Sheet 1 of 3		

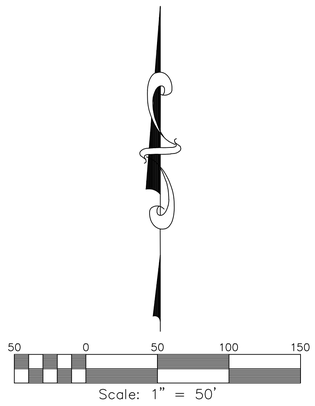
Book ____, Page ____

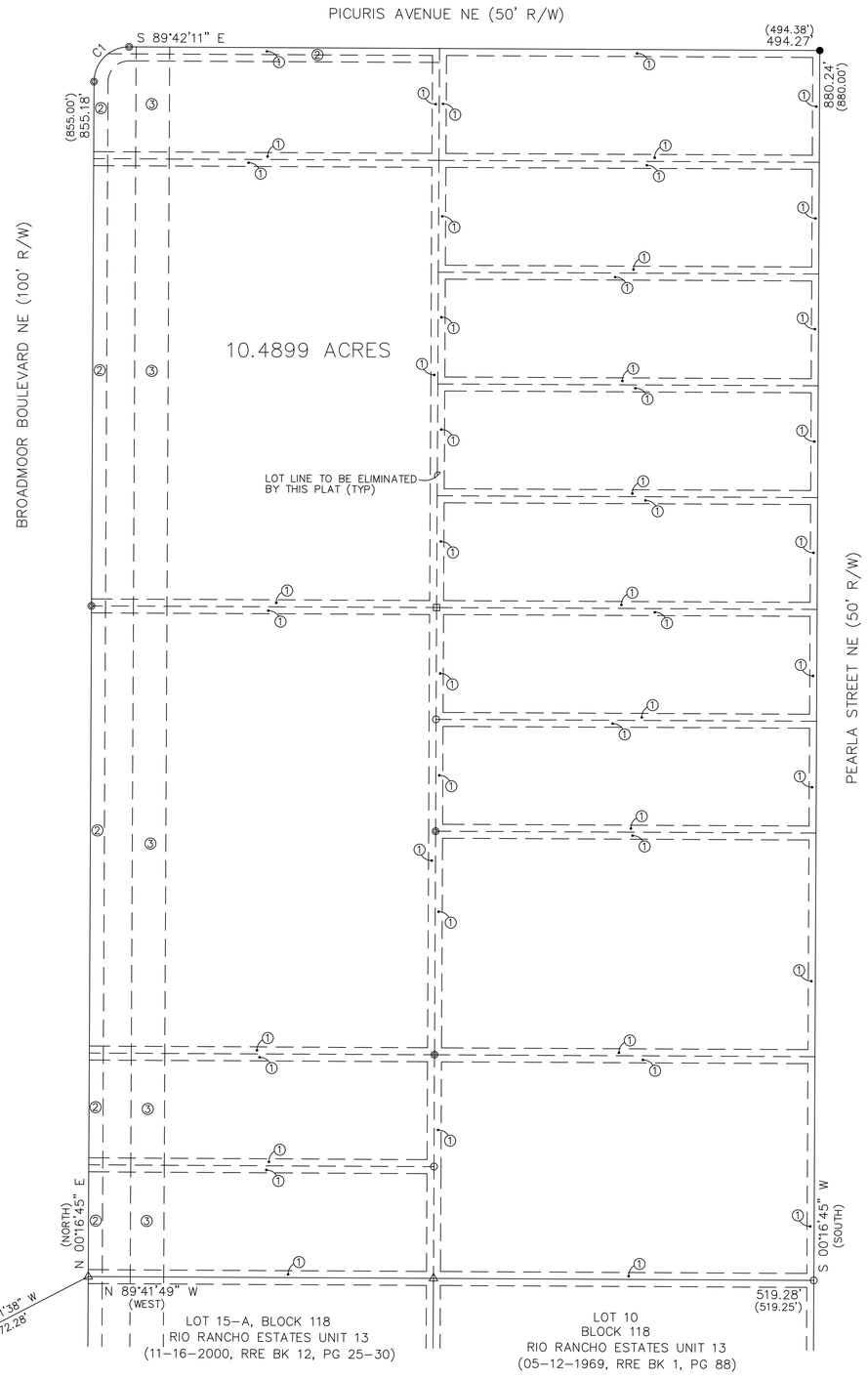
Engineering Comments - Page 2 of 3

PRELIMINARY PLAT FOR
BROADMOOR HILL
(BEING A REPLAT OF LOTS 1 THRU 9
AND 16–A THRU 20–A, BLOCK 118,
RIO RANCHO ESTATES UNIT 13)
WITHIN THE
TOWN OF ALAMEDA GRANT
PROJECTED SECTION 13
TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
DECEMBER 2023

DESCRIPTION

A tract of land situate within the Town of Alameda Grant, projected Section 13, Township 12 North, Range 2 East, New Mexico Principal Meridian, City of Rio Rancho, Sandoval County, New Mexico being all of LOTS 1–9, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on May 12, 1969, in Rio Rancho Estates Plat Book No. 1, Page 88 and all of LOTS 16–A THRU 20–A, BLOCK 118, RIO RANCHO ESTATES, UNIT 13, as the same is shown and designated on said plat, filed for record in the office of the County Clerk of Sandoval County, New Mexico, on November 16, 2000, in Rio Rancho Estates Plat Book No. 12, Pages 25–30, and containing 10.4899 acres more or less.





PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
- ◎ SET 5/8" REBAR W/CAP "LS 7719"

EASEMENTS

① EXISTING 5' UTILITY & DRAINAGE EASEMENT (TYPICAL)
(05–12–1969, RRE BOOK 1, PAGE 88)
(ALL VACATED BY THIS PLAT)

② EXISTING 10' PUE (TYPICAL)
(11–16–2000, RRE BOOK 12, PAGE 25–30)

③ EXISTING 24' RECIPROCAL INGRESS AND EGRESS EASEMENT DECLARATION, ACCEPTANCE AND MAINTENANCE
(05–23–2007, 200721588) (20–A)
(08–28–2007, 200735001) (19–A)
(08–28–2007, 200735002) (18–A)
(08–28–2007, 200735003) (17–A)
(08–28–2007, 200735004) (16–A)
(ALL VACATED BY THIS PLAT)

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. Bearings and distances in parenthesis are record.
4. Basis of boundary is from the plat of record entitled:

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (05–12–1969, RRE BOOK 1, PAGE 88)

   "UNIT THIRTEEN, RIO RANCHO ESTATES",
   (11–16–2000, RRE BOOK 12, PAGE 25–30 [VOL 3, FOLIO 2024A])

   all being records of Sandoval County, New Mexico.

5. Field Survey: February 19, 2015.
6. Title Report: Fidelity National Title Insurance Company File No. FT000171566–RUTLEDGED (Effective Date: December 15, 2014)
7. City of Rio Rancho, New Mexico Zone: R–1
8. 100 Year Flood Zone Designation: Zone X, Panel 1893 of 2225, Flood Insurance Rate Map, City of Rio Rancho, Sandoval County, New Mexico, dated March 18, 2008. This property does not lie in the 100 Year Flood Plain.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

10–31–2023 REV
01–06–2022 REV

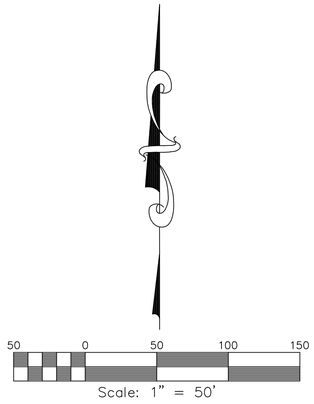
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Checked By:	TA	Drawing Name:	15011PLT.DWG
Job No.:	15–011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505–884–1990

Book _____, Page _____

Engineering Comments - Page 3 of 3

PRELIMINARY PLAT FOR
BROADMOOR HILL
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TOWNSHIP 12 NORTH, RANGE 2 EAST, NMPM
CITY OF RIO RANCHO
SANDOVAL COUNTY, NEW MEXICO
DECEMBER 2023





PROPERTY CORNERS

- ○ FOUND 3/8" REBAR
- ● FOUND 1" PIPE
- □ FOUND 1/2" REBAR W/CAP "LS 8686"
- △ FOUND BATHEY STAKE W/CAP "LS 14271"
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EASEMENTS

① EXISTING 5' UTILITY & DRAINAGE EASEMENT (TYPICAL)
(05–12–1969, RRE BOOK 1, PAGE 88)

② EXISTING 10' PUE (TYPICAL)
(11–16–2000, RRE BOOK 12, PAGE 25–30)

Per last set of comment.

"Page 3 note 1 and 2 note existing and should state □dedicated by this plat□"

NGS MONUMENT
"SAGE"
N=1545611.580
E=1499264.765
G–G=0.99965468
Δα=–00°16'22.20"
CENTRAL ZONE
ELEVATION=5676.181
(NAD83/NAVD88)

Graphical Representation: Add a note or graphical representation on the plat drawing that clearly indicates the full width of Tracts A and B are subject to water and sewer utility easements.

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.28'	25.00'	90°01'04"	N 45°17'17" E	35.36'

Drawn By:	TA	Date:	10–31–2023
Checked By:	TA	Drawing Name:	15011PL3.DWG
Job No.:	15–011	Sheet:	2 of 3

ALDRICH LAND SURVEYING
P.O. BOX 30701, ALBQ., N.M. 87190
505–884–1990

Book _____, Page _____

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 25-105-00001

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Text Amendment. The City of Rio Rancho is requesting approval of text amendments the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions, Sections: General Provisions, Platting Procedure, Design Standards, and Administration and Enforcement. Staff contact is Michelle Costilla, and staff recommends the Planning and Zoning Board recommend approval to the Governing Body.

BACKGROUND AND ANALYSIS:
The City of Rio Rancho is requesting approval of text amendments the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions, Section 155.06 (B), Section 155.07, Section 155.20 (A), (D), and (E)(3), Section 155.21 (A)(3) and B(1), Section 155.22 (A), (C), (D), (E), and (H), Section 155.23 (A) and (B), Section 155.24 (A), (C), (D), and (F), Section 155.25 (A), (B), and (C), Section 155.26 (A), Section 155.27 (A), (B), and (C), Section 155.28 (A), Section 155.29 (B), Section 155.30, Section 155.40, Section 155.41 (A), (D), (G), (H), (K), (L), (M), (N), (O), (P), (Q), (R), (T), (U), (W), Section 155.42, Section 155.43, Section 155.46, Section 155.60, Section 155.61 (B), and Section 155.62.

A change or amendment to any portion of the Title XV Land Usage requires review and recommendation by the Planning and Zoning Board pursuant to Chapter 150.07 (A), which states "Proposed amendments shall be submitted to the Governing Body through the Planning and Zoning Board", and (B) "The Board shall study the proposals at a regular meeting or at a special meeting, if necessary, and shall submit its recommendations to the Governing Body."

In conjunction with the updates that are proposed in the Development Process Manual, staff finds that in order to be consistent and in alignment with the standards and requirements set forth in the DPM, updates to Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions are needed.

General proposed changes made throughout the chapter are the capitalization of case types, such as Master Plan and Preliminary Plat, replacing the term "City Development Department" with "Development Services Department" and using the term "Planning and Zoning Board", instead of "Planning Board" to provided consistency and to avoid confusion. The specific changes are as follows:

Section 155.06 COMPLIANCE WITH CITY STANDARDS
(B): Replaced the term "Development Planning Manual" with "Development Process Manual," which is the term that is currently used.

Section 155.07 DEFINITIONS
Replaced the term "OPEN SPACE" with "PARKS, RECREATIONAL." Also changed the definition from "An area reserved for public use, not to include dedication of public streets and right-of-way" to "An area developed and maintained primarily for active recreation." The term "Open Space" has been misleading and confusing for staff and the public alike. The updated term and definition provide more clarity.

There are also two additional subsections added to this definition as "(1) DEVELOPED PARK AREA. The developed area is the portion of park land designated for active recreational use. Specifically designed and maintained to support various recreational activities, this area includes amenities such as sports fields, playgrounds, picnic areas, trails, and other facilities intended for public enjoyment and physical activity." and:

"(2) UNDEVELOPED PARK AREA. The undeveloped area is the portion of park land preserved in its natural state for conservation, wildlife habitat, and educational purposes. It encompasses features like forests, wetlands, open spaces, and other natural landscapes protected from active development. This acreage serves as a resource for environmental conservation, ecological study, and passive recreation." Staff finds that the proposed distinction would be helpful in the development process.

Removed the definition of PLANNING BOARD. Staff finds that it would be less complicated to use the term "Planning and Zoning Board" throughout the chapter.

155.20 PROCEDURE GUIDANCE
(A): Added reference to the proposed DPM Section 2.5.A Subdivision of Land, and 2.8.E.III General Requirements for all Plats.
(D): Changed the corporate limit of platting jurisdiction from three to five miles per State Statute regulations.
(E)(3): Replaced the term " Area plan" with "Master Plan", as that is what is more commonly used by staff. Also removed subsection (b), which states "If the Planning Board finds that the area plan will significantly alter the provisions of any officially adopted plans of the city, it shall make a recommendation to the Governing Body. The Governing Body shall approve it, approve it in modified form, or reject it." The land use plan process is outlined in the DPM and staff feels that this paragraph isn’t necessary in this section.

155.21 PREAPPLICATION; PLANS AND REQUIRED INFORMATION
(A)(3): Replaced the purpose of the Development Review Committee from "inform the subdivider whether the sketch plan and data meet the intent of these regulations" with "provide preliminary guidance that will not constitute a final decision with regard to a participant's application", which is a more accurate description.
(B)(1): Added a sentence to read "The map shall include a north arrow" so that it would be more grammatically correct.

155.22 PRELIMINARY PLAT
(A): Added reference to the proposed DPM Section 2.5.A.II. Preliminary Plat Procedure. Also provided a more detailed description of "prescribed forms", which reads "an application form (which can be found on the Department of Development Services website), a preliminary plat checklist, all items referenced in the checklist."
(B): Added timeframe for initial review of application for completeness.
(C): Removed the Annexation and/or rezoning section. This section is not applicable and the process is not relevant to the Preliminary Plat process. Renumber following sections to adjust for the removal of this subsection.
(new C): Updated the language stating "Per NMSA § 3-20-7, the Planning Board shall, within thirty-five days of receipt of the application package, act thereon as submitted or modified" to " Per NMSA

§ 3-20-7, the Planning Board shall approve or disapprove the preliminary plat within thirty-five days after the Development Services Department deems the preliminary plat application to be complete" to clarify that the application must be deemed complete before the the item can be scheduled for a hearing.
(new D): Added reference to the proposed DPM Section 2.3 and the Municipal Code Chapter 150.03 Applications and Procedures shows what is required for each type of application.
(new E): Added reference to 2.5.A.III in the DPM.
(new F): Added "if the applicant is planning a multi-phase subdivision a Preliminary Plat shall be approved separately for each phase."
(G): Added "If the applicant intends to make a change to the approved preliminary plat, the change may require approval from the Planning and Zoning Board." Certain minor changes to a plat may be required to go through and amendment process.

155.23 PRELIMINARY PLAT APPROVAL; PLANS AND REQUIRED INFORMATION
(A): Added language stating that the plat preferred scale is 1 inch to 100 feet. Added reference to the proposed DPM Section 2.8.E.V Preliminary Plat Requirements.
(B): Added subsection stating that the preliminary plat shall contain "Identification clearly stating the plat is a preliminary plat." Changed the word "environs" to "surrounding area" to make it easier to understand. Added subsection stating that the preliminary plat shall contain "Locations, dimensions and purpose of all easements, and labels for each as public or private." Added language that the proposed lot lines also need dimensions of lot widths and depths shown.

155.24 FINAL PLAT
(A): No major changes, provided a more detailed description of "prescribed forms", which reads "the application form (which can be found on the Development Services Department website), the final plat checklist, all items referenced in the checklist, the final plat, and other supplementary material as specified herein." Added reference to the proposed DPM Chapter 2 Procedures, Section 2.11.D Checklist for Submittal of Final Plats.
(C): Added language to clarify that the application must be deemed complete before the the item can be scheduled for a hearing. Added subsection stating that "Following final plat approval, the applicant shall work with City staff on remaining infrastructure improvements and any other action items in the conditions of approval. For additional guidance, planning staff will provide to the applicant, finding of fact documentation and will indicate which staff members to coordinate with on remaining tasks."
(D): Added reference to the DPM Section 2.8.E.III.n. Signature Blocks and added a subsection for an "OTHER" digital layer for miscellaneous easements.
(F): Added subsection stating "Park land dedication shall occur by deed, and it shall be depicted and called out on the plat."

155.25 FINAL APPROVAL; PLANS AND REQUIRED INFORMATION
(A): Updated language stating that the Final Plat shall be submitted digitally and added reference to DPM Section 2.8.E.VI. Final Plat Detailed Requirements.
(B): Added language stating "The final plat shall be on sheets no larger than 24 by 36 inches, and shall be at a scale of 1 inch to 200 feet, or 1 inch to 100 feet when practical."
(C): Added language stating "when combining lots, do not duplicate lot numbers, an example of the correct process is Lot 5+Lot 6=Lot 5A" to maintain consistency.

155.26 SUMMARY PROCEDURE
(A): Added subsection for acceptable conditions for a Summary Plat to include "Subdivisions of two or more parcels of land in areas zoned for industrial use" as refenced in NM State Statute, Chapter 3, Section 3-20-8.

155.27 REQUIRED IMPROVEMENTS
(A): Replaced the Planning Board with the Development Services Department as the entity who

reviews the plans for the construction of improvements.
(B): Replaced the City Clerk with the Development Services Department as the entity who shall receive the satisfactory bond for the installation of improvements to reflect current procedure.
(C): Removed subsection "Installation of improvements" due to the conflict with Survey Chapter of the DPM. Added reference to the DPM Chapter 4 Transportation. Added language for sidewalks and shared use paths, referencing Section 4.6.H of the DPM.

Added a subsection for Fire Safety, stating "The subdivider shall review the current International Fire Code for applicable requirements on emergency access roads, spacing of fire hydrants, and any other applicable requirements." Added reference to the DPM, Chapter 4 Transportation, section 4.5.F.IV. Lighting and Signing, and Chapter 53 Domestic Water Well Permitting and Chapter 51 Water and Wastewater Rules and Rates to reflect current standards for street lighting and private wells and septic systems.

155.28 CHARACTER OF DEVELOPMENT; MODIFICATIONS AND EXCEPTIONS
(A): Removed subsection stating that certain minimum restrictions may be placed on the property "To prevent the construction of substandard buildings", as this is already done by the Building Code. Added subsections stating that certain minimum restrictions may be placed on the property "To be in line with the Zoning Chapter" and "To create a subdivision with a sense of community and one that will contribute to the quality of life for those that inhabit it." Added language stating that "lot scale shall be compatible with existing neighboring development."

155.29 VACATION OF PLAT
(B): Removed subsection (2) that was repealed by Ordinance No. 21-04.

155.30 BULK PLAT
This is a new section. This is a process that is regularly used yet was missing from the Ordinance.

155.41 STREETS
(A): Added reference to the DPM Chapter 4 Transportation.
(D): Replaced the Planning Board with the Development Services Department as the entity who determines an access requirement.
(G): Added reference to the Rio Rancho Municipal Code Chapter 157 Naming; Renaming Streets for street name criteria and procedures.
(H): Removed language stating "no street shall intersect any other street at less than 60 degrees", as the current best practice is to be as near as possible at 90 degree angles.
(K): Replaced the Planning Board with the Development Services Department as the entity who determines special cases in sight distance requirements.
(L): Replaced the Planning Board with the Development Services Department as the entity who determines property line radiuses at intersections.
(N): Added reference to the DPM Chapter 4 Transportation and removed redundant or outdated information.
(O): Added reference to the DPM Chapter 4 Transportation.
(P): Removed this subsection as it is better covered in the DPM Chapter 4.
(R): Replaced the Planning Board with the Development Services Department as the entity who may waive alley requirements.
(T): Added reference to the DPM Chapter 4 Transportation and removed redundant or outdated information.
(W): Added reference to the DPM Section 4.5.F.IV. Lighting and Signing for street lighting standards and removed redundant or outdated information.

155.42 DRAINAGE
Removed requirement of being in accordance with the City of Rio Rancho Master Drainage Plan, as there currently isn't one in existence, and replaced it with the DPM Chapter 3 Drainage, Flood

Control and Erosion. Added reference to the DPM Chapter 3 and Chapter 2.11.T Engineer's Certification Checklist for Subdivisions.

155.43 EASEMENTS
Removed language stating "Easements of at least five feet in width shall be provided and dedicated on each side of all rear lot lines (except where there are alleys) and along side lot lines where necessary for poles, wires, conduits, storm and sanitary sewers, gas, water and other mains. An adequate easement or right-of-way shall be dedicated to contain all portions of the public drainage system for the purpose of widening, deepening, sloping, improving or protecting the channel for drainage purposes. Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided of sufficient width to permit maintenance of the slopes."

Staff finds that the side and rear easements are not needed for most modern subdivisions and more flexibility can be granted in certain circumstances.

Therefore, the following language is proposed: "A public utility easement of at least ten feet in width shall be provided and dedicated on each side of all lot lines abutting City right-of-way. Additional easements within lots and alongside rear and side lot lines shall be granted where necessary for poles, wires, conduits, storm and sanitary sewers, gas, water and other mains. An adequate easement or right-of-way shall be dedicated to containing all portions of the public drainage system for the purpose of widening, deepening, sloping, improving or protecting the channel for drainage purposes. Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided of sufficient width to permit maintenance of the slopes. Where a common drive is to be provided to serve more than one lot, a reciprocal easement that ensures access and maintenance rights shall be recorded with the approved subdivision or major partition plat. Follow standards in the appropriate section of the DPM as it relates to required easements."

155.46 PUBLIC SITES; OPEN SPACES

(A): Replaced the section's title with "PARKS, RECREATIONAL" to avoid confusion and to more accurately represent the section's intent. Added reference to the new "Developed Park Area" and "Undeveloped Park Area" terms that were added to the definitions and added reference to the DPM Chapter 2.6.B Parks Permits and Chapter 6 Parks and Trails for procedures and standards.

(B): Removed language that stated "When any subdivider receives final plat approval for a subdivision within the corporate municipal limits of the city, the subdivider shall dedicate to the city a portion of the land suitable for the purpose of parks, or recreational facilities for the future residents of the subdivision" with "The subdivider shall allot a portion of the land suitable for park area for the future residents of the subdivision. The allotted land shall conform to City standards as defined in this subchapter."
(C): Added subsection referencing Chapter 154 of the Municipal Code for standards on required public recreation and open space for multifamily development.
(D): Replaced the word "dedicated" with "allotted." No other major changes.
(E) and (F): Added subsections describing park sizes in relation to their classification as detailed in Chapter 6 of the proposed DPM.
(G): Changed the acreage for subdivisions that may submit payment in lieu of dedicating land from 25 to 10. Also added a caveat which states that "all new subdivisions, regardless of size, must have at a maximum, a 0.5 mile walk from nearest park via ADA accessible trails or sidewalks."
(H): Replaced language that stated "The dedication of land required by this section shall be by warranty deed and by dedication on a plat of the subdivision filed of record with the County Clerk" with "Park land which will ultimately be under City ownership shall be indicated on the preliminary plat as park land that will be dedicated to the City by deed." Park land dedications to the City should be by deed rather than plat dedication, and this language clarifies the process.

155.61 FEES AND PENALTIES

(B): Added subsection for nonconforming lots stating "No building permit shall be issued for any lot or parcel not created in conformity with the criteria in this title and no excavation or land or construction of improvements shall be commenced."

155.62 APPEALS
Added language stating "The appeal will only be considered if the claim is based on a violation of City standards."

IMPACT:

Staff recommends the Planning and Zoning Board recommend approval to the Governing Body, subject to the following findings of fact:

GENERAL FINDINGS OF FACT:
1. The Planning and Zoning Board may make a recommendation to the Governing Body on the applicant's request for a text amendment.
2. The applicant has the authority to apply for a text amendment.
3. The applicant and the public received due process.

SPECIFIC FINDINGS OF FACT FOR APPROVAL:
1. The proposed text amendment would be consistent with the health, safety, morals, and general welfare of the City.
2. Sound justification has been presented for the proposed text amendments which update outdated information.
3. The proposed changes are consistent and in alignment with the standards and requirements set forth with the proposed Development Process Manual update.

If the Board determines the proposed text amendment is not justified, the following findings are recommended for denial:

SPECIFIC FINDINGS OF FACT FOR DENIAL:
1. The proposed text amendment does not meet the requirements of Rio Rancho Code of Ordinances (R.O. 2003) §150.07(D) Amendments.

ALTERNATIVES:

The Planning and Zoning Board may:
1. Recommend approval of the request to the Governing Body;
2. Recommend denial of the request to the Governing Body;
3. Modify the request and recommend the Governing Body approve such modifications;
4. Postpone the item and continue the public hearing in order to further review.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends that the Planning and Zoning Board recommend approval of the Text Amendments to the Governing Body.

ATTACHMENT: DRAFT CoRR Chapter 155 - Subdivisions
ATTACHMENT: Legal Ad.pdf
ATTACHMENT: Draft_Ordinance_MC_BMB.doc

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CHAPTER 155
SUBDIVISIONS

Section

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155.61 Fees and penalties
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GENERAL PROVISIONS

155.01 TITLE.
This chapter shall be known as “The Subdivision Chapter of the City,” and is referred to elsewhere herein as “these regulations” or “this chapter.”

155.02 AUTHORITY.
These regulations are created pursuant to enabling legislation NMSA § 3-19-6.

155.03 JURISDICTION.
These regulations are designed to accomplish the procedures for the processing, consideration and filing of plats lying within the municipal boundaries of the City and/or within a radius of five miles from the City planning and platting jurisdiction pursuant to NMSA §§ 3-19-5 and 3-20-5. No subdivision of any land shall hereinafter be effected within the City area of jurisdiction except in accordance with the provisions of these regulations.

155.04 PURPOSE.
These regulations are intended to create orderly, harmonious and economically sound development of land in order to establish conditions favorable to the health, safety, convenience and general welfare of citizens of the City and its area of jurisdiction. More specifically, provisions of these regulations are designed to achieve adequate provision for light and air, public open spaces, water supply, drainage, sanitation including sewer facilities; economy in governmental expenditures and efficiency in governmental operations; safe convenient circulation of people, goods and vehicles; accurate and complete surveying and preparation and recording of plats thereof; safety and suitability of land for contemplated development; and coordination of land development in accordance with orderly physical patterns as stated in official plans, policies and ordinances and codes in furtherance of plans and policies as may have been and may be hereafter adopted by the City.

155.05 INTERPRETATION.
These regulations are held to be minimum requirements to carry out the purpose stated herein and are not intended to interfere with any other laws, covenants or ordinances. Whenever any of the provisions of these regulations are more or less restrictive than other laws, covenants or ordinances, then whichever is more restrictive shall govern.

155.06 COMPLIANCE WITH CITY STANDARDS
(A) Municipal Code. All lots created by a subdivision shall comply with applicable standards in the City of Rio Rancho Municipal Code Chapter 154 Planning and Zoning.

(B) Development Process Manual. All infrastructure and design elements for a subdivision shall comply with applicable standards in the City of Rio Rancho Development Process Manual (DPM).

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155.07 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ALLEY. A public thoroughfare which affords only a secondary means of access to abutting property.

BLOCK. Property bounded on one side by a street and on the other sides by a street, railroad right-of-way, waterway, unsubdivided areas or other definite barriers.

CENTERLINE. The line halfway between the street right-of-way lines.

CITY CLERK. An appointed officer of the City as so designated by the Governing Body.

CITY ENGINEER. Delegated to the Development Services Department. If infrastructure is outside of the standards for Development Services, the Department will contact the Public Works Department.

CUL-DE-SAC. A short street intersecting another street and terminating in a vehicular turnaround.

EASEMENT. An acquired or granted right of use which one person may have in the land of another.

FUTURE STREET LINE. A line, established by the Governing Body, running more or less parallel to the centerline of an existing or proposed street for the purpose of delineating the future boundaries of public right-of-way.

LOT. A tract or parcel of land platted and placed on the County Clerk's record in accordance with laws and ordinances, generally as a portion of a subdivision intended for development purposes.

MASTER PLAN. A comprehensive plan or any of its parts, adopted by the Governing Body, for the physical development of the area within the planning and platting jurisdiction of the City for the general purpose of guiding and accomplishing coordinated and harmonious development.

MONUMENT. One or more of the following:

(1) **BENCHMARK.** A brass cap, set in a base which meets City standard, with the elevation and the land surveyor's registration number inscribed thereon.

(2) **PERMANENT SURVEY MONUMENT.** A brass cap set in a base which meets City standards, or a standard Bureau of Land Management monument marking sectionalized corners, containing coordinates referenced to the New Mexico Coordinate System and the land surveyor's registration number prescribed thereon.

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(3) **SUBDIVISION CONTROL MONUMENT.** A metal stake or pipe which meets City standards, with the land surveyor's registration number affixed thereto.

PARKS, RECREATIONAL. An area developed and maintained primarily for active recreation.

(1) **DEVELOPED PARK AREA.** The developed area is the portion of park land designated for active recreational use. Specifically designed and maintained to support various recreational activities, this area includes amenities such as sports fields, playgrounds, picnic areas, trails, and other facilities intended for public enjoyment and physical activity.
(2) **UNDEVELOPED PARK AREA.** The undeveloped area is the portion of park land preserved in its natural state for conservation, wildlife habitat, and educational purposes. It encompasses features like forests, wetlands, open spaces, and other natural landscapes protected from active development. This acreage serves as a resource for environmental conservation, ecological study, and passive recreation.

PERSON. Any individual, estate, trust, receiver, association, club, corporation, company, firm, utility or other entity. **PLAT.** A map, chart, survey, plan or replat certification by a registered land surveyor which contains a description of subdivided land with ties to monuments or other points of reference acceptable to the Planning and Zoning Board, the plat to be placed on record.

PUBLIC DRAINAGE SYSTEM. The path that storm runoff or other flow will follow from the furthest upstream parcels of land to City limits.

REPLAT. To prepare and record a new plat replacing all or a portion of a previously recorded plat that has been vacated.

SKETCH PLAN. A preliminary sketch drawing of a subdivision plat conforming with the requirements stated herein, and used in the preapplication procedure prior to submission of the Preliminary Plat.

STREET. Property acquired or dedicated to and accepted by the City as right-of-way, other than an alley, for the principal means of public access to abutting property. The term includes the detailed set of functional classifications outlined in the Development Process Manual in Chapter 4 Transportation Planning, 4.4.A Functional Classification and Level of Service (LOS).

SUBDIVIDER. Any person creating a subdivision, including the owner, equitable owner or any authorized representative.

SUBDIVISION. The division of any lot or tract of land into two or more lots for the purpose, whether immediate or in the future, of sale, lease or development. **SUBDIVISION** does not include the following:

(1) Any residual land retained by the subdivider after **SUBDIVISION** but which has not been divided for **SUBDIVISION** purposes;

(2) The sale or lease of apartments, offices, stores or similar space within a building;

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(3) Any division of land in which only gas, oil, mineral or water rights are severed from the surface ownership of the land;

(4) Any division of land created by court order, except court orders involving land grant adjudications; and

(5) The leasing of land for grazing or farming activities.

VACATION OF PLAT. To formally remove a plat from record, as recorded in the office of the County Clerk.

155.07 VIOLATIONS.

(A) Construction which violates any provision of these regulations is strictly prohibited and no building permit shall be authorized except in those cases where modifications or exceptions have been granted by the Planning and Zoning Board prior to start of construction.

(B) Violations without authorization by the Planning and Zoning Board shall bring cause for legal action by the City to have the construction violation stopped, corrected and/or removed and a penalty assessed.

PLATTING PROCEDURE

155.20 PROCEDURE GUIDANCE.

(A) Refer to the Development Process Manual (DPM) Chapter 2.5.A Subdivision of Land, for subdivision procedures. Every person who desires to subdivide land into two or more lots shall furnish a plat of the proposed subdivision prepared by a surveyor, registered and licensed by the state and shall comply with the requirements of these regulations. Please refer to the DPM Chapter 2 Procedures, section 2.8.E.III General Requirements for all Plats. Upon request, Development Services shall furnish the subdivider with basic information on the requirements.

(B) Any proposed subdivision, replat, or vacation of plat occurring within the municipal limits of the City shall conform to the requirements of these regulations and shall be submitted for review and approval by the Planning and Zoning Board prior to filing with the County Clerk, before beginning improvement activities or negotiating sale or lease of any lot within the proposed subdivision.

(C) Where a subdivision is planned to be built in multiple phases, each phase must clearly identify the phase lines.

(D) Any proposed subdivision, replat, or vacation of plat occurring outside the corporate limits but within the five mile planning and platting jurisdiction of the City shall conform to the requirements of these regulations and, as supplemented by the provisions of the subject County land subdivision regulations, shall be submitted for concurrent review and approval by the Planning and Zoning Board and the Board of County Commissioners prior to filing with the subject County Clerk, before beginning improvement activities or negotiating sale or lease of any lot within the proposed subdivision.

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(E) In order to provide guidance to subdividers concerning acceptable proposed plats, the following matters are fundamental:

(1) *Geographic suitability.*

(a) The intended purpose of the subdivision shall not conflict with any officially adopted plan of the City which reference the area that is to be subdivided.

(b) The availability of adequate paved streets, fire protection, police protection, refuse service, public schools, parks and recreation facilities, and utility services shall all be weighed in considering the subdividing of land. They are not all necessarily required.

(c) Land with the following types of problems shall have subdivision approval withheld until it is demonstrated that the hazards have been or will be eliminated:

1. Special drainage conditions;

2. Difficult topography;

3. Soil conditions which are unusually limiting; and

4. Other geographic hazards to life, health or property.

(2) *Grading.*

(a) No subdivider shall proceed with any grading specifically in relation to a proposed subdivision before conditional approval has been given for the Preliminary Plat by the Planning and Zoning Board. The grading shall be consistent with the recommendations of an approved drainage plan, if any have been required pursuant to these regulations.

(b) The subdivider shall preserve major trees, scenic points, historic places and other community landmarks wherever feasible or required.

(3) *Master Plan.*

(a) If the subdivider owns or controls land contiguous to the land he wishes to subdivide immediately, the Development Services Department may require the subdivider to submit a proposed Master Plan for the total area to be approved or approved in modified form by the Planning and Zoning Board prior to approval of the Preliminary Plat. Any plat submitted shall be a reasonable planning unit in relation to the approved Master Plan. The proposed master plan shall show proposed use type and densities as well as proposed arterial, collector, and local street alignments.

(b) If the proposed Master Plan will significantly alter the provisions of any officially adopted plans of the City, the subdivider of the proposed Master Plan shall also request amendments to those adopted plans. (c) All proposed street alignments shown in the Master Plan or any Preliminary Plat related thereto shall extend,

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complement or otherwise conform to existing municipal streets and to officially designated proposed street alignments. Likewise, shall all proposed sewer, water and drainage lines be made to extend, complement and conform to existing and proposed.

155.21 PREAPPLICATION; PLANS AND REQUIRED INFORMATION.

(A)(1) *Submission.*

(a) All proposed subdivisions, replats or plat vacations shall comply with the requirements of these regulations. Whenever there is no need for dedication of streets or easements, the Planning and Zoning Board may waive the requirements for topography, street, utility and storm drainage as set forth herein. However, submittal of a series of two lot subdivisions on a tract of land will be considered a subterfuge to defeat the purpose of these regulations and the plats shall not be approved.

(b) Previous to the filing of an application for approval of the Preliminary Plat, it is encouraged that the subdivider submit to the Development Review Committee (DRC) a sketch plan and information as specified herein. This step does not require formal application, payment of fee or filing of a plat with the Planning and Zoning Board. Refer to the DPM Chapter 2 Procedures, for DRC procedures.

(2) *Advice.* The DRC Process affords the subdivider the opportunity to avail himself of the advice and assistance of the DRC early and informally before preparation of the Preliminary Plat and before formal application for its approval. The DRC may assist the subdivider in analyzing the development and plan for its sound integration with the community and may give informal guidance to the development at a stage when potential points of difference can be more easily resolved, thus simplifying official actions and saving unnecessary expense and delay to the subdivider. The DRC shall not assume any liability for possible lack of understanding on the part of the subdivider.

(3) *Review.* The DRC holds meetings on a regular basis. During the DRC meeting, the committee shall provide preliminary guidance that will not constitute a final decision with regard to a participant's application. If the sketch plan and data do not meet the intent, the DRC shall express the reasons therefor and advise the subdivider in bringing the proposed plan into conformance. The DRC will follow up with a memorandum summarizing their recommendations from the meeting.

(B) (1) *Location map.* A location map shall show the relationship of the proposed plat to existing community facilities which serve it: all abutting streets, shopping centers, schools, and parks. The map shall include a north arrow.

(2) *Sketch plan.* A simple sketch plan on a current topographic survey shall show the proposed layout of streets, lots and other features in relation to existing conditions. The sketch plan may be freehand pencil sketch made directly on a print of the topographic survey.

(3) *Sketch plat.* General plat information shall list the name and address of the subdivider and his agent, if any, the total area of the proposed plat, the existing conditions of the site, and the proposed development as necessary to supplement the sketch plan. This

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information shall include existing covenants and land characteristics including surface drainage, grading, landfill areas, and available private and municipal utilities. This information shall also describe the subdivision proposal, such as the number and typical lot width and depth of residential lots, business areas, public areas and proposed utilities.

155.22 PRELIMINARY PLAT.

(A) *Application.* Refer to the DPM Chapter 2 Procedures, section 2.5.A.II. Preliminary Plat Procedure, for details on the Preliminary Plat procedure. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.C Checklist for Submittal of Preliminary Plats. The subdivider shall submit to the Development Services Department a digital application including an application form (which can be found on the Department of Development Services website), a Preliminary Plat checklist, all items referenced in the checklist, together with the Preliminary Plat, and other supplementary material as specified herein.

(B) *Review.* Within 10 business days the Development Services Department shall review the required Preliminary Plat and supplementary material for completeness and provide a response to the applicant. The response will either state that the application is complete and will be reviewed further or the response will note the missing items. Once the application is deemed complete, the Development Services Department shall request comments from City staff and other governmental agencies as may be appropriate.

(D) *Decision.*

(1) Following review of the required Preliminary Plat and other material, and following negotiations with the subdivider on changes as may be deemed advisable, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. The Planning and Zoning Board will make the final determination of approval, approval with conditions, or denial at their meeting and a notice of the decision will be sent to the applicant within one week. However, if it is found that additional information is needed to make a decision, the time period within which the Planning and Zoning Board must act may require reasonable extension. After the last opinion requested of an agency is received, the Planning and Zoning Board shall act on the Preliminary Plat. Per NMSA § 3-20-7, the Planning and Zoning Board shall approve or disapprove the Preliminary Plat within thirty-five days after the Development Services Department deems the Preliminary Plat application to be complete. If the Preliminary Plat is approved, the Planning and Zoning Board shall express its conditional approval and provide the conditions of the approval, if any. If the plat is disapproved, the Planning and Zoning Board shall express its disapproval and its reasons therefor. The action of the Planning and Zoning Board shall be noted on the Preliminary Plat, referenced and attached to any condition determined.

(2) Conditional approval of a Preliminary Plat shall not constitute approval of the Final Plat. Rather, it shall be deemed an expression of approval to the layout submitted on the Preliminary Plat as a guide to the preparation of the Final Plat.

(E) *Public hearing.* No plat shall be acted upon without a public hearing. Refer to the DPM Chapter 2 Procedures, section 2.3 General Administrative Procedures, for requirements on

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public notices and public hearings. The Municipal Code Chapter 150.03 Applications and Procedures shows what is required for each type of application.

(F) *Longevity.* Approval of a Preliminary Plat is effective for one year unless extended by the Planning and Zoning Board, based on a finding that the delay has been unavoidable and the extension is in the public interest. The applicant shall follow requirements in the DPM Chapter 2 Procedures, section 2.5.A.III. Preliminary Plat Extension Procedure. No more than three extensions may be granted for the same Preliminary Plat.

(G) If the applicant is planning a multi-phase subdivision, a Preliminary Plat shall be approved separately for each phase.

(H) If the applicant intends to make a change to the approved Preliminary Plat, the change may require approval from the Planning and Zoning Board.

155.23 PRELIMINARY PLAT APPROVAL; PLANS AND REQUIRED INFORMATION.

(A) The subdivider shall submit a digital copy of the Preliminary Plat to the Development Services Department. The Preliminary Plat shall include all land owned or controlled by the subdivider, which is or may be suitable for or susceptible to subdivision or development, and adjoins the land proposed to be subdivided. The Preliminary Plat shall be drawn to a scale of 1 inch to 200 feet, or larger, 1 inch to 100 feet is preferable, for the purpose of showing all details clearly. An adequate number of sheets shall be used to show the proposed subdivision in its entirety. Where more than one sheet is required, each sheet shall be numbered in relation to the total number of sheets involved, and each sheet shall have a small key map showing its relationship to the whole. Further requirements are listed in the DPM Chapter 2 Procedures, section 2.8.E.V. Preliminary Plat Requirements.

(B) The Preliminary Plat shall contain the following information:

(1) Name of proposed subdivision, name and address of subdivider, agent and principal person preparing the Preliminary Plat;

(2) Scale and north arrow;

(3) Identification clearly stating the plat is a Preliminary Plat;

(4) Proposed location and type of subdivision control monuments found or set;

(5) Plat boundary lines, bearing in degrees, minutes and seconds, with basis for bearings noted or shown, distances in feet and hundredths;

(6) Existing conditions of the site and the surrounding area including the following:

(a) Present site designation or subdivision name;

(b) Easements on site: location, width and purpose;

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(c) Public right-of-way on and within 150 feet of the site; name, width, type and dimensions of paving;

(d) Utilities on and adjacent to the site, location and, if obtainable, size of water wells, water reservoirs, water lines, sanitary and storm sewers, location of gas lines, fire hydrants, electric and telephone lines and poles and street lights; (If water mains and sewers are not on or adjacent to the tract, indication of the direction, distance to and size of nearest ones showing invert elevation of sewer.)

(e) Ground elevation on the site based on mean sea level datum as established by the U.S. Coast and Geodetic Survey:

1. For land that slopes less than 1%, contour lines at intervals of not more than one foot;

2. For land that slopes between 1% to 5%, contour lines at intervals of not more than two feet; and

3. For land that slopes more than 5%, contour lines at intervals of not more than five feet.

(f) Existing storm drainage facilities on and adjacent to the site;

(g) Other significant conditions on the site; major rock outcrops, trees, structures, and the like;

(h) Conditions on adjacent land significantly affecting design of the subdivision; approximate direction and gradients of ground slope; character and location of development;

(i) Zoning on and adjacent to the site; and

(j) Total area of the proposed plat to the nearest one-tenth acre.

(7) Location map showing location of the site in relation to well known landmarks, abutting property owners and municipal boundaries;

(8) Locations, dimensions and purpose of all easements, and labels for each as public or private;

(9) Proposed lot lines with dimensions of lot widths and depths shown; public right-of-way and street widths; indicate roadways intended to be private; locations of planned water wells, reservoirs, and pump stations; rights-of-way for public services or utilities, and any limitations thereof;

(10) Number or letter to identify each proposed lot and block;

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(11) Locations, dimensions, approximate areas and purposes of lots proposed to be dedicated for public uses, or development fees proposed to be paid in lieu thereof, in accordance with design standards specified in this chapter;

(12) Sites and approximate area for any multi-family dwellings or nonresidential use; and

(13) Proposed changes to ground elevations, to standards specified herein.

(C) *Storm drainage management.* For the purpose of minimizing or eliminating damage resulting from storm water runoff, the subdivider shall be required to furnish a plan for storm drainage management if the subdivision lies within a designated flood hazard area. Preparation of the drainage plan shall be done by a registered professional engineer and shall include the following information:

(1) Location of proposed lots, streets, bridges, water and erosion control structures, and utility easements in relation to the existing contours. These shall also be shown in relation to the finished contours proposed to be implemented in development of the subdivision.

(2) Storm drainage computations showing the estimated runoff from the subdivision prior to and following completion of development.

(3) Storm drainage computations on the surrounding areas contributing runoff that may affect the subdivision or may be affected by the subdivision.

(4) All appropriate design details necessary to clearly explain the construction of all water control structures, utility installations and buildings as they shall be made flood proof to the extent necessary.

(5) Conformity to the regulations, procedures, and standards as may be prescribed by local, state or federal laws.

(D) *Soils analysis.* The subdivider shall provide a preliminary soils analysis by a qualified soil scientist to determine the adequacy of the soil for the proposed construction. Subdivisions reviewed by the summary procedure of these regulations may be exempt from this paragraph unless the Planning and Zoning Board determines the analysis to be in the public interest.

(E) *Schedule of development.* The subdivider shall provide an estimated schedule of lot development. In particular, the schedule shall indicate when street paving, water service and sewer service will be provided.

(F) *Special problems analysis.* For land with difficult topography or other geographic hazards to life, health or property, a report and proposed solution shall be prepared satisfactory to the Planning and Zoning Board.

155.24 FINAL PLAT.

(A) *Submission.* Application for approval of the Final Plat shall be submitted to the Development Services Department, including the application form (which can be found on the Development Services Department website), the Final Plat checklist, all items referenced in the checklist, the

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Final Plat, and other supplementary material as specified herein. The Final Plat application shall be recorded within 12 months following approval of the Preliminary Plat; otherwise, the approval shall become null and void unless an extension of time has been granted by the Planning and Zoning Board. Submission of the application shall follow the DPM Chapter 2 Procedures, section 2.5.A.IV. Final Plat Procedure. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.D Checklist for Submittal of Final Plats. The Final Plat shall conform to the Preliminary Plat as approved and conditioned.

(B) *Review.* When the Development Services Department deems the Final Plat application to be complete, they shall provide the applicant's final submission to the Planning and Zoning Board for review along with a staff report. The Planning and Zoning Board shall review the Final Plat and other exhibits submitted for conformity to these regulations, and shall ensure that the conditions of the Preliminary Plat as approved have been met.

(C) *Decision.*

(1) If the Final Plat is in conformance with the Preliminary Plat as approved and conforms with these regulations, it shall be approved by the Planning and Zoning Board. Should the Final Plat be disapproved, the Planning and Zoning Board shall express in writing the reasons for disapproval.

(2) Per NMSA § 3-20-7, the Planning and Zoning Board shall approve or disapprove the Final Plat within thirty-five days after the Development Services Department deems the Final Plat application to be complete, unless the subdivider agrees in writing to a deferral. If the Final Plat is approved by the Planning and Zoning Board, the approval shall be recorded on the face of the original drawing of the Final Plat and shall be dated and verified by the signature of the Chairman of the Planning and Zoning Board.

(3) Following Final Plat approval, the applicant shall work with City staff on remaining infrastructure improvements and any other action items in the conditions of approval. For additional guidance, planning staff will provide to the applicant, finding of fact documentation and will indicate which staff members to coordinate with on remaining tasks.

(D) *Recording.*

(1) The Final Plat is in full force and effect only after having been duly recorded in the office of the County Clerk and copies filed with the City Clerk. Approval of the Final Plat shall become null and void if the plat is not so recorded with six months after the date of approval, unless an extension of time is granted by the Planning and Zoning Board. Submittal for recording is the subdivider's responsibility.

(2) In the case of a replat, the subdivider shall request the County Clerk to mark the original plat with the words "replatted" or "partially replatted" and refer on the original plat to the filed location of the replat. The Planning and Zoning Board shall mark the copies of the original plat on file in the offices of the City in a similar manner.

(3) After having filed the original drawing of the Final Plat with the County Clerk, which copy shall be the official copy, the subdivider shall submit to the City one copy of the Final

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Plat as recorded and properly stamped by the County Clerk, and a digital copy with the following requirements:

(a) *Format.* The digital copy shall be submitted in a format that follows the DPM Chapter 2 Procedures, section 2.8.D Digital Record Drawing Requirements, and shall be approved by the City Development Services Department.

(b) *Projection.* The digital copy shall be submitted in accordance with the current City-used projection.

(c) *Layering.* Layers shall either contain a layer index or shall consist of and be limited to:

1. SUBD: legal subdivision boundary (coincident with narrative);

2. LOT: lots, outlots, blocks (areas of land ownership);

3. RDCL: road center lines (public or private);

4. ROAD: platted right-of-way;

5. RDEAMT: access easements across lots;

6. PUESMT: public utility easements;

7. DESMT: drainage easements;

8. ATRIBTS: attributes shall consist of and be labeled as:

   a. Parcel, labeled as Par.

   b. Lots shall be lot numbers only.

   c. Tract, labeled as Tr.

   d. Block, labeled as Blk.

9. NOTES: shall consist of notes and legal description and title of plat;

10. SIGBLK: shall consist of the Signature Blocks on plat, which shall conform to the samples provided per the DPM Chapter 2 Procedures, section 2.8.E.III.n. Signature Blocks; and

11. OTHER: miscellaneous easements.

(d) *Geographic extent.* The digital copy shall have contiguous layers of the subdivision and shall not be divided into sheets.

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(4) No building permits shall be issued until a copy of the recorded Final Plat have been placed on file with the City.

(E) *Replat.* After final approval of any plat, no lot or block shall be further subdivided or the area of any platted lot diminished, and no change shall be made in the platting of any street, alley or easement established by the plat, except upon the filing of a replat, showing the proposed change or changes, with the Planning and Zoning Board and securing its approval in accordance with the procedures herein established. The provisions of this division shall apply to all proposed replats or changes in lot lines, dimensions of lots, streets, alleys and easements in any platted area within the City planning and platting jurisdiction.

(F) *Acceptance of land.*

(1) Approval of the Final Plat by the Planning and Zoning Board shall be deemed to constitute acceptance by the City of dedication of public rights-of-way, and other proposed public easements provided the Final Plat is properly recorded with the County Clerk and the City Clerk.

(2) Park land dedication shall occur by deed, and it shall be depicted and called out on the plat.

155.25 FINAL APPROVAL; PLANS AND REQUIRED INFORMATION.

(A) *Final Plat.* The subdivider shall submit a digital copy of the Final Plat to the Planning and Zoning Board for approval in accordance with the following provisions. Further requirements are listed in the DPM Chapter 2 Procedures, section 2.8.E.VI. Final Plat Detailed Requirements.

(B) *Size, scale, material.* The Final Plat shall be on sheets no larger than 24 by 36 inches, and shall be at a scale of 1 inch to 200 feet, or 1 inch to 100 feet when practical. Enough sheets shall be used to show the subdivision in its entirety, with each sheet numbered in relation to the total number of sheets involved, and each shall have a small key map showing its relationship to the whole.

(C) *Information.* The Final Plat shall contain the following information:

(1) Name of subdivision;

(2) Title, scale, north arrow and date of survey;

(3) Location and description of all monuments found or set within the plat area, and all these referred to, including bench marks with elevation shown and property corners;

(4) Plat boundary lines; bearing in degrees, minutes and seconds, with basis for bearings noted or shown; distances in feet and hundredths or other functional reference system; both the record and measured bearings and distances;

(5) Reference the plat to the state Plane Coordinate System; total acreage of subdivision to four decimal places;

(6) Lot lines, and right-of-way lines, existing and proposed; lines to be eliminated shown as dashed lines; names of streets, right of way widths, and centerline data and all streets

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and alleys, including private streets and alleys; the length, central angle and radius of all curves;

(7) Location, dimensions and purpose of all easements, existing or proposed, and any limitations thereof;

(8) Number or letter to identify each lot and block, when combining lots, do not duplicate lot numbers, an example of the correct process is Lot 5+Lot 6=Lot 5A;

(9) Location, dimensions, areas and purposes of lots proposed to be dedicated or reserved for the public;

(10) Reference to recorded subdivision plats of adjoining platted land by recorded name, date, book and page number in the office of the County Clerk;

(11) Mileage of streets created:

(a) Total;

(b) Full-width streets; and

(c) Half-width streets.

(12) Certification by the County Treasurer or by a duly qualified abstract company that the previous ten years' property taxes due and payable have been paid in full;

(13) Statement that the subdivision is with the free consent and in accordance with the desire of the undersigned owner of the land, acknowledged in a manner required for acknowledgment of deeds;

(14) Signed statements by the subdivider dedicating public rights-of-way, any sites for public use, and granting the shown easements for public use;

(15) Certification and seal by a registered land surveyor, in accordance with the laws of the state, certifying the accuracy of the survey and plat, that they prepared or supervised preparation of the plat, that they have shown all easements of record, and that it meets design standards for surveying;

(16) Certification that all monuments are in place; and

(17) Other certificates, affidavits, endorsements or dedications as may be required by the Planning and Zoning Board in the enforcement of these regulations.

155.26 SUMMARY PROCEDURE.

(A) In accordance with the alternate summary procedures authorized by NMSA § 3-20-8, the Development Services Department Director, as administrative officer, may approve a subdivision as a combined preliminary and Final Plat in any case where no public purpose would be served by separate steps. Summary procedure shall follow the DPM Chapter 2

Procedures, section 2.7.H Summary Plat Procedure. The summary approval shall be given only when one or both of the following conditions exist:

(1) The subdivision contains no more than two lots, provided, however, that submittal of a series of two lot subdivisions on a tract of land will be considered a subterfuge to defeat the purpose of these regulations and the plats shall not be approved.

(2) Resubdivisions, where the combination or recombination of portions of previously platted lots does not increase the total number of lots.

(3) Subdivisions of two or more parcels of land in areas zoned for industrial use;

(B) In all cases, the subdivision plat being considered for approval under this summary procedure shall be prepared according to the standards for plans and data for both preliminary and Final Plats as contained herein. If the subdivision plat application does not meet the standards for plans and data for both preliminary and Final Plats, the Development Services Department may defer approval to the Planning and Zoning Board.

(C) The City Development Services Department Director shall furnish the Planning and Zoning Board with monthly reports documenting those subdivisions approved administratively.

155.27 REQUIRED IMPROVEMENTS.

(A) *Authorization.* Receipt of the signed copy of the Preliminary Plat is authorization for the subdivider to proceed with the minimum improvements required by these regulations. Prior to the construction of any improvements or to the submission of any bond, the subdivider shall furnish the Development Services Department with all plans and required information necessary for the construction of the improvements. These plans shall be examined by the Development Services Department and will be approved if in accordance with the following requirements. Following the approval, construction can be started or the amount of bond determined.

(B) *Installation assurance.* Plans for improvement shall be prepared by an engineer registered in accordance with the laws of the state. The City is to be assured of the installation of these improvements in a satisfactory manner by one or more of the following methods:

(1) Complete installation of the improvements prior to approval of the Final Plat;

(2) Submission of a subdivision improvement agreement (SIA) along with a satisfactory bond, either a performance bond or a cash bond, and with surety and conditions satisfactory to the Development Services Department, providing for and securing to the City, the actual construction and installation of the improvements and utilities within a period not to exceed one year;

(3) Completion of an approved assessment procedure whereby the City is put in an assured position to do the work and make the installations at the cost of the owners of the property within the subdivision;

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(4) Submission of an approved assessment procedure for the paving of streets together with an agreement between the subdivider and the City for a cash payment for other improvements with payment to be made as the work is completed;

(5) The City may authorize a written agreement between the City and the subdivider, which would be recorded at the time of filing of the Final Plat, which would adequately restrict sales of any lots as to which there had not been completion of the improvements and installation of utilities, and which would establish a ten-year time limit; and

(6) The subdivision may be developed in segments whereby the Planning and Zoning Board, at its discretion, may waive the use of a guarantee as required by the section on the initial segments, provided that such segments are not larger than 25 lots or 50% of the total number of lots in the subdivision, whichever is less. The Planning and Zoning Board shall grant Final Plat approval for each succeeding segment being contingent upon completion of the minimum improvements required by these regulations in each preceding segment. Completion of improvements in the final segment of the subdivision, which shall include at least 25 lots or 50% of the total number of lots in the subdivision, whichever is less, must be guaranteed through the use of one the other methods detailed under this section.

(C) *Installation of improvements.* The subdivider may prepare and secure approval of the Preliminary Plat and then install improvements in the area covered by the Preliminary Plat. Improvements must be installed only in that part of the area for which a Final Plat will be submitted for approval and filing. The improvements to be installed shall include the following:

(1) *Street improvements.* All streets shall be graded and the roadway improved by paving under the supervision of the City Engineer and subject to his approval in accordance with the design standards provided in this ordinance and the DPM Chapter 4 Transportation.

(2) *Sidewalks.*

(a) *Provision.* Sidewalks and/or shared use paths shall be provided by the developer and shall be constructed under the supervision of the City Engineer and subject to his approval in accordance with the design standards of the City outlined in the DPM Chapter 4 Transportation.

(b) *Warrants.* Sidewalks shall be required on both sides of arterial and collector streets when abutting land zoned R-3, C-1, C-2, M-1 or SU, and when abutting church and school grounds. Sidewalks shall be required on both sides of all local streets in a logical manner to facilitate pedestrian access. Shared use paths may be constructed in lieu of sidewalks on collector and arterial roadways. Either a sidewalk or shared use path must be provided on both sides of the street. Shared use paths shall not be built in lieu of on-street bicycle facilities where such facilities are required. For specific design standards for sidewalks and shared use paths, please reference section 4.6.H of the Development Process Manual.

(3) *Water and sewer mains.* The subdivider shall make necessary arrangements to serve each lot from water and sewer mains of the central systems serving the City, where feasible and in conformity to Governing Body policy. All water and sewer mains shall

follow standards in the DPM Chapter 5 Water and Wastewater. Where, for any reason, municipal services cannot be provided, the subdivider shall present evidence that adequate water and sewer service to each lot will be provided in compliance with the requirements of the New Mexico Environmental Improvement Division and in conformity to the standard specifications of the City construction of all water and sewer lines shall be under the supervision and approval of the City Engineer.

(4) *Drainage.* Construction of drainage improvements and other means of storm water management shall be under the supervision and approval of the City Engineer.

(5) *Adoption of the Fire Code*. For the purpose of regulation of fire hazards and control of fires and fire prevention, the minimum Fire Codes for the State of New Mexico, as identified in 10.25.1 through 10.25.12 NMAC, including any and all future amendments, replacement sections and additional provisions thereof, are adopted. The minimum Fire Codes for the State of New Mexico shall be controlling within the city to the same extent as if such provisions were set out in full in this chapter, including and not limited to emergency access roads, and spacing of fire hydrants.

(6) *Street lighting.* Street lighting shall be provided in accordance with standards in the DPM, Chapter 4 Transportation, section 4.5.F.IV. Lighting and Signing.

(7) *Private wells and septic systems.* Refer to Chapter 53 Domestic Water Well Permitting and Chapter 51 Water and Wastewater Rules and Rates.

(D) *Approvals.* Approvals by the City Engineer of improvement plans for streets, alleys, grading, drainage, water, sewer, street lighting or other improvements within the context of this chapter shall expire by limitation and become null and void if the work or improvements authorized is not commenced within 12 months of the approval. In the event the authorized work or improvement is suspended or abandoned for a period of 12 months after the work or improvement is commenced, the approval shall expire and become null and void. Before the work or improvement is recommenced, resubmittal must be made for approval by the City Engineer.

155.28 CHARACTER OF DEVELOPMENT; MODIFICATIONS AND EXCEPTIONS.

(A)The Planning and Zoning Board shall confer with the subdivider regarding the type and character of development that will be permitted in the subdivision, and may agree with the subdivider as to certain minimum restrictions to be placed upon the property:

(1) To be in line with the Planning and Zoning Chapter.

(2) To control the type and use of structures and the use of lots which, unless so controlled, would clearly depreciate the character and value of the proposed subdivision and of adjoining property. For example, lot scale shall be compatible with existing neighboring development.

(3) To create a subdivision with a sense of community and one that will contribute to the quality of life for those that inhabit it.

(B)(1) Whenever the tract to be subdivided is of an unusual size or shape or is surrounded by the development or unusual conditions that the strict application of these regulations would result in real difficulties and substantial hardships, the Planning and Zoning Board may vary or modify the requirements, so that the subdivider is allowed to develop his property in a reasonable manner, but at the same time so that the public welfare and interests of the City are protected and the general intent and spirit of these regulations are preserved.

(2) However, relief may not be granted if it is detrimental to the public good or impairs the intent and purpose of these regulations or the desirable developments of the community in accordance with plans and policies of the Governing Body. Any modification granted shall be entered in the records of the Planning and Zoning Board setting forth the reasons which justified the modifications. Further, in granting modifications and exceptions, the Planning and Zoning Board may place conditions which will in its judgment substantially secure the objectives of the standards or requirements involved.

155.29 VACATION OF PLAT.

(A) This section does not require that a vacation be undertaken if a replat, accomplishing the elimination of lot lines, is duly approved. A vacation is required when no replatting is undertaken but elimination of lot lines, rights-of-way or easement lines dividing a parcel is to be accomplished.

(B) Any plat filed in the office of the Sandoval County Clerk and within the planning and platting jurisdiction of the City may be vacated according to the following procedures:

(1) The subdivider of land proposed to be vacated, exclusive of public rights-of-way, shall sign a duly acknowledged statement declaring the plat or a portion of the plat is to be vacated and shall apply to the Planning and Zoning Board for approval.

(2) In considering the vacation of all or part of a public right-of-way, the Planning and Zoning Board shall determine whether or not the vacation will adversely affect the interests of persons owning contiguous land or land within the subdivision being vacated.

(3) The rights-of-way of any public or private utility, including drainage, existing prior to the vacation, total or partial, of any plat are not affected by the vacation of a plat unless an authorized representative of the utility involved agrees in writing to have the rights vacated.

(C) A decision on approval and endorsement shall be made at a hearing by the Planning and Zoning Board. If approved by the Planning and Zoning Board, the statement of vacation is endorsed “approved.” The endorsement shall be within 10 days of the conclusion of the hearing.

(D) The vacation is in effect only after the approved statement declaring the vacation has been recorded in the office of the County Clerk. The County Clerk shall be requested to mark the original plat with the words “vacated” or “partially vacated” and refer on the plat to the volume and page on which the statement of vacation is recorded. Submittal for recording is the applicant’s responsibility. The applicant shall also provide certified proof of the recording by the County Clerk to the City Clerk.

155.30 BULK PLAT.

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(A) A Bulk Plat is required for the division of land that is primarily intended to facilitate transfer to intermediate land holders, not to create parcels available for development without further subdivision approvals. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.C Checklist for Submittal of Preliminary Plats/Bulk Plats.

(B) All Bulk Plats must include the following.

(1) Title of plat

(2) Subtitle of plat

(3) Date of plat

(4) Location Map with major roads labeled

(5) North arrow

(6) Scale of at least 1 inch to 200 feet in standard engineering increments (100 feet is preferable)

(7) Statement noting purpose of plat

(8) Plat boundary (boldest lines on plat) annotated with bearings in degrees, minutes and seconds, with basis for bearings noted or shown and dimensions in feet to the nearest hundredth foot (0.00)

(9) Location and description of all monuments found or set within the plat area and tie to State Plane Coordinate System, Central New Mexico Zone

(10) Easements (existing) including location, dimensions, type and party receiving easement

(11) Easements (proposed) including location, dimensions, type and party receiving easement

(12) Right–of-way (existing along or intersecting plat boundary) including name, location, dimensions and purpose or nature

(13) Monument Description and Location

(14) Disclosure Statement

(15) Legal description, County recording information (date of recordation and all applicable volume, folio and document numbers) and City of Rio Rancho book and page number for the subject property and abutting properties

(16) Signature Blocks for Utilities, City departments, County Treasurer, County Clerk and, if necessary, Southern Sandoval County Flood Control Authority.

(17) Registered New Mexico Surveyor Certification

(18) Jurisdictional Affidavit

(19) Name and address of applicant and agent

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(20) Zoning of subject property

(21) Area of plat to the nearest ten-thousandth (0.0000) acre

(22) Lot, tract (land reserved by applicant for future subdivision or development ancillary to the subdivision, e.g. landscaped area, utility corridor) and parcel (land dedicated to the City or other public agency) boundaries

(23) Numbers or letters to identify each lot and block (contiguous grouping of lots)

(24) Letters to identify each tract or parcel

(25) Purpose of tracts and parcels

(26) Boundaries of vacated right-of-way, easements or lot lines

DESIGN STANDARDS

155.40 COMPLIANCE.

All subdivisions within the City planning and platting jurisdiction shall conform to minimum design standards established by the City. Follow standards in the DPM.

155.41 STREETS.

(A) The character, extent, width, and location of all streets shall conform to policies established by the Governing Body and shall be consistent and appropriate in their relationship to existing and planned streets, topographic conditions, public convenience, safety and the proposed uses of the land to be served by the streets. Street standards shall follow DPM Chapter 4 Transportation.

(B) Where an arterial or collector street is not shown and defined in a Master Plan of the City and there is not an adopted future street line, the arrangement of streets in a subdivision shall either:

(1) Provide for the continuation or appropriate projection of existing principal situation where topographic or conditions make continuance of, or conformance to, existing streets impractical; or

(2) Conform to a plan for the neighborhood properly approved by the City to meet a particular situation where topographic or other conditions make continuance of, or conformance to, existing streets impractical.

(C) Minor streets shall be so laid out so that their use by through traffic will be discouraged.

(D) Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way, the Development Services Department may require a street approximately parallel to the right-of-way. This distance shall be suitable for the appropriate use of the intervening land and shall also be determined with due regard for the requirements of approach grades and future grade separations.

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(E) Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed in the City under conditions approved by the Planning and Zoning Board.

(F) Half streets shall be prohibited, except where used as an addition to another half street which was platted and filed before the effective date of these regulations.

(G) No street names shall be used which will duplicate or be confused with the names of existing streets within the jurisdiction of the City. Street name changes shall be subject to the requirements of Rio Rancho Municipal Code Chapter 157 Naming; Renaming Streets.

(H) Streets shall be laid out to intersect as nearly as possible at 90 degree angles.

(I) Street jogs with centerline offsets shall be avoided, but where necessary shall have a minimum offset of 125 feet.

(J) A minimum tangent 100 feet long shall be introduced between reverse curves on major streets.

(K) Property lines at street intersections shall be rounded with a radius of 25 feet, or of greater radius where the Development Services Department may deem it necessary. Comparable cutoffs or chords in place of round corners may be permitted. Refer to the State Access Management Manual (SAMM).

(L) Dead end streets (cul-de-sacs), designed to be so permanently, shall not be longer than 500 feet and shall be provided at the closed end with a turn-around having an outside paved roadway diameter of at least 96 feet.

(M)(1) All street gradients shall be subject to approval of the City Engineer. Minimum and maximum street gradient shall follow the standards in the DPM Chapter 4 Transportation.

(N) Right of way street type pavement width and width of streets and alleys shall be provided in accordance with DPM Chapter 4 Transportation.

(O) All streets shall be graded and the roadway improved in accordance with the DPM and any other standard specifications of the City and with the supervision and approval of the City Engineer.

(P) Alleys shall be provided in commercial and industrial districts. However, the Development Services Department may waive this requirement where other definite and assured provision is made for service access, such as off-street loading, unloading, and parking adequate for the uses proposed. Alleys may be provided in residential areas at the option of the subdivider, but are to be discouraged where they would serve no useful public purpose or where easements would better serve the purpose.

(Q) Curbs and gutters shall be provided on both sides of the street and constructed to standard specifications of the City under the supervision of the City Engineer and subject to his approval.

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(R) The width and horizontal location of sidewalks shall conform to the standards in the DPM Chapter 4 Transportation.

(S) Trails and multi-use paths shall follow standards in the DPM Chapter 6 Parks and Trails, section 6.3.C Trails and Multi-Use Paths.

(T) Street numbers designating building numbers shall be in compliance with § 154.81 and building numbers shall be designated during plat approval procedure.

(U) Streetlights shall be located in accordance with the DPM Chapter 4 Transportation, section 4.5.F.IV. Lighting and Signing.

155.42 DRAINAGE.

Adequate provision shall be made for drainage of storm water subject to the approval of the City Engineer in accordance with the DPM Chapter 3 Drainage, Flood Control and Erosion, and requirements pursuant to the National Flood Insurance Program of the Federal Emergency Management Agency. Please refer to the DPM Chapter 2 Procedures, section 2.11.T Engineer's Certification Checklist for Subdivisions, when certifying compliance with an approved drainage report or grading and drainage plan for subdivisions when required for the release of financial guarantees associated with an executed Subdivision Improvement Agreement.

155.43 EASEMENTS.

A public utility easement of at least ten feet in width shall be provided and dedicated on each side of all lot lines abutting City right-of-way. Additional easements within lots and alongside rear and side lot lines shall be granted where necessary for poles, wires, conduits, storm and sanitary sewers, gas, water and other mains. An adequate easement or right-of-way shall be dedicated to containing all portions of the public drainage system for the purpose of widening, deepening, sloping, improving or protecting the channel for drainage purposes. Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided of sufficient width to permit maintenance of the slopes. Where a common drive is to be provided to serve more than one lot, a reciprocal easement that ensures access and maintenance rights shall be recorded with the approved subdivision or major partition plat. Follow standards in the appropriate section of the DPM as it relates to required easements.

155.44 BLOCKS.

The lengths, widths and shapes of blocks shall be determined with due regard to provision of adequate building sites suitable to the special needs of the type of use contemplated; to zoning requirements as to lot sizes and dimensions; to needs for convenient access, circulation, control and safety of street traffic; and to limitations and opportunities to topography.

155.45 LOTS.

The lot arrangement and design shall be such that all lots will provide satisfactory and desirable building sites properly related to topography and the character of adjacent development. All side lines of lots shall be at right angles to straight street lines or radial to curved street lines unless a variation of this rule will give a better street and lot plan. Lots of double frontage shall not be permitted.

155.46 PARKS, RECREATIONAL.

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(A) The Planning and Zoning Board shall require adequate provision for suitable Developed Park Area or Undeveloped Park Area in each subdivision. The park area shall follow procedures and standards in the DPM Chapter 2 Procedures, section 2.6.B Parks Permits, and Chapter 6 Parks and Trails.

(B) The subdivider shall allot a portion of the land suitable for park area for the future residents of the subdivision. The allotted land shall conform to City standards as defined in this subchapter.

(C) Refer to Chapter 154 of the Municipal Code for standards on required public recreation and open space for multifamily development.

(D) The exact amount of land allotted shall be determined by the recommendations of the City Development Services Department, and the Planning and Zoning Board. The amount of land shall be generally based upon three acres per 1,000 persons and 2.83 persons per dwelling in single-family areas and shall be generally equivalent in other areas.

(E) A park smaller than three (3) acres in size shall be considered a Pocket Park, for which the design shall be coordinated with the Parks Recreation Community Services Department to ensure minimum safety standards and ADA Guidelines are met. A Pocket Park shall be managed and maintained by an HOA.

(F) A park between three (3) and ten (10) acres in size shall meet the standards of a Neighborhood Park detailed in the DPM Chapter 6 Parks and Trails. A park between ten (10) and twenty (20) acres in size shall meet the standards of a Community Park detailed in the DPM Chapter 6 Parks and Trails.

The subdivider shall provide utility availability for the development of the dedicated land.

(G)(1) For subdivisions containing 10 acres or less, in lieu of the required land dedication, the City may accept payment of a fee based upon the fair market value of the amount of land which would otherwise be required to be dedicated. However, all new subdivisions, regardless of size, must have at a maximum, a 0.5 mile walk from nearest park via ADA accessible trails or sidewalks. Also, submittal of subsequent subdivisions, involving adjacent or contiguous land will be considered a subterfuge to defeat the purposes of this chapter and the subdivider must comply with the requirement for public sites and open spaces.

(2) Fair market value shall be determined in an appraisal obtained by the City from a certified appraiser. The appraisal shall be obtained after the site is platted into lots and before the plat is approved by the Planning and Zoning Board.

(H) Park land which will ultimately be under City ownership shall be indicated on the Preliminary Plat as park land that will be dedicated to the City by deed.

(I) Notwithstanding any other provisions of this chapter, any requests for waivers or variances from the requirements for public sites or open space for recreational use shall be submitted to the Planning and Zoning Board through the Development Services Department. The Planning and Zoning Board shall make and submit recommendations to the Governing Body for its approval, disapproval or modification at an open meeting.

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ADMINISTRATION AND ENFORCEMENT

155.60 VARIANCES.

(A) Variance from the strict application of design standards may be allowed in cases where unusual conditions exist, or a variance would provide an improved design. Financial gain, loss or monetary savings cannot be considered solely as a basis for a variance request.

(B) A request for a variance shall be submitted to the Planning and Zoning Board through the Development Services Department.

(C) The Planning and Zoning Board shall approve or disapprove the variance request at one of its regular meetings, or at a special hearing if necessary.

155.61 FEES AND PENALTIES.

(A)(1) *Land dedication fee.* The fees received under this chapter shall be placed in a separate "Public Site and/or Open Space Purchase and Improvement Account," and shall be used by the City only for acquisitions, development and improvement of public site and/or open space facilities to serve the subdivision for which the fees have been paid.

(2) *Payment in lieu of land dedication.* Payment in lieu of land dedication shall be paid at the time the Planning and Zoning Board approves the certified appraisal.

(B)(1) *Nonconforming lot.* No building permit shall be issued for any lot or parcel not created in conformity with the criteria in this title and no excavation or land or construction of improvements shall be commenced

(2) *Transferring lots in unapproved subdivision.*

(a) Any owner or agent of the owner, of any land located within the planning and platting jurisdiction of the City, who leases, transfers, sells, agrees to sell or negotiates to sell land by reference to or exhibition of a plat of the land before being duly approved by the Planning and Zoning Board and duly recorded in the office of the Sandoval County Clerk, shall upon conviction be subject to a fine not exceeding the maximum according to state law.

(b) Each and every lot or portion thereof so leased, transferred, sold, agreed to be sold, or negotiated to be sold shall be prosecuted and treated as a separate offense. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from the penalties.

(3) *Improper recordings.* Any person who records with the Sandoval County Clerk any plat in violation of these regulations shall upon conviction be subject to a fine not exceeding the maximum according to state law.

155.62 APPEALS.

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An aggrieved party may appeal the final decision of the Development Services Department as outlined in Title XV, Land Usage, Chapter 150, General Provisions, Article I, Administration and Enforcement, Section 150.08, Appeals. The appeal will only be considered if the claim is based on a violation of City standards.

155.63 AMENDMENTS.

The Governing Body may, from time to time, amend or modify these regulations after public hearing, due notice of which shall be given as required by law.

155.64 PUBLIC RECORDS.

The Planning and Zoning Board shall keep public records of findings, decisions and recommendations concerning all subdivision plats filed with it for review, including actions as may be taken by the Governing Body through appeals or amendments to these regulations.

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CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A.

Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.

CITY OF RIO RANCHO
ORDINANCE

ORDINANCE NO. **ENACTMENT NO.**

ORDINANCE OF THE CITY OF RIO RANCHO, NEW MEXICO AMENDING THE RIO RANCHO CODE OF ORDINANCES TITLE XV LAND USAGE, CHAPTER 155 SUBDIVISIONS, SECTIONS: GENERAL PROVISIONS, PLATTING PROCEDURE, DESIGN STANDARDS, AND ADMINISTRATION AND ENFORCEMENT; PROVIDING FOR INTERPRETATION, SEVERABILITY, AND CONFLICTS; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS: the Governing Body of the City of Rio Rancho has adopted zoning regulations and an official zone map in accordance with New Mexico Statutes Annotated 1978 (NMSA 1978) Chapter 3, Article 21; and

WHEREAS: the Governing Body finds the need to amend R.O. 2003 Chapter 155 in order to be consistent and in alignment with the standards and requirements set forth with the proposed Development Process Manual update; and

WHEREAS: the City of Rio Rancho Planning and Zoning Board held a duly noticed public hearing on May 27, 2025, regarding the proposed amendments to Chapter 155 and made recommendations to the Governing Body regarding adoption of the changes; and

WHEREAS: a public hearing occurred, in accordance with procedures set forth in R.O. 2003 Section 150.07, and NMSA 1978 Section 3-21-6, on the proposed text amendments and were duly advertised and held by the Governing Body of the City of Rio Rancho on June 12, 2025 (First Reading) and June 26, 2025 (Second and Final Reading), and the Governing Body heard interested parties and citizens for and against the proposed text amendments; and

WHEREAS: the proposed amendments to be adopted by this Ordinance comply with the statutory and regulatory requirements of the aforesaid Code of Ordinances and Statutes, and upon specific findings related to the subject property and determining the proposed amendment is consistent with the policies and criteria set forth in R.O. 2003 Section 150.07 (D) through (G), the Governing Body finds the amendments promote the health, safety, morals, and general welfare of the City.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF RIO RANCHO:

Section 1. Amendment to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions is hereby amended to read as follows with red strikeouts as removals and red underlines as additions:

CHAPTER 155

SUBDIVISIONS

Section

General Provisions

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155.02 Authority
155.03 Jurisdiction
155.04 Purpose
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155.076 Definitions
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Platting Procedure

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155.21 Preapplication; plans and ~~data~~ required information
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Design Standards

155.40 Compliance
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155.46 Parks, recreational ~~Public sites; open spaces~~

Administration and Enforcement

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GENERAL PROVISIONS

155.01 TITLE.

This chapter shall be known as “The Subdivision Chapter of the City,” and is referred to elsewhere herein as “these regulations” or “this chapter.”

155.02 AUTHORITY.

These regulations are created pursuant to enabling legislation NMSA § 3-19-6.

155.03 JURISDICTION.

These regulations are designed to accomplish the procedures for the processing, consideration and filing of plats lying within the municipal boundaries of the City and/or within a radius of five miles from the City planning and platting jurisdiction pursuant to

NMSA §§ 3-19-5 and 3-20-5. No subdivision of any land shall hereinafter be effected within the City area of jurisdiction except in accordance with the provisions of these regulations.

155.04 PURPOSE.

These regulations are intended to create orderly, harmonious and economically sound development of land in order to establish conditions favorable to the health, safety, convenience and general welfare of citizens of the City and its area of jurisdiction. More specifically, provisions of these regulations are designed to achieve adequate provision for light and air, public open spaces, water supply, drainage, sanitation including sewer facilities; economy in governmental expenditures and efficiency in governmental operations; safe convenient circulation of people, goods and vehicles; accurate and complete surveying and preparation and recording of plats thereof; safety and suitability of land for contemplated development; and coordination of land development in accordance with orderly physical patterns as stated in official plans, policies and ordinances and codes in furtherance of plans and policies as may have been and may be hereafter adopted by the City.

155.05 INTERPRETATION.

These regulations are held to be minimum requirements to carry out the purpose stated herein and are not intended to interfere with any other laws, covenants or ordinances. Whenever any of the provisions of these regulations are more or less restrictive than other laws, covenants or ordinances, then whichever is more restrictive shall govern.

155.06 COMPLIANCE WITH CITY STANDARDS

(A) Municipal Code. All lots created by a subdivision shall comply with applicable standards in the City of Rio Rancho Municipal Code Chapter 154 Planning and Zoning.
(B) Development Process ~~Planning~~ Manual. All infrastructure and design elements for a subdivision shall comply with applicable standards in the City of Rio Rancho Development ~~Planning~~ Process Manual (DPM).

155.07 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ALLEY. A public thoroughfare which affords only a secondary means of access to abutting property.

BLOCK. Property bounded on one side by a street and on the other sides by a street, railroad right-of-way, waterway, unsubdivided areas or other definite barriers.

CENTERLINE. The line halfway between the street right-of-way lines.

CITY CLERK. An appointed officer of the City as so designated by the Governing Body.

CITY ENGINEER. Delegated to the Development Services Department. If infrastructure is outside of the standards for Development Services, the Department will contact the Public Works Department.

CUL-DE-SAC. A short street intersecting another street and terminating in a vehicular turnaround.

EASEMENT. An acquired or granted right of use which one person may have in the land of another.

FUTURE STREET LINE. A line, established by the Governing Body, running more or less parallel to the centerline of an existing or proposed street for the purpose of

delineating the future boundaries of public right-of-way.

LOT. A tract or parcel of land platted and placed on the County Clerk's record in accordance with laws and ordinances, generally as a portion of a subdivision intended for development purposes.

MASTER PLAN. A comprehensive plan or any of its parts, adopted by the Governing Body, for the physical development of the area within the planning and platting jurisdiction of the City for the general purpose of guiding and accomplishing coordinated and harmonious development.

MONUMENT. One or more of the following:

(1) **BENCHMARK.** A brass cap, set in a base which meets City standard, with the elevation and the land surveyor's registration number inscribed thereon.

(2) **PERMANENT SURVEY MONUMENT.** A brass cap set in a base which meets City standards, or a standard Bureau of Land Management monument marking sectionalized corners, containing coordinates referenced to the New Mexico Coordinate System and the land surveyor's registration number prescribed thereon.

(3) **SUBDIVISION CONTROL MONUMENT.** A metal stake or pipe which meets City standards, with the land surveyor's registration number affixed thereto.

PARKS, RECREATIONAL. An area developed and maintained primarily for active recreation. ~~**OPEN SPACE.** An area reserved for public use, not to include dedication of public streets and right-of-way.~~

(1) **DEVELOPED PARK AREA.** The developed area is the portion of park land designated for active recreational use. Specifically designed and maintained to support various recreational activities, this area includes amenities such as sports fields, playgrounds, picnic areas, trails, and other facilities intended for public enjoyment and physical activity.

(2) **UNDEVELOPED PARK AREA.** The undeveloped area is the portion of park land preserved in its natural state for conservation, wildlife habitat, and educational purposes. It encompasses features like forests, wetlands, open spaces, and other natural landscapes protected from active development. This acreage serves as a resource for environmental conservation, ecological study, and passive recreation.

PERSON. Any individual, estate, trust, receiver, association, club, corporation, company, firm, utility or other entity.

~~**PLANNING AND ZONING BOARD.** The Planning and Zoning Board of the City.~~

PLAT. A map, chart, survey, plan or replat certification by a registered land surveyor which contains a description of subdivided land with ties to monuments or other points of reference acceptable to the Planning and Zoning Board, the plat to be placed on record.

PUBLIC DRAINAGE SYSTEM. The path that storm runoff or other flow will follow from the furthest upstream parcels of land to City limits.

REPLAT. To prepare and record a new plat replacing all or a portion of a previously recorded plat that has been vacated.

SKETCH PLAN. A preliminary sketch drawing of a subdivision plat conforming with the requirements stated herein, and used in the preapplication procedure prior to submission of the Preliminary Plat.

STREET. Property acquired or dedicated to and accepted by the City as right-of-way, other than an alley, for the principal means of public access to abutting property. The term includes the ~~following:~~ detailed set of functional classifications outlined in the

Development Process Manual in Chapter 4 Transportation Planning, 4.4.A Functional Classification and Level of Service (LOS).

~~(1) **ARTERIAL STREET.** A street designed and used primarily for serving large volumes of traffic.~~

~~(2) **COLLECTOR STREET.** A street which carries traffic from local streets to the arterial streets and highways.~~

~~(3) **LOCAL STREET.** A street which is primarily for access to abutting properties and carries low volume traffic.~~

SUBDIVIDER. Any person creating a subdivision, including the owner, equitable owner or any authorized representative.

SUBDIVISION. The division of any lot or tract of land into two or more lots for the purpose, whether immediate or in the future, of sale, lease or development. **SUBDIVISION** does not include the following:

(1) Any residual land retained by the subdivider after **SUBDIVISION** but which has not been divided for **SUBDIVISION** purposes;

(2) The sale or lease of apartments, offices, stores or similar space within a building;

(3) Any division of land in which only gas, oil, mineral or water rights are severed from the surface ownership of the land;

(4) Any division of land created by court order, except court orders involving land grant adjudications; and

(5) The leasing of land for grazing or farming activities.

VACATION OF PLAT. To formally remove a plat from record, as recorded in the office of the County Clerk.

155.07 VIOLATIONS.

(A) Construction which violates any provision of these regulations is strictly prohibited and no building permit shall be authorized except in those cases where modifications or exceptions have been granted by the Planning and Zoning Board prior to start of construction.

(B) Violations without authorization by the Planning and Zoning Board shall bring cause for legal action by the City to have the construction violation stopped, corrected and/or removed and a penalty assessed.

PLATTING PROCEDURE

155.20 PROCEDURE GUIDANCE.

(A) Refer to the Development Process Manual (DPM) Chapter 2 Procedures, section 2.5.A Subdivision of Land, for subdivision procedures. Every person who desires to subdivide land into two or more lots shall furnish a plat of the proposed subdivision prepared by a surveyor, registered and licensed by the state and shall comply with the requirements of these regulations. Please refer to the DPM Chapter 2 Procedures, section 2.8.E.III General Requirements for all Plats. Upon request, Development Services ~~the City Clerk~~ shall furnish the subdivider with basic information on the requirements.

(B) Any proposed subdivision, replat, or vacation of plat occurring within the municipal limits of the City shall conform to the requirements of these regulations and shall be submitted for review and approval by the Planning and Zoning Board prior to filing with the County Clerk, before beginning improvement activities or negotiating sale or lease of any lot within the proposed subdivision.

(C) Where a subdivision is planned to be built in multiple phases, each phase must clearly identify the phase lines.

(D) Any proposed subdivision, replat, or vacation of plat occurring outside the corporate limits but within the ~~three~~ five mile planning and platting jurisdiction of the City shall conform to the requirements of these regulations and, as supplemented by the provisions of the subject ~~Sandoval~~ County land subdivision regulations, shall be submitted for concurrent review and approval by the Planning and Zoning Board and the Board of County Commissioners prior to filing with the subject ~~Sandoval~~ County Clerk, before beginning improvement activities or negotiating sale or lease of any lot within the proposed subdivision.

(E) In order to provide guidance to subdividers concerning acceptable proposed plats, the following matters are fundamental:

(1) *Geographic suitability.*

(a) ~~With reference to any officially adopted plans of the city, an area shall not be unsuited to the purposes for which it is to be subdivided.~~ The intended purpose of the subdivision shall not conflict with any officially adopted plan of the City which reference the area that is to be subdivided.

(b) The availability of adequate paved streets, fire protection, police protection, refuse service, public schools, parks and recreation facilities, and utility services shall all be weighed in considering the subdividing of land. They are not all necessarily required.

(c) Land with the following types of problems shall have subdivision approval withheld until it is demonstrated that the hazards have been or will be eliminated:

1. Special drainage conditions;
2. Difficult topography;
3. Soil conditions which are unusually limiting; and
4. Other geographic hazards to life, health or property.

(2) *Grading.*

(a) No subdivider shall proceed with any grading specifically in relation to a proposed subdivision before conditional approval has been given for the Preliminary Plat by the Planning and Zoning Board. The grading shall be consistent with the recommendations of an approved drainage plan, if any have been required pursuant to these regulations.

(b) The subdivider shall preserve major trees, scenic points, historic places and other community landmarks wherever feasible or required.

(3) *Master ~~Area~~ Plan.*

(a) If the subdivider owns or controls land contiguous to the land he wishes to subdivide immediately, the Development Services Department may require the subdivider to submit a proposed Master Plan for the total area to be approved or approved in modified form by the Planning and Zoning Board prior to approval of the Preliminary Plat. Any plat submitted shall be a reasonable planning unit in relation to the approved Master ~~Area~~ Plan. The proposed Master ~~Area~~ Plan shall show proposed use type and densities as well as proposed arterial, collector, and local street alignments.

(b) If the proposed Master Plan will significantly alter the provisions of any officially adopted plans of the City, the subdivider of the proposed Master Plan shall also request amendments to those adopted plans. ~~finds that the area plan will significantly alter the provisions of any officially adopted plans of the~~

~~City, it shall make a recommendation to the Governing Body. The Governing Body shall approve it, approve it in modified form, or reject it.~~

(c) All proposed street alignments shown in the Master ~~Area~~ Plan or any Preliminary Plat related thereto shall extend, complement or otherwise conform to existing municipal streets and to officially designated proposed street alignments. Likewise, shall all proposed sewer, water and drainage lines be made to extend, complement and conform to existing and proposed.

155.21 PREAPPLICATION; PLANS AND ~~DATA~~ REQUIRED INFORMATION.

(A)(1) *Submission.*

(a) All proposed subdivisions, replats or plat vacations shall comply with the requirements of these regulations. Whenever there is no need for dedication of streets or easements, the Planning and Zoning Board may waive the requirements for topography, street, utility and storm drainage as set forth herein. However, submittal of a series of two lot subdivisions on a tract of land will be considered a subterfuge to defeat the purpose of these regulations and the plats shall not be approved.

(b) Previous to the filing of an application for approval of the preliminary plat, ~~the subdivider shall submit to the Planning~~ it is encouraged that the subdivider submit to the Development Review Committee (DRC) ~~Board~~ a sketch plan and data as specified herein. This step does not require formal application, payment of fee or filing of a plat with the Planning and Zoning Board. Refer to the DPM Chapter 2 Procedures, for DRC procedures.

(2) *Advice.* The ~~preapplication procedure~~ DRC Process affords the subdivider the opportunity to avail himself of the advice and assistance of the ~~Planning Board~~ DRC early and informally before preparation of the Preliminary Plat and before formal application for its approval. The ~~Planning Board~~ DRC may assist the subdivider in analyzing the development and plan for its sound integration with the community and may give informal guidance to the development at a stage when potential points of difference can be more easily resolved, thus simplifying official actions and saving unnecessary expense and delay to the subdivider. The ~~Planning Board~~ DRC shall not assume any liability for possible lack of understanding on the part of the subdivider.

(3) *Review.* The DRC holds meetings on a regular basis. During the DRC meeting, the committee shall provide preliminary guidance that will not constitute a final decision with regard to a participant's application. ~~inform the subdivider whether the sketch plan and data meet the intent of these regulations.~~ If the sketch plan and data do not meet the intent, the DRC shall express the reasons therefor and advise the subdivider in bringing the proposed plan into conformance. The DRC will follow up with a memorandum summarizing their recommendations from the meeting.

(B)(1) *Location map.* A location map shall show the relationship of the proposed plat to existing community facilities which serve it: all abutting streets, shopping centers, schools, and parks. The map shall include a north arrow.

(2) *Sketch plan.* A simple sketch plan on a current topographic survey shall show the proposed layout of streets, lots and other features in relation to existing conditions. The sketch plan may be freehand pencil sketch made directly on a print of the topographic survey.

(3) *Sketch plat data.* ~~*Written information.*~~ General plat information shall list the

name and address of the subdivider and his agent, if any, the total area of the proposed plat, the existing conditions of the site, and the proposed development as necessary to supplement the sketch plan. This information shall include data on existing covenants and land characteristics including surface drainage, grading, landfill areas, and available private and municipal utilities. This information shall also describe the subdivision proposal, such as the number and typical lot width and depth of residential lots, business areas, public areas and proposed utilities.

155.22 PRELIMINARY PLAT.

(A) *Application.* Refer to the DPM Chapter 2 Procedures, section 2.5.A.II. Preliminary Plat Procedure, for details on the Preliminary Plat procedure. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.C Checklist for Submittal of Preliminary Plats. The subdivider shall submit to the Development Services Department a digital application including an application form (which can be found on the Department of Development Services website), a Preliminary Plat checklist, all items referenced in the checklist ~~on prescribed forms,~~ together with the Preliminary Plat, ~~improvement plans~~ and other supplementary material as specified herein.

(B) *Review.* Within 10 days the ~~Planning Board~~ Development Services Department shall review the required Preliminary Plat and supplementary material for completeness and provide a response to the applicant. The response will either state that the application is complete and will be reviewed further or the response will note the missing items. Once the application is deemed complete, the Development Services Department ~~and~~ shall request comments from city staff and other governmental agencies as may be appropriate.

~~(C) *Annexation and/or rezoning.* If annexation and/or rezoning is proposed or required to accomplish the development envisioned in connection with the plat, the Planning Board shall withhold conditional approval of the preliminary plat until such time as annexation and/or rezoning shall be officially adopted by the Governing Body. The Planning Board shall submit a written report containing its recommendation to the Governing Body prior to the public hearing on the annexation or rezoning.~~

(C~~D~~) *Decision.*

(1) Following review of the required Preliminary Plat and other material, and following negotiations with the subdivider on changes as may be deemed advisable, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. The Planning ~~Board as may be deemed advisable, the Planning Board shall, within 35 days of receipt of the application package, act thereon as submitted or modified. and~~ Zoning Board will make the final determination of approval, approval with conditions, or denial at their meeting and a notice of the decision will be sent to the applicant within one week. However, if it is found that ~~any agency other than the staff of the city should be requested to review the submitted materials~~ additional information is needed to make a decision, the time period within which the Planning and Zoning Board must act may require reasonable extension. After the last opinion requested of an agency is received, the Planning and Zoning Board shall act on the Preliminary Plat ~~within 21 days~~. Per NMSA § 3-20-7, the Planning and Zoning Board shall approve or disapprove the Preliminary Plat within thirty-five days after the Development Services Department deems the Preliminary Plat application to be complete. If the Preliminary Plat is approved, the Planning and Zoning Board shall

express its conditional approval and provide the conditions of the approval, if any. If the plat is disapproved, the Planning and Zoning Board shall express its disapproval and its reasons therefor. The action of the Planning and Zoning Board shall be noted on ~~two copies of~~ the Preliminary Plat, referenced and attached to any condition determined. ~~One copy shall be returned to the subdivider and the other retained by the Planning Board.~~

(2) Conditional approval of a Preliminary Plat shall not constitute approval of the Final Plat. Rather, it shall be deemed an expression of approval to the layout submitted on the Preliminary Plat as a guide to the preparation of the Final Plat.

(D~~E~~) *Public hearing.* No plat shall be acted upon without a public hearing. Refer to the DPM Chapter 2 Procedures, section 2.3 General Administrative Procedures, for requirements on public notices and public hearings. The Municipal Code Chapter 150.03 Applications and Procedures shows what is required for each type of application.

(E) *Longevity.* Approval of a Preliminary Plat is effective for one year unless extended by the Planning and Zoning Board, based on a finding that the delay has been unavoidable and the extension is in the public interest. The applicant shall follow requirements in the DPM Chapter 2 Procedures, section 2.5.A.III. Preliminary Plat Extension Procedure. No more than three extensions may be granted for the same Preliminary Plat.

(F) If the applicant is planning a multi-phase subdivision, a Preliminary Plat shall be approved separately for each phase.

(G) If the applicant intends to make a change to the approved Preliminary Plat, the change may require approval from the Planning and Zoning Board.

155.23 PRELIMINARY PLAT APPROVAL; PLANS AND REQUIRED INFORMATION.

(A) The subdivider shall submit ~~eight copies~~ a digital copy of the Preliminary Plat to the ~~Planning Board~~ Development Services Department. The Preliminary Plat shall include all land owned or controlled by the subdivider, which is or may be suitable for or susceptible to subdivision or development, and adjoins the land proposed to be subdivided. The Preliminary Plat shall be drawn to a scale of 1 inch to 200 feet, or larger, 1 inch to 100 feet is preferable, for the purpose of showing all details clearly. An adequate number of sheets shall be used to show the proposed subdivision in its entirety. Where more than one sheet is required, each sheet shall be numbered in relation to the total number of sheets involved, and each sheet shall have a small key map showing its relationship to the whole. Further requirements are listed in the DPM Chapter 2 Procedures, section 2.8.E.V. Preliminary Plat Requirements.

(B) The Preliminary Plat shall contain the following information:

(1) Name of proposed subdivision, name and address of subdivider, agent and principal person preparing the Preliminary Plat;

(2) Scale and north arrow;

(3) Identification clearly stating the plat is a Preliminary Plat;

(4)) ~~Proposed bench mark locations, proposed location of and method of tie to permanent survey monuments, and~~ Proposed location and type of subdivision control monuments found or set;

(5) Plat boundary lines, bearing in degrees, minutes and seconds, with basis for bearings noted or shown, distances in feet and hundredths;

(6) Existing conditions of the site and ~~its environs~~ the surrounding area including the following:

(a) Present site designation or subdivision name;
(b) Easements on site: location, width and purpose;
(c) Public right-of-way on and within 150 feet of the site; name, width, type and dimensions of paving;
(d) Utilities on and adjacent to the site, location and, if obtainable, size of water wells, water reservoirs, water lines, sanitary and storm sewers, location of gas lines, fire hydrants, electric and telephone lines and poles and street lights; (If water mains and sewers are not on or adjacent to the tract, indication of the direction, distance to and size of nearest ones showing invert elevation of sewer.)
(e) Ground elevation on the site based on mean sea level datum as established by the U.S. Coast and Geodetic Survey:
1. For land that slopes less than 1%, contour lines at intervals of not more than one foot;
2. For land that slopes between 1% to 5%, contour lines at intervals of not more than two feet; and
3. For land that slopes more than 5%, contour lines at intervals of not more than five feet.
(f) Existing storm drainage facilities on and adjacent to the site;
(g) Other significant conditions on the site; major rock outcrops, trees, structures, and the like;
(h) Conditions on adjacent land significantly affecting design of the subdivision; approximate direction and gradients of ground slope; character and location of development;
(i) Zoning on and adjacent to the site; and
(j) Total area of the proposed plat to the nearest one-tenth acre.
(7) Location map showing location of the site in relation to well known landmarks, abutting property owners and municipal boundaries;
(8) Locations, dimensions and purpose of all easements, and labels for each as public or private;
(9) Proposed lot lines with dimensions of lot widths and depths shown; ~~and~~ public right-of-way and street widths; indicate roadways intended to be private; locations of planned water wells, reservoirs, and pump stations; ~~locations, dimensions and purpose of all easements, public or private; rights~~ rights-of-way for public services or utilities, and any limitations thereof;
(10) Number or letter to identify each proposed lot and block;
(11) Locations, dimensions, approximate areas and purposes of lots proposed to be dedicated for public uses, or development fees proposed to be paid in lieu thereof, in accordance with design standards specified in this chapter;
(12) Sites and approximate area for any multi-family dwellings or nonresidential use; and
(13) Proposed changes to ground elevations, to standards specified herein.
(C) *Storm drainage management.* For the purpose of minimizing or eliminating damage resulting from storm water runoff, the subdivider shall be required to furnish a plan for storm drainage management if the subdivision lies within a designated flood hazard area. Preparation of the drainage plan shall be done by a registered professional engineer and shall include the following information:
(1) Location of proposed lots, streets, bridges, water and erosion control structures, and utility easements in relation to the existing contours. These shall also be shown in relation to the finished contours proposed to be implemented in

development of the subdivision.

(2) Storm drainage computations showing the estimated runoff from the subdivision prior to and following completion of development.

(3) Storm drainage computations on the surrounding areas contributing runoff that may affect the subdivision or may be affected by the subdivision.

(4) All appropriate design details necessary to clearly explain the construction of all water control structures, utility installations and buildings as they shall be made flood proof to the extent necessary.

(5) Conformity to the regulations, procedures, and standards as may be prescribed by local, state or federal laws.

(D) *Soils analysis.* The subdivider shall provide a preliminary soils analysis by a qualified soil scientist to determine the adequacy of the soil for the proposed construction. Subdivisions reviewed by the summary procedure of these regulations may be exempt from this paragraph unless the Planning and Zoning Board determines the analysis to be in the public interest.(E) *Schedule of development.* The subdivider shall provide an estimated schedule of lot development. In particular, the schedule shall indicate when street paving, water service and sewer service will be provided.

(E) *Special problems analysis.* For land with difficult topography or other geographic hazards to life, health or property, a report and proposed solution shall be prepared satisfactory to the Planning and Zoning Board.

155.24 FINAL PLAT.

(A) *Submission.* Application for approval of the Final Plat shall be submitted to the Development Services Department, ~~on prescribed forms~~ including the application form (which can be found on the Development Services Department website), the Final Plat checklist, all items referenced in the checklist, the Final Plat, and other supplementary material as specified herein. ~~To the Planning Board~~ The Final Plat application shall be recorded within 12 months following approval of the Preliminary Plat; otherwise, the approval shall become null and void unless an extension of time has been granted by the Planning and Zoning Board. Submission of the application shall follow DPM Chapter 2 Procedures, section 2.5.A.IV. Final Plat Procedure. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.D Checklist for Submittal of Final Plats. The Final Plat shall conform ~~substantially~~ to the Preliminary Plat as approved and conditioned.

(B) *Review.* When the Development Services Department deems the Final Plat application to be complete, they shall provide the applicant's final submission to the Planning and Zoning Board for review along with a staff report. The Planning and Zoning Board shall review the Final Plat and other exhibits submitted for conformity to these regulations, and shall ensure that the conditions of the Preliminary Plat as approved have been met.

(C) *Decision.*

(1) If the Final Plat is in conformance with the Preliminary Plat as approved and conforms with these regulations, it shall be approved by the Planning and Zoning Board. Should the Final Plat be disapproved, the Planning and Zoning Board shall express in writing the reasons for disapproval. ~~The reasons for disapproval shall be referenced and attached to two copies of the final plat. One of the copies shall become a part of the files of the City Clerk's office.~~

(2) ~~Approval or disapproval shall be given within 35 days of the date of final plat submission~~ Per NMSA § 3-20-7, the Planning and Zoning Board shall approve or

disapprove the final plat within thirty-five days after the Development Services Department deems the Final Plat application to be complete, unless the subdivider agrees in writing to a deferral. If the Final Plat is approved by the Planning and Zoning Board, the approval shall be recorded on the face of the original drawing of the Final Plat and shall be dated and verified by the signature of the Chairman of the Planning and Zoning Board.

(3) Following Final Plat approval, the applicant shall work with City staff on remaining infrastructure improvements and any other action items in the conditions of approval. For additional guidance, planning staff will provide to the applicant, finding of fact documentation and will indicate which staff members to coordinate with on remaining tasks.

(D) *Recording.*

(1) The Final Plat is in full force and effect only after having been duly recorded in the office of the County Clerk and copies filed with the City Clerk. Approval of the Final Plat shall become null and void if the plat is not so recorded with six months after the date of approval, unless an extension of time is granted by the Planning and Zoning Board. Submittal for recording is the subdivider's responsibility.

(2) In the case of a replat, the subdivider shall request the County Clerk to mark the original plat with the words "replatted" or "partially replatted" and refer on the original plat to the filed location of the replat. The Planning and Zoning Board shall mark the copies of the original plat on file in the offices of the City in a similar manner.

(3) After having filed the original drawing of the Final Plat with the County Clerk, which copy shall be the official copy, the subdivider shall submit to the City one copy of the Final Plat as recorded and properly stamped by the County Clerk, and a digital copy with the following requirements:

(a) *Format.* The digital copy shall be submitted in a format that follows the DPM Chapter 2 Procedures, section 2.8.D Digital Record Drawing Requirements~~, is compatible with the city's GIS (geographical information system)~~ and shall be approved by the City Development Services Department.

~~(b) Storage. The digital copy shall be submitted, preferably on a CD Rom, but may be submitted on a 3 1/4-inch floppy disk, the disk shall be labeled with the recorded plat book and page numbers and subdivision name.~~

(b) *Projection.* The digital copy shall be submitted in accordance with the ~~NAD 1927 or the NAD 1983 State Plane Coordinate System~~ current City-used projection.

(c) *Layering.* Layers shall either contain a layer index or shall consist of and be limited to:

1. SUBD: legal subdivision boundary (coincident with narrative);
2. LOT: lots, outlots, blocks (areas of land ownership);
3. RDCL: road center lines (public or private);
4. ROAD: platted right-of-way;
5. RDEAMT: access easements across lots;
6. PUESMT: public utility easements;7. DESMT: drainage easements;
8. ATRIBTS: attributes shall consist of and be labeled as:
    a. Parcel, labeled as Par.
    b. Lots shall be lot numbers only.
    c. Tract, labeled as Tr.

d. Block, labeled as Blk.

9. NOTES: shall consist of notes and legal description and title of plat;

10. SIGBLK: shall consist of the Signature Blocks on plat, which shall conform to the samples provided per the DPM Chapter 2 Procedures, section 2.8.E.III.n. Signature Blocks; and

11. OTHER: miscellaneous easements.

(d) *Geographic extent.* The digital copy shall have contiguous layers of the subdivision and shall not be divided into sheets.

(4) No building permits shall be issued until a copy of the recorded Final Plat have been placed on file with the City.

(E) *Replat.* After final approval of any plat, no lot or block shall be further subdivided or the area of any platted lot diminished, and no change shall be made in the platting of any street, alley or easement established by the plat, except upon the filing of a replat, showing the proposed change or changes, with the Planning and Zoning Board and securing its approval in accordance with the procedures herein established. The provisions of this division shall apply to all proposed replats or changes in lot lines, dimensions of lots, streets, alleys and easements in any platted area within the City planning and platting jurisdiction.

(F) *Acceptance of land.*

(1) Approval of the Final Plat by the Planning and Zoning Board shall be deemed to constitute acceptance by the City of dedication of public rights-of-way, and other proposed public easements ~~and public areas shown on the plat~~ provided the Final Plat is properly recorded with the County Clerk and the City Clerk.

(2) Park land dedication shall occur by deed, and it shall be depicted and called out on the plat.

155.25 FINAL APPROVAL; PLANS AND ~~DATA~~ REQUIRED INFORMATION

(A) *Final Plat.* The subdivider shall ~~the original and two copies~~ submit a digital copy of the Final Plat to the Planning and Zoning Board for approval in accordance with the following provisions. Further requirements are listed in the DPM Chapter 2 Procedures, section 2.8.E.VI. Final Plat Detailed Requirements.

(B) *Size, scale, material.* The Final Plat shall be ~~drawn, scribed or photo-reproduced in black ink on tracing cloth or stable-base polyester material,~~ on sheets no larger than 24 by 36 inches, and shall be at a scale of 1 inch to 200 feet, or 1 inch to 100 feet when practical. Enough sheets shall be used to show the subdivision in its entirety, with each sheet numbered in relation to the total number of sheets involved, and each shall have a small key map showing its relationship to the whole.

(C) *Information.* The Final Plat shall contain the following information:

(1) Name of subdivision;

(2) Title, scale, north arrow and date of survey;

(3) Location and description of all monuments found or set within the plat area, and all these referred to, including bench marks with elevation shown and property corners;

(4) Plat boundary lines; bearing in degrees, minutes and seconds, with basis for bearings noted or shown; distances in feet and hundredths or other functional reference system; both the record and measured bearings and distances;

(5) Reference the plat to the state Plane Coordinate System; total acreage of subdivision to four decimal places;

(6) Lot lines, and right-of-way lines, existing and proposed; lines to be eliminated

shown as dashed lines; names of streets, right of way widths, and centerline data and all streets and alleys, including private streets and alleys; the length, central angle and radius of all curves;

(7) Location, dimensions and purpose of all easements, existing or proposed, and any limitations thereof;

(8) Number or letter to identify each lot and block, when combining lots, do not duplicate lot numbers, an example of the correct process is Lot 5+Lot 6=Lot 5A;

(9) Location, dimensions, areas and purposes of lots proposed to be dedicated or reserved for the public;

(10) Reference to recorded subdivision plats of adjoining platted land by recorded name, date, book and page number in the office of the County Clerk;

(11) Mileage of streets created:

(a) Total;

(b) Full-width streets; and

(c) Half-width streets.

(12) Certification by the County Treasurer or by a duly qualified abstract company that the previous ten years' property taxes due and payable have been paid in full;

(13) Statement that the subdivision is with the free consent and in accordance with the desire of the undersigned owner of the land, acknowledged in a manner required for acknowledgment of deeds;

(14) Signed statements by the subdivider dedicating public rights-of-way, any sites for public use, and granting the shown easements for public use;

(15) Certification and seal by a registered land surveyor, in accordance with the laws of the state, certifying the accuracy of the survey and plat, that they prepared or supervised preparation of the plat, that they have shown all easements of record, and that it meets design standards for surveying;

(16) Certification that all monuments are in place; and

(17) Other certificates, affidavits, endorsements or dedications as may be required by the Planning and Zoning Board in the enforcement of these regulations.

155.26 SUMMARY PROCEDURE.

(A) In accordance with the alternate summary procedures authorized by NMSA § 3-20-8, the ~~City Development Director~~ Development Services Department Director, as administrative officer, may approve a subdivision as a combined preliminary and Final Plat in any case where no public purpose would be served by separate steps. Summary procedure shall follow DPM Chapter 2 Procedures, section 2.7.H Summary Plat Procedure. The summary approval shall be given only when one or both of the following conditions exist:

(1) The subdivision contains no more than two lots, provided, however, that submittal of a series of two lot subdivisions on a tract of land will be considered a subterfuge to defeat the purpose of these regulations and the plats shall not be approved.

(2) Resubdivisions, where the combination or recombination of portions of previously platted lots does not increase the total number of lots.

(3) Subdivisions of two or more parcels of land in areas zoned for industrial use;

(B) In all cases, the subdivision plat being considered for approval under this summary procedure shall be prepared according to the standards for plans and data for both preliminary and Final Plats as contained herein. If the subdivision plat application does not meet the standards for plans and data for both preliminary and Final Plats, the

Development Services Department may defer approval to the Planning and Zoning Board.

(C) The City Development Services Department Director shall furnish the Planning and Zoning Board with monthly reports documenting those subdivisions approved administratively.

155.27 REQUIRED IMPROVEMENTS.

(A) *Authorization.* Receipt of the signed copy of the Preliminary Plat is authorization for the subdivider to proceed with the minimum improvements required by these regulations. Prior to the construction of any improvements or to the submission of any bond, the subdivider shall furnish the ~~Planning Board~~ Development Services Department with all plans and required information ~~data~~ necessary for the construction of the improvements. These plans shall be examined by the ~~Planning Board~~ Development Services Department and will be approved if in accordance with the following requirements. Following the approval, construction can be started or the amount of bond determined.

(B) *Installation assurance.* Plans for improvement shall be prepared by an engineer registered in accordance with the laws of the state. The City is to be assured of the installation of these improvements in a satisfactory manner by one or more of the following methods:

(1) Complete installation of the improvements prior to approval of the Final Plat;

(2) Submission of a subdivision improvement agreement (SIA) along with a satisfactory bond, either a performance bond or a cash bond, or the establishment of an escrow account in an amount, and with surety and conditions satisfactory to the City ~~Clerk~~ Development Services Department, providing for and securing to the City, the actual construction and installation of the improvements and utilities within a period not to exceed one year;

(3) Completion of an approved assessment procedure whereby the City is put in an assured position to do the work and make the installations at the cost of the owners of the property within the subdivision;

(4) Submission of an approved assessment procedure for the paving of streets together with an agreement between the subdivider and the City for a cash payment for other improvements with payment to be made as the work is completed;

(5) The City may authorize a written agreement between the City and the subdivider, which would be recorded at the time of filing of the Final Plat, which would adequately restrict sales of any lots as to which there had not been completion of the improvements and installation of utilities, and which would establish a ten-year time limit; and

(6) The subdivision may be developed in segments whereby the Planning and Zoning Board, at its discretion, may waive the use of a guarantee as required by the section on the initial segments, provided that such segments are not larger than 25 lots or 50% of the total number of lots in the subdivision, whichever is less. The Planning and Zoning Board shall grant Final Plat approval for each succeeding segment being contingent upon completion of the minimum improvements required by these regulations in each preceding segment. Completion of improvements in the final segment of the subdivision, which shall include at least 25 lots or 50% of the total number of lots in the subdivision, whichever is less, must be guaranteed through the use of one the other methods

detailed under this section.

(C) *Installation of improvements.* The subdivider may prepare and secure approval of the Preliminary Plat and then install improvements in the area covered by the Preliminary Plat. Improvements must be installed only in that part of the area for which a Final Plat will be submitted for approval and filing. The improvements to be installed shall include the following:

~~(1) Permanent markers. All subdivision boundary corners, and the four corners of all street intersections shall be marked with permanent monuments. A permanent monument shall be deemed to be concrete with a minimum dimension of four inches, extending three feet below the surface of the ground. Should conditions prohibit the placing of monuments on line, offset marking will be permitted; provided, however, that offset courses and distances are shown on the plat. A permanent bench mark shall be accessibly placed within the subdivision, the elevation of which shall be referred to the U.S.G.S. datum and accurately noted on the subdivision plat.~~

(1) *Street improvements.* All streets shall be graded and the roadway improved by paving under the supervision of the City Engineer and subject to his approval in accordance with the design standards provided ~~herein~~ in this ordinance and the DPM Chapter 4 Transportation.

(2) *Sidewalks.*

(a) *Provision.* Sidewalks and/or shared use paths shall be provided by the developer and shall be constructed under the supervision of the City Engineer and subject to his approval in accordance with the design standards of the ~~City~~ outlined in the DPM Chapter 4 Transportation.

(b) *Warrants.* Sidewalks shall be required on both sides of arterial and collector streets when abutting land zoned R-3, C-1, C-2, M-1 or SU, and when abutting church and school grounds. Sidewalks shall be required on both sides of all local streets in a logical manner to facilitate pedestrian access. Shared use paths may be constructed in lieu of sidewalks on collector and arterial roadways. Either a sidewalk or shared use path must be provided on both sides of the street. Shared use paths shall not be built in lieu of on-street bicycle facilities where such facilities are required. For specific design standards for sidewalks and shared use paths, please reference section 4.6.H of the Development Process Manual.

(3) *Water and sewer mains.* The subdivider shall make necessary arrangements to serve each lot from water and sewer mains of the central systems serving the City, where feasible and in conformity to Governing Body policy. All water and sewer mains shall follow standards in the DPM Chapter 5 Water and Wastewater. Where, for any reason, municipal services cannot be provided, the subdivider shall present evidence that adequate water and sewer service to each lot will be provided in compliance with the requirements of the New Mexico Environmental Improvement Division and in conformity to the standard specifications of the City construction of all water and sewer lines shall be under the supervision and approval of the City Engineer.

(4) *Drainage.* Construction of drainage improvements and other means of storm water management shall be under the supervision and approval of the City Engineer.

(5) *Adoption of the Fire Code*. For the purpose of regulation of fire hazards and control of fires and fire prevention, the minimum Fire Codes for the State of New

Mexico, as identified in 10.25.1 through 10.25.12 NMAC, including any and all future amendments, replacement sections and additional provisions thereof, are adopted. The minimum Fire Codes for the State of New Mexico shall be controlling within the city to the same extent as if such provisions were set out in full in this chapter, including and not limited to emergency access roads, and spacing of fire hydrants.

(6) *Street lighting.* Street lighting shall be provided in accordance with standards in the DPM, Chapter 4 Transportation, section 4.5.F.IV. Lighting and Signing.

~~(a) Street lighting shall be provided by the developer and shall be constructed under the supervision of the City Engineer and subject to his approval in accordance with the design standards provided herein.~~

~~(b) Street lights shall be required at all arterial and collector intersections, park, school and church sites, and any other high pedestrian-oriented land use.~~

(7) *Private wells and septic systems.* Refer to Chapter 53 Domestic Water Well Permitting and Chapter 51 Water and Wastewater Rules and Rates. ~~Private wells serving 15 or more households shall be permitted in accordance with division (C)(4) above. All other private domestic wells, in any existing or future subdivision, shall be permitted under the terms of this section.~~

~~(a) No private domestic well shall be permitted as the primary water source for any lot within 300 feet of an adequate water supply belonging to the city or any franchisee of the city.~~

~~(b) No private domestic well shall serve more than three lots.~~

~~(c) The lots shall be contiguous with no intervening highways, streets, roads, alleyways or other rights of way for vehicular traffic.~~

~~(d) The owner of the well shall present evidence that adequate water service will be provided in compliance with the requirements of the New Mexico Environment Department and in conformity to the standard specifications of the city construction of all water and sewer lines shall be under the supervision and approval of the City Development Department.~~

~~(e) In the event that a given well serves more than one lot, the owners of each lot shall jointly present the evidence in division (7)(b) above and shall further submit an executed agreement, filed with the Sandoval County Clerk, binding each of the owners and their successors in interest to maintaining the well and its pipelines for so long as the well is in operation.~~

(D) *Approvals.* Approvals by the City Engineer of improvement plans for streets, alleys, grading, drainage, water, sewer, street lighting or other improvements within the context of this chapter shall expire by limitation and become null and void if the work or improvements authorized is not commenced within 12 months of the approval. In the event the authorized work or improvement is suspended or abandoned for a period of 12 months after the work or improvement is commenced, the approval shall expire and become null and void. Before the work or improvement is recommenced, resubmittal must be made for approval by the City Engineer.

155.28 CHARACTER OF DEVELOPMENT; MODIFICATIONS AND EXCEPTIONS.

(A) ~~(1)~~ The Planning and Zoning Board shall confer with the subdivider regarding the type and character of development that will be permitted in the subdivision, and may agree with the subdivider as to certain minimum restrictions to be placed upon the property:

~~(a) To prevent the construction of substandard buildings; and~~

(1) To be in line with the Planning and Zoning Chapter.

(2) To control the type and use of structures and the use of lots which, unless so controlled, would clearly depreciate the character and value of the proposed subdivision and of adjoining property. For example, lot scale shall be compatible with existing neighboring development.

(3) To create a subdivision with a sense of community and one that will contribute to the quality of life for those that inhabit it.

~~(2) The Planning Board shall have power to agree with the subdivider upon the use, height, area or bulk restrictions governing building and premises, providing that, in the case of subdivisions beyond the corporate limits, the Planning Board may require the subdivider to conform to the land use plans adopted by the city. Deed restrictions and covenants shall not contain reversionary clauses wherein any lot shall return to the subdivider because of a violation of the terms of the restrictions and covenants.~~

(B)(1) Whenever the tract to be subdivided is of an unusual size or shape or is surrounded by the development or unusual conditions that the strict application of these regulations would result in real difficulties and substantial hardships, the Planning and Zoning Board may vary or modify the requirements, so that the subdivider is allowed to develop his property in a reasonable manner, but at the same time so that the public welfare and interests of the City are protected and the general intent and spirit of these regulations are preserved.

(2) However, relief may not be granted if it is detrimental to the public good or impairs the intent and purpose of these regulations or the desirable developments of the community in accordance with plans and policies of the Governing Body. Any modification granted shall be entered in the records of the Planning and Zoning Board setting forth the reasons which justified the modifications. Further, in granting modifications and exceptions, the Planning and Zoning Board may place conditions which will in its judgment substantially secure the objectives of the standards or requirements involved.

155.29 VACATION OF PLAT.

(A) This section does not ~~Nothing in this section~~ requires that a vacation be undertaken if a replat, accomplishing the elimination of lot lines, is duly approved. A vacation is required when no replatting is undertaken but elimination of lot lines, rights-of-way or easement lines dividing a parcel is to be accomplished.

(B) Any plat filed in the office of the Sandoval County Clerk and within the planning and platting jurisdiction of the City may be vacated according to the following procedures:

(1) The subdivider of land proposed to be vacated, exclusive of public rights-of-way, shall sign a duly acknowledged statement declaring the plat or a portion of the plat is to be vacated and shall apply to the Planning and Zoning Board for approval.

(2) ~~Where a public right-of-way is proposed to be vacated:~~

~~(a) Repealed by Ord. 21-04.~~

~~(b) Repealed by Ord. 21-04.~~

~~(c)~~ In considering the vacation of all or part of a public right-of-way, the Planning and Zoning Board shall determine whether or not the vacation will adversely affect the interests of persons owning contiguous land or land within the subdivision being vacated.

(3) The rights-of-way of any public or private utility, including drainage, existing

prior to the vacation, total or partial, of any plat are not affected by the vacation of a plat unless an authorized representative of the utility involved agrees in writing to have the rights vacated.

(C) A decision on approval and endorsement shall be made at a hearing by the Planning and Zoning Board. If approved by the Planning and Zoning Board, the statement of vacation is endorsed "approved." The endorsement shall be within 10 days of the conclusion of the hearing.

(D) The vacation is in ~~full force and~~ effect only after the approved statement declaring the vacation has been recorded in the office of the County Clerk. The County Clerk shall be requested to mark the original plat with the words "vacated" or "partially vacated" and refer on the plat to the volume and page on which the statement of vacation is recorded. Submittal for recording is the applicant's responsibility. The applicant shall also provide certified proof of the recording by the County Clerk to the City Clerk.

155.30 BULK PLAT.

(A) A Bulk Plat is required for the division of land that is primarily intended to facilitate transfer to intermediate land holders, not to create parcels available for development without further subdivision approvals. A checklist of application requirements is provided in the DPM Chapter 2 Procedures, section 2.11.C Checklist for Submittal of Preliminary Plats/Bulk Plats.

(B) All Bulk Plats must include the following.

(1) Title of Plat
(2) Subtitle of Plat
(3) Date of Plat
(4) Location map with major roads labeled
(5) North arrow
(6) Scale of at least 1 inch to 200 feet in standard engineering increments (100 feet is preferable)
(7) Statement noting purpose of plat
(8) Plat boundary (boldest lines on plat) annotated with bearings in degrees, minutes and seconds, with basis for bearings noted or shown and dimensions in feet to the nearest hundredth foot (0.00)
(9) Location and description of all monuments found or set within the plat area and tie to State Plane Coordinate System, Central New Mexico Zone
(10) Easements (existing) including location, dimensions, type and party receiving easement
(11) Easements (proposed) including location, dimensions, type and party receiving easement
(12) Right–of-way (existing along or intersecting plat boundary) including name, location, dimensions and purpose or nature
(13) Monument Description and Location
(14) Disclosure Statement
(15) Legal description, County recording information (date of recordation and all applicable volume, folio and document numbers) and City of Rio Rancho book and page number for the subject property and abutting properties
(16) Signature Blocks for Utilities, City departments, County Treasurer, County Clerk and, if necessary, Southern Sandoval County Flood Control Authority.
(17) Registered New Mexico Surveyor Certification

(18) Jurisdictional Affidavit
(19) Name and address of applicant and agent
(20) Zoning of subject property
(21) Area of plat to the nearest ten-thousandth (0.0000) acre
(22) Lot, tract (land reserved by applicant for future subdivision or development ancillary to the subdivision, e.g. landscaped area, utility corridor) and parcel (land dedicated to the City or other public agency) boundaries
(23) Numbers or letters to identify each lot and block (contiguous grouping of lots)
(24) Letters to identify each tract or parcel
(25) Purpose of tracts and parcels
(26) Boundaries of vacated right-of-way, easements or lot lines

DESIGN STANDARDS

155.40 COMPLIANCE.

All subdivisions within the City planning and platting jurisdiction shall conform to minimum design standards established by the City. Follow standards in the DPM.

155.41 STREETS.

(A) The character, extent, width, and location of all streets shall conform to ~~any~~ Master Plan ~~or~~ policies established by the Governing Body and shall be consistent and appropriate in their relationship to existing and planned streets, topographic conditions, public convenience, safety and the proposed uses of the land to be served by the streets. Street standards shall follow DPM Chapter 4 Transportation.

(B) Where an arterial or collector street is not shown and defined in a Master Plan of the City and there is not an adopted future street line, the arrangement of streets in a subdivision shall either:

(1) Provide for the continuation or appropriate projection of existing principal situation where topographic or conditions make continuance of, or conformance to, existing streets impractical; or

(2) Conform to a plan for the neighborhood properly approved by the City to meet a particular situation where topographic or other conditions make continuance of, or conformance to, existing streets impractical.

(C) Minor streets shall be so laid out so that their use by through traffic will be discouraged.

(D) Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way, the ~~Planning Board~~ Development Services Department may require a street approximately parallel to the right-of-way. This distance shall be suitable for the appropriate use of the intervening land and shall also be determined with due regard for the requirements of approach grades and future grade separations.

(E) Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed in the City under conditions approved by the Planning and Zoning Board.

(F) Half streets shall be prohibited, except where used as an addition to another half street which was platted and filed before the effective date of these regulations.

(G) No street names shall be used which will duplicate or be confused with the names of existing streets within the jurisdiction of the City. Street name changes shall be subject to the ~~approval of the Governing Body upon the recommendation of the~~

~~Planning Board. A street name shall only be changed if the applicant shows that there will be a public benefit which clearly outweighs the public confusion which would be created by the name change.~~ requirements of Rio Rancho Municipal Code Chapter 157 Naming; Renaming Streets.

(H) Streets shall be laid out to intersect as nearly as possible at 90-degree angles.~~, and no street shall intersect any other street at less than 60 degrees.~~

(I) Street jogs with centerline offsets shall be avoided.

(J) A minimum tangent 100 feet long shall be introduced between reverse curves on major streets.

~~(K) When connecting street lines deflect from each other at any one point by more than ten degrees, they shall be connected by a curve with a radius adequate to insure a sight distance of not less than 200 feet and of the greater radius as may be set by the Planning Board for special cases.~~

(K) Property lines at street intersections shall be rounded with a radius of ~~ten~~ 25 feet, or of greater radius where the ~~Planning Board~~ Development Services Department may deem it necessary. Comparable cutoffs or chords in place of round corners may be permitted. Refer to the State Access Management Manual (SAMM).

(L) Dead end streets (cul-de-sacs), designed to be so permanently, shall not be longer than 500 feet and shall be provided at the closed end with a turn-around having an outside roadway diameter of at least 100 feet.

(M) ~~(1)~~ All street gradients shall be subject to approval of the City Engineer. Minimum and maximum street gradient shall follow the standards in the DPM Chapter 4 Transportation. ~~not be less than 0.5%, and the maximum not more than 10%. (2) Within 100 feet of any intersection, the maximum gradient shall be 5% to provide adequate and safe sight distance and the intersection itself shall have a maximum gradient of 3%.~~

(N) Right of way street type pavement width and width of streets and alleys shall be provided in accordance with ~~the following minimum standards~~ DPM Chapter 4 Transportation.

~~***Right-of-Way Street Type***~~	~~***Pavement Width***~~	~~***Width***~~
~~Arterial~~	~~86 feet~~	~~48 feet, plus median~~
~~Collector~~	~~60 feet~~	~~42 feet~~
~~Local~~	~~50 feet~~	~~32 feet~~
~~Alley~~	~~20 feet~~	~~20 feet~~
~~Cul-de-sac less than 200 feet in length~~	~~40 feet~~	~~24 feet~~

~~(P) The minimum radius at the centerline for horizontal curves on streets shall be as follows:~~

~~(1) Arterial: 400 feet;~~
~~(2) Collector: 200 feet; and~~
~~(3) Local: 50 feet.~~

(O) All streets shall be graded and the roadway improved in accordance with the DPM and any other standard specifications of the City and with the supervision and approval of the City Engineer.

(P) Alleys shall be provided in commercial and industrial districts. However, ~~except that~~ the ~~Planning Board~~ Development Services Department may waive this requirement where other definite and assured provision is made for service access, such as off-

street loading, unloading, and parking adequate for the uses proposed. Alleys may be provided in residential areas at the option of the subdivider, but are to be discouraged where they would serve no useful public purpose or where easements would better serve the purpose.

(Q) Curbs and gutters shall be provided on both sides of the street and constructed to standard specifications of the City under the supervision of the City Engineer and subject to his approval.

(R) The width and horizontal location of sidewalks shall conform to the standards in the DPM Chapter 4 Transportation. ~~following minimum design criteria:~~

~~(1) Width. A six-foot width is required on all arterials. A four-foot width is required on all collectors and local streets.~~

~~(2) Horizontal location. Sidewalks shall be located within the public right-of-way such that the property side edge is located on the property line. There shall be a 21/2-foot minimum separation between street side edge of the walk and the back of curb. Special locations shall be as identified in adopted plans.~~

~~(3) Vertical location. The sidewalk must be located such that the top surface of the sidewalk will be two inches above the top of curb at the lowest point on the sidewalk.~~

~~(4) Transverse slope. Sidewalks shall have a minimum transverse slope of 1/4-inch per foot, sloping toward the street.~~

~~(5) Sidewalk materials. Sidewalk materials and specific design specifications must be approved by the City Engineer prior to construction.~~

(S) ~~(U) Walkways, bike paths, bridle paths and water courses shall provide a minimum right-of-way width of ten feet and a minimum pavement width, if any, of ten feet.~~ Trails and multi-use paths shall follow standards in the DPM Chapter 6 Parks and Trails Design, section 6.3.C Trails and Multi-Use Paths.

(T) Street numbers designating building numbers shall be in compliance with § 154.81 and building numbers shall be designated during plat approval procedure.

(U) Streetlights shall be located in accordance with the DPM Chapter 4 Transportation, section 4.5.F.IV. Lighting and Signing. ~~consist of 100 watt, high pressure sodium vapor, pink lights and shall be located at warranted locations and at mid-block locations where blocks exceed 500 feet in length. In new subdivisions, the developer shall submit a plat to the authorized utility franchisee for design of the street lighting system. The authorized utility franchisee shall submit the completed design to the City Engineer through the City Development Department for approval. Following approval, the authorized utility franchisee shall install the street lights in conjunction with the installation of electrical service to the subdivision.~~

155.42 DRAINAGE.

Adequate provision shall be made for drainage of storm water subject to the approval of the City Engineer in accordance with the DPM Chapter 3 Drainage, Flood Control and Erosion, ~~master drainage plan~~ and requirements pursuant to the National Flood Insurance Program of the Federal Emergency Management Agency. Please refer to the DPM Chapter 2 Procedures, section 2.11.T Engineer's Certification Checklist for Subdivisions, when certifying compliance with an approved drainage report or grading and drainage plan for subdivisions when required for the release of financial guarantees associated with an executed Subdivision Improvement Agreement.

155.43 EASEMENTS.

A public utility easement of at least ten feet in width shall be provided and dedicated on each side of all lot lines abutting City right-of-way. Additional easements within lots and alongside rear and side lot lines shall be granted where necessary for poles, wires, conduits, storm and sanitary sewers, gas, water and other mains. An adequate easement or right-of-way shall be dedicated to containing all portions of the public drainage system for the purpose of widening, deepening, sloping, improving or protecting the channel for drainage purposes. Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided of sufficient width to permit maintenance of the slopes. Where a common drive is to be provided to serve more than one lot, a reciprocal easement that ensures access and maintenance rights shall be recorded with the approved subdivision or major partition plat. Follow standards in the appropriate section of the DPM as it relates to required easements.

~~Easements of at least five feet in width shall be provided and dedicated on each side of all rear lot lines (except where there are alleys) and along side lot lines where necessary for poles, wires, conduits, storm and sanitary sewers, gas, water and other mains. An adequate easement or right-of-way shall be dedicated to contain all portions of the public drainage system for the purpose of widening, deepening, sloping, improving or protecting the channel for drainage purposes. Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided of sufficient width to permit maintenance of the slopes.~~

155.44 BLOCKS.

The lengths, widths and shapes of blocks shall be determined with due regard to provision of adequate building sites suitable to the special needs of the type of use contemplated; to zoning requirements as to lot sizes and dimensions; to needs for convenient access, circulation, control and safety of street traffic; and to limitations and opportunities to topography.

155.45 LOTS.

The lot arrangement and design shall be such that all lots will provide satisfactory and desirable building sites properly related to topography and the character of adjacent development. All side lines of lots shall be at right angles to straight street lines or radial to curved street lines unless a variation of this rule will give a better street and lot plan. Lots of double frontage shall not be permitted.

155.46 ~~PUBLIC SITES; OPEN SPACES~~ PARKS, RECREATIONAL.

(A) The Planning and Zoning Board shall require adequate provision for suitable ~~park land, playgrounds or other public recreational use~~ Developed Park Area or Undeveloped Park Area in each subdivision. The park area shall follow procedures and standards in DPM Chapter 2 Procedures, section 2.6.B Parks Permits and Chapter 6 Parks and Trails Design.

(B) ~~When any subdivider receives final plat approval for a subdivision within the corporate limits of the city,~~ The subdivider shall ~~dedicate~~ allot ~~to the~~ a portion of the land suitable for the ~~purpose of parks, or recreational facilities~~ park area for the future residents of the subdivision. The ~~dedicated~~ allotted land shall conform to City standards as defined in this subchapter.

(C) Refer to Chapter 154 of the Municipal Code for standards on required public recreation and open space for multifamily development.

(D) The exact amount of land ~~dedicated~~ allotted shall be determined by the recommendations of the City Development Services Department, and the Planning and Zoning Board. The ~~dedication~~ amount of land shall be generally based upon three acres per 1,000 persons and 2.83 persons per dwelling in single-family areas and shall be generally equivalent in other areas.

(E) A park smaller than three (3) acres in size shall be considered a Pocket Park, for which the design shall be coordinated with the Parks Recreation Community Services Department to ensure minimum safety standards and ADA Guidelines are met. A Pocket Park shall be managed and maintained by an HOA.

(F) A park between three (3) and ten (10) acres in size shall meet the standards of a Neighborhood Park detailed in the DPM Chapter 6 Parks and Trails Design. A park between ten (10) and twenty (20) acres in size shall meet the standards of a Community Park detailed in the DPM Chapter 6 Parks and Trails Design.

The subdivider shall provide utility availability for the development of the dedicated land.

(G)(1) For subdivisions containing ~~25~~ 10 acres or less, in lieu of the required land ~~required to be dedicated~~ dedication, the City may accept payment of a fee based upon the fair market value of the amount of land which would otherwise be required to be dedicated. However, all new subdivisions, regardless of size, must have at a maximum, a 0.5 mile walk from nearest park via ADA accessible trails or sidewalks. ~~However~~ Also, submittal of subsequent subdivisions, involving adjacent or contiguous land will be considered a subterfuge to defeat the purposes of this chapter and the subdivider must comply with the requirement for public sites and open spaces.

(2) Fair market value shall be determined in an appraisal obtained by the City from a certified appraiser. The appraisal shall be obtained after the site is platted into lots and before the plat is approved by the Planning and Zoning Board.

~~(F) The dedication of land required by this section shall be by warranty deed and by dedication on a plat of the subdivision filed of record with the County Clerk.~~

(H) Park land which will ultimately be under City ownership shall be indicated on the Preliminary Plat as park land that will be dedicated to the City by deed.

(I) Notwithstanding any other provisions of this chapter, any requests for waivers or variances from the requirements for public sites or open space for recreational use shall be submitted to the Planning and Zoning Board through the ~~City~~ Development Services Department. The Planning and Zoning Board shall make and submit recommendations to the Governing Body for its approval, disapproval or modification at an open meeting.

ADMINISTRATION AND ENFORCEMENT

155.60 VARIANCES.

(A) Variance from the strict application of design standards may be allowed in cases where unusual conditions exist, or a variance would provide an improved design. Financial gain, loss or monetary savings cannot be considered solely as a basis for a variance request.

(B) A request for a variance shall be submitted to the Planning and Zoning Board through the ~~City~~ Development Services Department.

(C) The Planning and Zoning Board shall approve or disapprove the variance request at one of its regular meetings, or at a special hearing if necessary.

155.61 FEES AND PENALTIES.

(A)(1) *Land dedication fee.* The fees received under this chapter shall be placed in a separate “Public Site and/or Open Space Purchase and Improvement Account,” and

shall be used by the City only for acquisitions, development and improvement of public site and/or open space facilities to serve the subdivision for which the fees have been paid.

(2) *Payment in lieu of land dedication.* Payment in lieu of land dedication shall be paid at the time the Planning and Zoning Board approves the certified appraisal.

(B)(1) *Nonconforming lot.* No building permit shall be issued for any lot or parcel not created in conformity with the criteria in this title and no excavation or land or construction of improvements shall be commenced

(2) *Transferring lots in unapproved subdivision.*

(a) Any owner or agent of the owner, of any land located within the planning and platting jurisdiction of the City, who leases, transfers, sells, agrees to sell or negotiates to sell land by reference to or exhibition of a plat of the land before being duly approved by the Planning and Zoning Board and duly recorded in the office of the Sandoval County Clerk, shall upon conviction be subject to a fine not exceeding the maximum according to state law.

(b) Each and every lot or portion thereof so leased, transferred, sold, agreed to be sold, or negotiated to be sold shall be prosecuted and treated as a separate offense. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from the penalties.

(3) *Improper recordings.* Any person who records with the Sandoval County Clerk any plat in violation of these regulations shall upon conviction be subject to a fine not exceeding the maximum according to state law.

155.62 APPEALS.

An aggrieved party may appeal the final decision of the ~~City~~ Development Services Department as outlined in Title XV, Land Usage, Chapter 150, General Provisions, Article I, Administration and Enforcement, Section 150.08, Appeals. The appeal will only be considered if the claim is based on a violation of City standards.

155.63 AMENDMENTS.

The Governing Body may, from time to time, amend or modify these regulations after public hearing, due notice of which shall be given as required by law.

155.64 PUBLIC RECORDS.

The Planning and Zoning Board shall keep public records of findings, decisions and recommendations concerning all subdivision plats filed with it for review, including actions as may be taken by the Governing Body through appeals or amendments to these regulations.

Section 2. Severability Clause. If any section, paragraph, clause, or provision of this Ordinance, or any section, paragraph, clause, or provision of any regulation promulgated hereunder shall for any reason be held to be invalid, unlawful, or enforceable, the invalidity, illegality, or unenforceability of such section, paragraph, clause, or provision shall not affect the validity of the remaining portions of this Ordinance or the regulation so challenged.

Section 3. Effective Date. This Ordinance shall become effective ten days after adoption.

ADOPTED THIS 26th DAY OF JUNE, 2025.

Greggory D. Hull, Mayor

ATTEST:

Noel C. Davis, City Clerk
(SEAL)

CITY OF RIO RANCHO
COVER PAGE

Legislation Item: 23-105-00002

AGENDA DATE:
May 27, 2025

DEPARTMENT:
Development Services

SUBJECT:
Resolution. The City of Rio Rancho is requesting approval of the adoption of a Resolution of the City of Rio Rancho, New Mexico for an update to the Development Process Manual (DPM).

BACKGROUND AND ANALYSIS:
The City of Rio Rancho is requesting approval of the adoption of a Resolution of the City of Rio Rancho, New Mexico for an update to the Development Process Manual. The Development Process Manual (DPM) is adopted by the Rio Rancho Municipal Code, Section 150.11 (C), which states "The City of Rio Rancho DPM, as may be adopted and amended from time to time as set forth below, is hereby adopted as fully as if incorporated and set forth at length in this section and incorporated by reference."

The DPM serves as a guide for development procedures, provides design criteria, and is a reference to apply uniform standards for infrastructure. Its users include the public, developers, and staff. It was last revised in 2010 and therefore, an update is needed in order for it to be in alignment with adopted higher ranking plans such as the Comprehensive Plan or the Parks Master Plan.

The DPM standards promote development practices that implement goals for complete streets or standards for park typologies identified in the Parks Master Plan and carry out the goals and policies of the Comprehensive Plan coordinating and clarifying processes and procedures. The update also reflects the evolution of standards that align with updates in technology, best practices, and durability requirements.

DPM COMMITTEE:
The DPM Committee is defined by by Rio Rancho Municipal Code, Section 150.11(C)(2)(a), which states "The committee shall consist of an interdisciplinary team of department directors, or their designees, who have been delegated to be permanent members, two members from Development Services, one from Public Works, one from Utilities, one from Parks, Recreation and Community Services, and one from the Fire and Rescue Department." and (b) "The City Manager is authorized to appoint a maximum of three outside members from the community, such as, but not limited to, building contractors, engineering firms, land developers, or realtors."

Section 150.11(C)(5) states that the purpose of the committee is to (a) "Set rules and procedures as are necessary for the operation of the Committee." and (b) "Convene to establish, consider revisions to, improve and refine, to insure a continued effort to seek improvement in their usefulness, accuracy, and effectiveness."

The DPM Committee first convened in March of 2022 at a workshop session to get initial input on

issues and challenges. In June of 2022 and December 2023, additional workshops were held to present major changes in the following drafts. After many stakeholder reviews and comment periods for revisions, at a meeting held on April 3, 2025, the DPM Committee voted unanimously to recommend approval of the update to the Planning and Zoning Board.

ENGAGEMENT:
The DPM was also sent for review to various stakeholders, which included developers, building contractors, engineering firms, land developers, and realtors. In September of 2024, the DPM was distributed to stakeholders for comments. Two more distributions were sent in October and December of 2024. In February of 2025, City staff and consultants met with HBA and AMREP to discuss notable changes and to answer any additional questions or concerns. Additionally, two separate open house meetings were held at City Hall and the Dekker office in Albuquerque to allow anyone from the development community to stop by. The final draft of the DPM was posted on the City website in April for the larger community for a 30-day public comment period.

Also notable were four Governing Body Work Sessions and one on one meetings with Councilors. In all, there were a total of 33 meetings held for the DPM update.

PROPOSED UPDATES:
The overall goals of the Rio Rancho DPM update are to re-organize, update graphics, update procedures to reflect current practices, clarify standards by removing conflicting requirements, update standards to reflect national best practices and to provide consistency with SSCAFCA requirements. More specific updates broken down by chapters are the following:

Chapter 2 - Procedures:
- Add procedures which were missing from previous DPM (Variances, Development Agreements, general administrative procedures, Special Use Site Plans, change of address requests, Wireless Telecommunication Facilities, business registrations including Home Occupations).
- Add flowcharts for each procedure.
- Make DRC meetings recommended instead of mandatory.
- Combine submittal requirements and recordable documents sections into procedures.
- Update Utility Engineering Report, Traffic Impact Analysis, and Drainage Report standards to reflect current best practices.
- Update submittal requirements to allow digital submittals and GIS data submittal requirements.
- Update language on Master Plan minimum size to at least 10 acres.
- Require 75% ownership for master plans.
- Add language for traffic calming.

Chapter 3 - Drainage Flood Control Erosion:
- Simplify language.
- Remove duplicative content between the DPM and SSCAFCA’s hydrology manual.
- Simplify and elevate the coordination between the City and SSCAFCA in Drainage, Flood Control, and Erosion review processes.

Chapter 4 - Transportation:
- Simplify language.
- Clean up definitions.
- Remove duplicative content and mismatched references.
- Update reference standards to include a wider variety of best practices and resources, such as NACTO.
- Clarify the Traffic Impact Analysis procedure and requirements.
- Clarify the roadway classifications included in the chapter.

- Update requirements based on staff current operating procedures.

Chapter 5 - Water and Wastewater Infrastructure:

- Chapter largely left intact, only minor changes were necessary.
- Simplify language where necessary.
- Limited procedural updates.
- Limited standards updates reflective of current best practices in the City.
- Add language that if purple pipe/effluent/re-use lines are within 200 feet of development that the purple pipe be extended and used for irrigation.

Chapter 6 - Parks and Trails:

- Align more closely with the Parks Master Plan park types .
- Require parks under 3 acres to be constructed and maintained by HOAs.
- Revise park types to reflect desired improvements.
- Revise required park elements to provide more flexibility.
- Add definition of Activity Element.
- Revise design criteria to reflect best practices.

Chapter 7 - Surveys and Permanent Monumentation:

- Substantially simplified language overall.
- Correct standards references and language connected to NM State Statute's.
- DPM chapter language to infrastructure currently in place in the City.
- Reserve sections for future use when updated monumentation processes and relevant infrastructure are in place to support more specificity.

IMPACT:

Staff recommends the Planning and Zoning Board recommend approval to the Governing Body, subject to the following findings of fact:

GENERAL FINDINGS OF FACT:

1. The applicant has the authority to make an application to request adoption of a resolution of the City of Rio Rancho, New Mexico for updates to the Development Process Manual.
2. The Planning and Zoning Board may make a recommendation to the Governing Body on establishments and additions to the Development Process Manual for adoption by resolution.
3. The applicant and the public received due process.

SPECIFIC FINDINGS OF FACT FOR APPROVAL:

1. The proposed resolution would be consistent with the health, safety, morals, and general welfare of the City.
2. Sound justification has been presented for the proposed resolution.
3. The Development Process Manual Committee recommended approval of the Development Process Manual Update at their April 3, 2025 meeting pursuant to Section 150.11 (C).

ALTERNATIVES:

The Planning and Zoning Board may:

1. Recommend approval of the request to the Governing Body;
2. Recommend denial of the request to the Governing Body;
3. Modify the request and recommend the Governing Body approve such modifications;
4. Postpone the item and continue the public hearing in order to further review.

DEPARTMENT RECOMMENDATION:

The Development Services Department recommends that the Planning and Zoning Board recommend approval of the update to the Development Process Manual.

ATTACHMENT: RR DPM Chapter 1 DPM Overview.pdf
ATTACHMENT: RR DPM Chapter 2 Development Procedures.pdf
ATTACHMENT: RR DPM Chapter 3 Drainage Flood Control Erosion.pdf
ATTACHMENT: RR DPM Chapter 4 Transportation.pdf
ATTACHMENT: RR DPM Chapter 5 Water and Wastewater Infrastructure.pdf
ATTACHMENT: RR DPM Chapter 6 Parks and Trails.pdf
ATTACHMENT: RR DPM Chapter 7 Surveys and Permanent Monumentation.pdf
ATTACHMENT: Crosswalks Combined.pdf
ATTACHMENT: Legal Ad.pdf
ATTACHMENT: Combined Comment Log.pdf
ATTACHMENT: Public Comment 5.20.25.pdf
ATTACHMENT: DRAFT_Resolution.doc

DEVELOPMENT PROCESS MANUAL

Chapter 1: DPM Overview



Rio Rancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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1. Development Process Manual (DPM) Overview

1.1 Introduction

The City of Rio Rancho's Development Process Manual (DPM) provides design criteria and procedures for the orderly development of the community, assuring the public health, safety, and general welfare. The DPM is intended for use by City staff, citizens, and developers as a reference for the development process from the initial land use proposals through construction. Rio Rancho Municipal Code § 150.11(C) adopted the DPM and incorporated it by reference.

1.2 Purpose of the DPM

The purpose of the DPM is to carry out the goals and policies of the Comprehensive Plan, to coordinate and clarify the development processes and procedures, and to provide uniform standards for development. It is intended to provide the basic criteria necessary to ensure acceptable levels of performance and safety for public facilities related to development, and to assure adequate monumentation and documentation of land division. The DPM also serves as a reference for City staff to apply uniform standards in a consistent manner while evaluating development submittals.

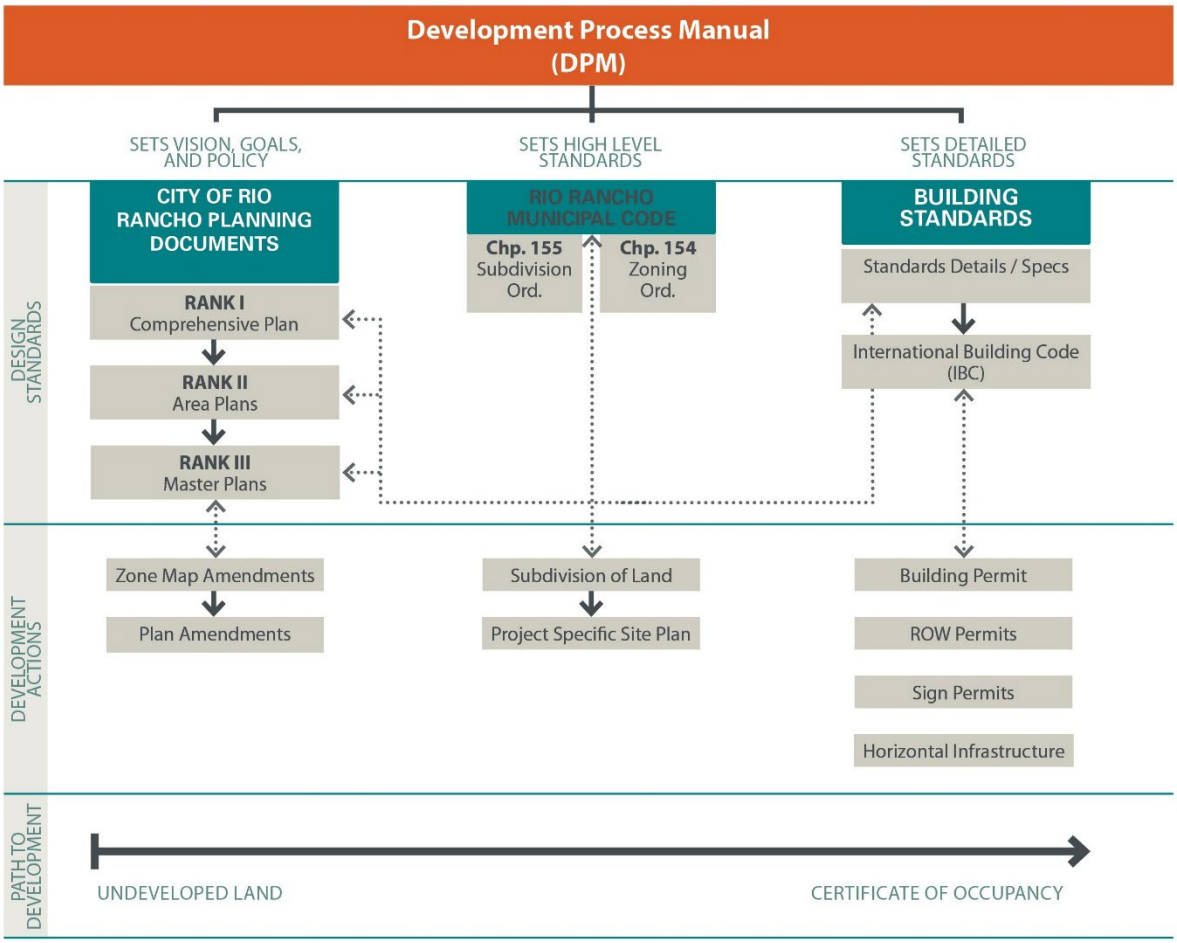
1.3 Relationship to Other Regulatory Documents

The City of Rio Rancho relies on a comprehensive system of regulatory documents to govern growth and development, ensuring public safety, order, and responsible development. These documents include:

- **Adopted City Plans**, which set the long-term vision, goals, and policies for growth, providing a guiding framework for development that aligns with the community's values and addresses regional, citywide, and area-specific issues.
- **City of Rio Rancho Municipal Code**, a set of local laws that regulate land use, zoning, building standards, and other aspects of city life. For example, Chapter 155 establishes subdivision standards for land division, while Chapter 154 outlines zoning regulations to define permissible land uses. These ordinances ensure that development is orderly and aligned with the city's growth goals.
- **Development Process Manual (DPM)** and **Public Works Design Criteria and Standard Details**, which provide technical guidelines and specifications for the design and construction of public infrastructure. These standards ensure the consistency, safety, and quality of infrastructure projects, covering roads, drainage systems, utilities, and public facilities, and ensuring that projects meet the required safety, functionality, and aesthetic standards.
- **International Building Code**, which establishes minimum standards for the design, construction, and safety of buildings and structures. It covers structural integrity, fire safety, electrical systems, plumbing, ventilation, accessibility, and energy efficiency, all aimed at protecting public health and safety.

Each of these regulatory tiers builds on the one above, creating a cohesive planning framework that ensures all development decisions align with the broader goals and policies established in the Comprehensive Plan. The Development Process Manual (DPM) is particularly important as it serves as a critical tool for ensuring that both public and private development projects are carried out consistently,

efficiently, and in compliance with City standards, contributing to the long-term success and sustainability of the community.



1.4 DPM Update Procedures

The DPM is intended to evolve as the need for new or updated standards arise. The document was most recently revised in 2025. The content of the DPM was prepared jointly by both private sector users and City staff members. DPM users are encouraged to submit suggestions, corrections, and proposed modifications in writing at any time.

1.4.A DPM Executive Committee Roles and Responsibilities

The Development Process Manual Executive Committee (the DPM Committee), established by Rio Rancho Municipal Code Section 150.11(C), is responsible for the review and direction of DPM changes. The DPM Committee consists of an interdisciplinary team of City staff and community group representatives, including two members from the Development Services Department, one member from the Public Works Department, one from the Utilities Department, one from the Parks, Recreation and Community Services Department, and one from the Fire and Rescue Department. The City Manager may also appoint three community members, such as building contractors, engineering firms, land developers, or realtors, to the committee.

The DPM Committee meets at a minimum biannually to review the DPM for necessary updates or revisions. A written evaluation and appraisal of the DPM is then presented to the Planning and Zoning Board and the Governing Body.

Proposals to change the DPM may be reviewed by a subcommittee of the DPM Committee composed of various public and private sector members from professions or companies closely related to various aspects of land development. Any subcommittee is advisory only and has no authority to override any public agency responsible for the enforcement of public policy or charged with the responsibility of promulgation of new rules, policies, ordinances, or procedures.

1.4.B DPM Update Procedures

Proposed changes are to be submitted in writing to staff. The submittal of the change request is to include a brief statement outlining the proposed change, the reason for the change, and the name and address of the individual, firm, organization, or agency proposing the change. Requests should also include the DPM text to be changed with the material proposed to be deleted identified with a strike-through and proposed new text identified as underlined.

The request is first reviewed by the DPM Committee. The Executive Committee determines the merits or validity of the change and whether further investigation, information, or research is needed. If the proposed change requires further study, the Executive Committee will appoint a subcommittee to undertake the work. If the subcommittee determines that a modification to the proposed rule is appropriate or necessary, the proposed rule as modified shall go back to the Executive Committee for consideration.

If the DPM Committee recommends approval of the change, the proposed modification is reviewed by the Planning and Zoning Board. A legal ad notification shall be published in a newspaper 15 days prior to the Planning and Zoning Board Meeting. The Planning and Zoning Board's recommendation is forwarded to the Governing Body for adoption of the modifications by resolution. A legal ad notification shall be published in a newspaper 15 days prior to the Governing Body meeting.

After the change request is accepted as originally proposed or modified as a result of comments received, the change is official when adopted by resolution of the Governing Body.



1.4.C Appeal Procedures

Anyone may appeal a proposed rule change within 15 days of its posting and filing with the City Clerk, or within 15 days of sending notice of final rejection to the proponent of the change.

1.5 DPM Waiver Procedures

A waiver to the design standards of the DPM may be sought in the case of unusual site characteristics, unique circumstances, or alternative design concepts.

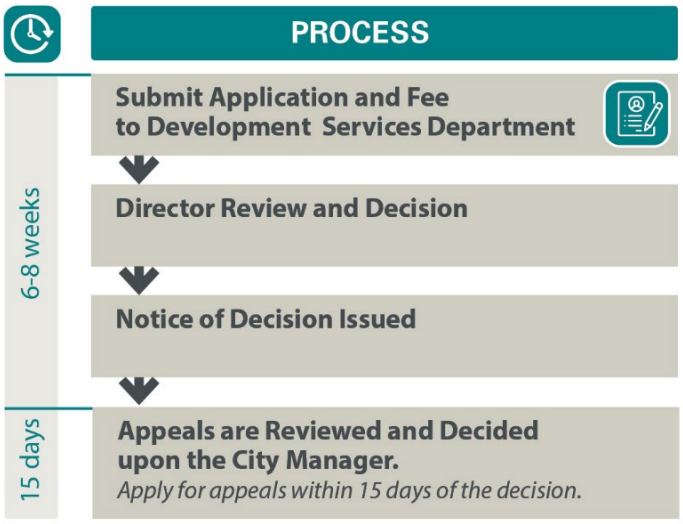
1.5.A DPM Waiver Criteria for Approval

An application for a waiver to the DPM Standards may be approved if the following criteria are met:

1. The standards may be met by an alternative method that is demonstrated to have an equivalent or better function and meet the same objective.
2. Site conditions, including geology, topography, indigenous soils, or issues related to environmental impacts or wildlife habitat, may be better addressed through the alternative proposal.
3. There are special circumstances applicable to the site that are not self-imposed, including but not limited to size, shape, topography, location, surroundings, physical characteristics, and natural forces. Such special circumstances of the lot either create an extraordinary hardship in the form of a substantial and unjustified limitation on the reasonable use or economic return on the property, or practical difficulties result from strict compliance with the minimum standards.
4. The requested waiver is the minimum necessary to avoid extraordinary hardship or practical difficulties.

1.5.B DPM Waiver Process

DPM waivers are requested by the following process. Applicants submit an application to the Development Services Department. Development Services Zoning Division review and decide on the application.



DEVELOPMENT PROCESS MANUAL

Chapter 2: Procedures



RioRancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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2. Development Procedures

This chapter outlines the development procedures within the City of Rio Rancho. Development in the City of Rio Rancho is intended to meet community goals to promote the health, safety, and welfare of current and future citizens. Each participant in this process must follow these processes and meet requirements that are designed to create a fair, transparent, and open process of submittal, evaluation, and approval.

2.1 Determining the Appropriate Procedure

Many development projects require the completion of several procedures to secure final approval. Table 2.1 Summary of Development Procedures summarizes the types of development applications and actions within the City. The table indicates the type of development permit and approval required by the City, any pre-application requirements, the applicable reviewing and approving bodies, public hearing requirements, appellate bodies, and the approval expiration timelines as applicable. This table is intended to guide the user toward the appropriate development processes and the appropriate steps needed to complete them. Subsequent sections outline applicable procedures associated with these development applications, as well as common administrative procedures necessary for the administrative of this DPM and the City's Municipal Code. Several of these sections may apply to a single development project. Each section provides an overview of the process, the necessary information for submittal, and references to the applicable section of the City's Code of Ordinance and any technical specifications or other codes.

Questions on these processes should be directed to the Development Services Department. The most recent applications and forms are available on the City's Development Services webpage: https://rrnm.gov/26/Development-Services.

Table 2.1: Summary of Development Procedures								
Application/Permit Type	**Applicability** R= Review and/or Recommend D = Review and Decide AD = Appeal Review and Decision < > = Public Hearing	**Notifications**			**Review/Decision Authority**			**Procedures**
		Mailed Notices	**Posted Signs**	**Published**	**City Staff**	**Planning and Zoning Board**	**Governing Body**	
POLICY DECISIONS								
Annexation of Land	An annexation of land request is required to add any new land area into the City Limits.	X	X	X	R	<R>	<D>	*Section 2.4.A*
Land Use Plans	Land Use Plans are Master Plans and Specific Area Plans that lay out a specific development scenario for a site, including future land use, utilities, drainage, and transportation. A master plan may be required for any development that is at least 10 acres in size. A specific area plan is required for any development that is at least 1,000 acres in size.	X	X	X	R	<R>	<D>	*Section 2.4.B*
Land Use Plan Amendments	A plan amendment is required to update or change elements of established Master Plans or Specific Area Plans.	X	X	X	R	<R>	<D>	*Section 2.4.B*
DECISIONS REQUIRING A PUBLIC HEARING								
Subdivisions	A request for subdivision is required for dividing a portion of land into lots or for consolidating one or more parcels into a larger lot.							*Section 2.5.A*
Bulk Plats	A bulk plat is required for the division of land that is primarily intended to facilitate transfer to intermediate land holders, not to create parcels available for development without further subdivision approvals.	X	X	X	R	<D>		*Section 2.5.A.I.*
Preliminary Plats	A preliminary plat is required for the division of land intended to create parcels available for development.	X	X	X	R	<D>		*Section 2.5.A.II.*
Preliminary Plat Extensions	A preliminary plat extension is required for plats that have expired or have not been acted upon within one year of their approval.	X	X	X	R	<D>		*Section 2.5.A.III.*
Final Plats	A final plat approval is required prior to the filing of a plat for record with the appropriate County Clerk.				R	<D>		*Section 2.5.A.IV.*
Vacation Plats	A vacation plat is required when no new lots are being created and lot lines, rights-of-way, or easements are being eliminated.	X	X	X	R	<D>		*Section 2.5.A.V.*
Subdivision Variances	A subdivision variance is required when a deviation from the design standards of Rio Rancho Municipal Code Section 155.40-46 is requested.	X	X	X	R	<D>		*Section 2.5.A.VI.*
Street Name Changes	Street name change requests are required to alter the name of any public or privately-owned street as petitioned by the Public.	X			R	<D>		*Section 2.5.B*
Street Name Change for adopted by Resolution	Street name change requests are required to alter as petitioned by the Public.	X			R	<D>		*Section 2.5.B*
Zone Map Amendments	A zone map amendment is required to change the zone district classification for one or more parcels of land.	X	X	X	R	<R>	<D>	*Section 2.5.D*
Conditional Use Permits	A conditional use permit is required for any uses specified as conditional within a zone district.	X	X	X	R	<D>		*Section 2.5.E*
Variances	A variance request is required to deviate from the area height, dimension, distance, parking, or setback requirements of the Code.	X	X	X	R	<D>		*Section 2.5.F*
Special Use Site Plans	A site plan is required for the development of a property within a SU: Special Use Zone and provides detail on how the property is proposed to be developed.	X	X	X	R		<D>	*Section 2.5.G*
CONSTRUCTION PERMITS								
Right-of-Way Use Permit	Aright-of-way use permit is required for the authorization from the city to use, work in, or otherwise occupy public right-of-way; detailing the specific time, place, and other restrictions for the allowed use.				D			
Curb Cut	A curb cut application is required to cut the curb of any sidewalk or public right-of-way to give access to any premises.				D			
Residential Building Permits	A building permit is required whenever a building or structure is erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished. No electrical wiring, plumbing or mechanical work and gas work may be installed, repaired or maintained in or on such building or structure without a permit. All re-roofs and roof coatings require a building permit.				D			*Section 2.6.A.I.*

Table 2.1: Summary of Development Procedures								
Application/Permit Type	**Applicability** R= Review and/or Recommend D = Review and Decide AD = Appeal Review and Decision < > = Public Hearing	**Notifications**			**Review/Decision Authority**			**Procedures**
		Mailed Notices	**Posted Signs**	**Published**	**City Staff**	**Planning and Zoning Board**	**Governing Body**	
Commercial & Multifamily Building Permits	A building permit is required whenever a building or structure is erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished. No electrical wiring, plumbing or mechanical work and gas work may be installed, repaired or maintained in or on such building or structure without a permit. All re-roofs and roof coatings require a building permit.				D			*Section 2.6.A.II.*
Park Permit	Parks permits are required for parks and recreational facilities 3 acres or less which will be owned and maintained by the City of Rio Rancho or private entities.				D			*Section 2.6.B*
ADMINISTRATIVE PERMITS AND LICENSES								
Accessory Structures smaller than 120 sf Permit	This permit is required for the construction or placement of secondary structures smaller than 120 sf in area, including prefabricated or site built sheds, chicken coops, gazebos, and similar structures.				D			*Section 2.7.C*
Administrative Variances	An administrative variance is required to deviate from the area height, dimension, distance, parking, or setback requirements of the Code that impact less than 10% of the area, height, dimension, distance, parking or setback requirements.				D			*Section 2.5.F.II.*
Business Registrations	A business registration is required for all persons proposing to engage in business within the municipal limits of the City of Rio Rancho, including home businesses.				D			*Section 2.7.A*
Change of Address	A change of address is required for any premise to be assigned a new address number.				D			*Section 2.7.B*
Childcare Facilities	This permit is required for the operation of childcare facilities, including daycare facilities, and in home childcare services. Facilities caring for seven (7) to twelve (12) children are required to obtain a conditional use permit.				D			*Section 2.7.C*
Community Residential Care Facilities	This permit is required for licensing of residential care facilities and providers who provide care for people with special needs within the city.				D			*Section 2.7.C*
Fence or Wall Permit	A fence or wall permit is required to build a fence or wall.				D			*Section 2.7.C*
Wireless Telecommunication Facility Permit	A Wireless Telecommunication Facility (WTF) permit required to comply with Rio Rancho Municipal Code regulations for freestanding and small cell WTFs.				D			*Section 2.7.J*
Model Homes/Sales Offices	Model homes and sales offices require a model home and sales office permit approval. Temporary model home sales offices in the C-1: Retail Commercial Zone District require a Conditional Use Permit. A building permit is also required.				D			*Section 2.7.E*
Sign Permit	A sign permit is required to construct, place, erect or modify a sign. A permit is not required for general maintenance, face changes, or the erection of certain temporary construction signs.				D			*Section 2.7.G*
Summary Plats	A summary plat procedure is required when a subdivision contains no more than two lots and all the necessary infrastructure is in place or when a combination or recombination of portions of lots does not increase the total number of lots.				D			*Section 2.7.H*
Special Event Permits	Special event permits are required when any of the following occurs at an event: • Selling or vending of food and/or alcohol • Dedicated safety resources are necessary • Tents or other structures are erected • Traffic flow and access is impacted				D			*Section 2.7.I*

2.2 Definitions

Administrative Permits – Official approvals issued for activities or projects with limited physical impact on a property. These permits are reviewed and approved by staff to ensure compliance with applicable regulations.

Adoption – The formal process by which land use plans become legally enforceable following approval by the Governing Body. This process includes public hearings to ensure alignment with the Comprehensive Plan.

Annexation – To add additional territory into Rio Rancho's jurisdiction thereby changing the boundaries of the community.

Appeals – A structured process for contesting development-related decisions made by City staff, the Planning and Zoning Board, or the Governing Body. Certain appeals may be subject to judicial review by a District Court.

Building Permit - A building permit is an official approval issued by the City that allows construction, renovation, or demolition of a structure to proceed in compliance with building codes, zoning regulations, and safety standards. It ensures that projects meet structural integrity, fire safety, environmental, and accessibility requirements.

Bulk Plat – A type of land division that does not require immediate infrastructure improvements, typically used for zoning changes, right-of-way dedications, easement grants, and land conveyances for future development.

Commercial Business License – The official process for obtaining a business license for commercial establishments. This includes review by the City Clerk, Development Services, and completion of required inspections before final approval.

Conceptual Grading and Drainage Plans – Plans that show existing and proposed grading, drainage, flood control, erosion control, and stormwater management for a project that help assess feasibility and ensure compatibility with on-site and adjacent property constraints. Used for developments on tracts of five acres or more.

Conditional Use – A use allowed with conditions in the applicable zoning district as determined by the Planning and Zoning Board.

Conditional Use Permit (CUP) – An official permit allowing specific land uses within a zoning district that require additional review to mitigate potential adverse impacts. CUPs are approved by the Planning and Zoning Board.

Developer - An individual, company, or entity responsible for planning, financing, and executing development projects in accordance with city development standards. Developers coordinate land acquisition, project design, permitting, and construction while ensuring compliance with zoning regulations, building codes, and municipal requirements. They work closely with city agencies, engineers, and contractors to deliver infrastructure that meets public safety, environmental, and community needs.

Development Review Committee (DRC) – A multi-departmental advisory committee that provides applicants with guidance on City policies, regulations, and procedural requirements. The DRC does not issue final approvals but offers preliminary feedback to facilitate the formal application process.

Drainage Plan – A brief, comprehensive plan for small, non-complex developments that addresses drainage, flood control, erosion control, and stormwater management. Required for projects 5 acres or smaller, accompanying building permits, site plans, and landscape plans.

Drainage Report – A detailed analysis of drainage, flood control, erosion control, and stormwater management for a proposed development. Required for subdivisions with more than 10 lots, projects over 5 acres, or in flood hazard areas or near major arroyos.

Easement – An acquired or granted right of use which one person may have in the land of another.

Final Plat – A map showing the location, boundaries and ownership of individual properties, planned and developed as a single project. A legally binding document that precisely delineates lot boundaries, roadways, and easements. The final plat is recorded with the county assessor's office to formally establish the subdivision.

GIS Shapefile – A widely used file format for geographic information system (GIS) data. It stores spatial data in vector format, representing geographic features like points, lines, and polygons.

Governing Body - The Mayor and the members of the City Council. The corporate authority of the municipality is vested in this body.

Home-Based Business (Home Occupation) –Any business, occupation or activity conducted for gain, on residential property, within a residential building, or an accessory building thereto, which is incidental or secondary to the use of such building for dwelling purposes and which does not change the essential character of the building.

Home Occupation License – The application and approval process for businesses operating from a residence. This includes submitting completed forms to the City Clerk's Office, review by the Planning and Zoning Division, and payment of required fees.

Land Use Plan Amendments – Official modifications to zoning designations, infrastructure provisions, or proposed land uses within an adopted land use plan. Amendments undergo a structured review process, including staff evaluations, Planning and Zoning Board recommendations, and final approval by the Governing Body.

Land Use Plans – Official documents that outline future development strategies, including zoning classifications, infrastructure improvements, and land use patterns. These plans include the Comprehensive Plan, System and Facility Plans, Specific Area Plans, Master Plans, Corridor Plans, and Project-Specific Site Plans.

Master Plan – A Master Plan is a strategic planning document prepared by either the City or the private sector and submitted for City review and approval. It serves as a framework for guiding the long-term growth and development of a specific area within the City, typically covering at least 10 acres. The plan must align with the Principles and Policies of the Comprehensive Plan while providing a detailed vision for land use, infrastructure, and community design.

Model Home/Sales Office – Any furnished dwelling, which is primarily used as a marketing tool to show prospective homebuyers a particular plan, type of construction, accoutrements or floor plan and which is not a residence at the same time. A sales office need not be physically located in the dwelling.

Park- An open space reserved in the public domain where appropriate development may take place and which is intended primarily for passive activity.

Planning and Zoning Board – The Planning and Zoning Board of the City of Rio Rancho.

Plat – A map showing the location, boundaries and ownership of individual properties, planned and developed as a single project.

Policy Decisions – Development applications subject to review based on the City's long-term strategic goals and officially adopted plans, such as the Comprehensive Plan, Master Plans, and Specific Area Plans. These applications require public hearings and discretionary review by the Planning and Zoning Board and the Governing Body.

Preliminary Plat – A conceptual plan outlining the proposed subdivision layout, including lot configuration, road placement, and utility connections. It serves as the initial step in the subdivision approval process.

Preliminary Plat Extension – A process allowing an applicant to extend the validity of a preliminary plat beyond the standard one-year period. Extensions are limited and require formal approval.

Public Hearings – Formal review processes for development applications conducted in accordance with City procedures. These hearings are held by the Planning and Zoning Board and the Governing Body following the prescribed rules of procedure. The Planning and Zoning Board will conduct the noticed public hearing, hear testimony on and consider the application, and decide if the application is approved.

Public Notices – Official notifications informing the community about upcoming development decisions. Notices are distributed through mailed notifications, on-site postings, and legal advertisements, as required by municipal regulations.

Record Drawing – A finalized drawing that shows the as-built conditions of a project, including any changes made during construction. It serves as an official record for future reference, maintenance, or modifications.

Replat – A process used to move, erase, or add new interior property lines within a recorded summary or subdivision plat. It results in a new plat being recorded for the affected parcels or lots.

Residential Care Facilities and Childcare Facilities – Licensed facilities providing care for children or residents. These businesses require registration with the City and must comply with specific zoning regulations based on the number of individuals served.

Sign Permits – Official approval required for the construction, placement, or modification of signs; a structure or graphic display designed to inform or attract the attention of persons not on the premises on which the sign is located. Certain maintenance activities and temporary construction signs may be exempt from permit requirements.

Sketch Plan – A preliminary sketch drawing of a subdivision plat conforming with the requirements stated herein, and used in the pre-application procedure prior to submission of the preliminary plat.

Special Event Permits – Permits required for events, the duration of which is temporary in nature, involving specific activities such as food sales, alcohol vending, or temporary traffic disruptions.

Staff - City staff refers to the employees and officials who work for the City of Rio Rancho that carry out administrative, regulatory, and operational duties to support the City's functions and services. They are responsible for implementing policies, reviewing development proposals, enforcing codes and regulations, managing public infrastructure, and providing essential community services.

Subdivision - The division of any lot or tract of land into two or more lots for the purpose, whether immediate or in the future, of sale, lease or development. SUBDIVISION does not include the following:

(1) Any residual land retained by the subdivider after SUBDIVISION but which has not been divided for SUBDIVISION purposes.
(2) The sale or lease of apartments, offices, stores or similar space within a building.
(3) Any division of land in which only gas, oil, mineral or water rights are severed from the surface ownership of the land.
(4) Any division of land created by court order, except court orders involving land grant adjudications.
(5) The leasing of land for grazing or farming activities.

Summary Plat – A subdivision process used for minor changes such as lot combinations or easement additions, without increasing the number of lots.

Traffic Impact Analysis (TIA) – Analysis that evaluates the effects of a proposed development on the surrounding transportation system.

Variance – A granted deviation from zoning or subdivision regulations due to unique property conditions. A variance from the strict application of area, height, dimension, distance, parking or setback requirements of this title may be allowed in the case of exceptionally irregular, narrow, shallow or steep lots, or other exceptional physical condition where the strict application of the requirements of this title would result in a practical difficulty or unnecessary hardship that would deprive the owner of the reasonable use of his land or building. Practical difficulty or unnecessary hardship cannot be found when financial gain, loss or monetary savings, or mere inconvenience upon the property owner, or difficulty caused to one's personal comfort is the basis for the claim of hardship.

Wireless Telecommunication Facilities Permit – A required approval for wireless telecommunications towers or facilities.

Zone Map Amendment – A request to change the zoning classification of a parcel of land on the official zoning map.

Zoning – The regulatory framework that designates land use classifications.

Zoning District – Any section of the City of Rio Rancho where regulations governing the use of buildings and premises or the height and area of buildings and lot size are uniform.

2.3 General Administrative Procedures

The following general administrative procedures apply to various stages of the development process for most development applications.

2.3.A Development Review Committee Process

The Development Review Committee (DRC) is comprised of City department and other reviewing agency representatives. They are convened to provide preliminary guidance to applicants on development projects in an informal pre-application meeting setting. The DRC includes representatives from the City's Development Services, Public Works, Utilities, Police, Fire and Rescue, and Parks, Recreation and Community

Development departments. Additional representatives, such as staff from Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA), utility companies, or Rio Rancho Public Schools, may attend when their presence is necessary or desirable for any specific project or questions before the DRC. Staff provide advice and information on relevant City Policies, standards, and processes.

The purpose of a DRC meeting is to provide an opportunity to discuss application submittal requirements and procedures between an applicant, City Staff, and representatives from other affected agencies. Discussions can include the scope, features, and potential impacts of the proposed development on surrounding neighborhoods and infrastructure systems; the consistency or inconsistency of the proposed application with the Comprehensive Plan, as amended; applicable requirements and standards in the Rio Rancho Code of Ordinances; and applicable requirements and standards in this DPM and to identify primary contacts for the applicant and staff.

Planning and Zoning staff coordinates and distributes project information, chairs the meetings, and manages the DRC files. The DRC meets twice each month on the second and fourth Thursday.

The recommendations of the DRC are advisory, intended to facilitate the submittal of the formal development application. They do not convey final approval authority.

DRC meetings are not required for any development application; however, applicants are encouraged to attend a DRC meeting to obtain answers to any preliminary questions about the approval process and design requirements.

2.3.B Public Notices

Public notice requirements in the land use decision-making process are utilized to assure that the public is adequately notified or otherwise made aware of development applications and permits under consideration, which may directly or indirectly affect lands within the City. Public notice is required to be provided pursuant to the Rio Rancho Municipal Code and summarized in Table 1: Summary of Development Procedure. The City uses the following methods for public notification; first class letters, postcards, certified letters, site sign posting and published legal notices. Notice that is published, mailed, posted by sign, or posted online as required in Rio Rancho Code of Ordinances §150.03 shall be provided in compliance with the standards below.

All required notices shall include, at a minimum, the following information:

1. The address of the property listed in the application.
2. The name of the property owner.
3. The name of the applicant if different from the property owner.
4. A summary of the nature of the proposed project.
5. The date, time, and place of the hearing.
6. An email address or phone number where additional information can be obtained.

Mailed notices, including first class mail, certified letters, and post cards shall be sent by City Planning and Zoning staff at least 15 days prior to the applicable public hearing to allow for any comments before a decision is reached.

Site sign posted notices shall use signs furnished by the City at the time of submittal. The applicant is responsible for posting and maintaining one or more signs at least 7 days prior to the date of the applicable hearing. The applicant is responsible for removing the signs within 5 days after the hearing is completed. Applicant must sign the sign posting agreement and provide photos of the signs posted on site to staff.

Legal notices shall be created and transmitted by City Planning and Zoning staff to be published in a newspaper of general circulation in the City at least 15 days before the date of the hearing.

2.3.C Public Hearings

Public hearings are held to review and decide upon numerous development applications pursuant to the City's Municipal Code. Table 1 Summary of Development Procedure summarizes for which development applications require a public hearing, what review and decision-making body reviews and decides upon the application, and what body hears appeals.

Public hearing procedures are governed by the Boards and Commissions Rules of Procedure for hearings before the Planning and Zoning Board and by the Governing Body Rules of Procedure for hearings before the Governing Body.

2.3.D Appeals

City staff, the Planning and Zoning Board and the Governing Body consider and approve applications for development proposals and various aspects of those developments. Table 1 Summary of Development Procedure shows the decision-making body that hears the appeals (the appellate body) for each type of development application. Appeals are governed by Rio Rancho Municipal Code Section 150.08 and by NMSA § 39-3-1.1.

The following decisions on development applications can be appealed:

1. Final decisions by the Development Services Department Director or their designee.
2. Final actions of the City Manager.
3. Final actions of the Planning and Zoning Board made after a public hearing.
4. Final actions of the Governing Body made after a public hearing.

To provide due process and fairness in the development review process, any person with standing can appeal decisions of City staff, Planning and Zoning Board, and/or Governing Body, which can be ultimately referred to a judicial review in District Court.

2.3.D.I. APPEAL CRITERIA FOR APPROVAL

Appeal review and decision criteria are laid out in Rio Rancho Municipal Code (R.O. 2003) Section 150.08.

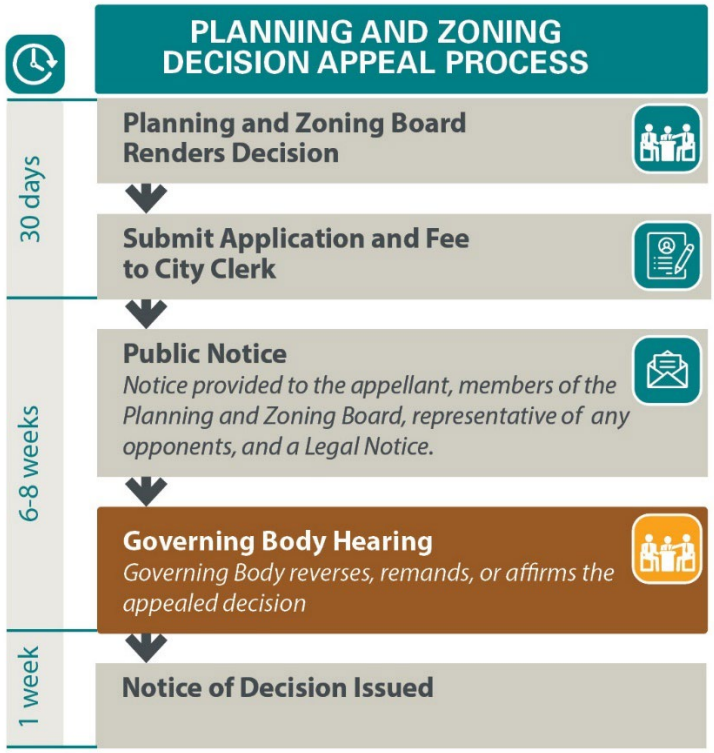
2.3.D.II. ADMINISTRATIVE DECISION APPEAL PROCESS

Administrative decision appeals are reviewed through the following process. Applicants submit an appeal of a final decision by the Development Services Department with the City Manager within 15 days of the initial determination. Appeals are heard and determined by the City manager within 45 days of the original decision.



2.3.D.III. PLANNING AND ZONING DECISION APPEAL PROCESS

Planning and Zoning Board decision appeals are reviewed through the following process. Applicants submit an appeal of a final decision by the Planning and Zoning Board with the City Clerk within 30 days of the final determination. Staff will schedule the application to be heard by the Governing Body on the next available agenda. The Governing Body will remand, reverse, or affirm the appealed decision to bring it into compliance with the standards and criteria of this Code or other applicable County, State or Federal regulations and a notice of the decision will be sent to the applicant within one week.

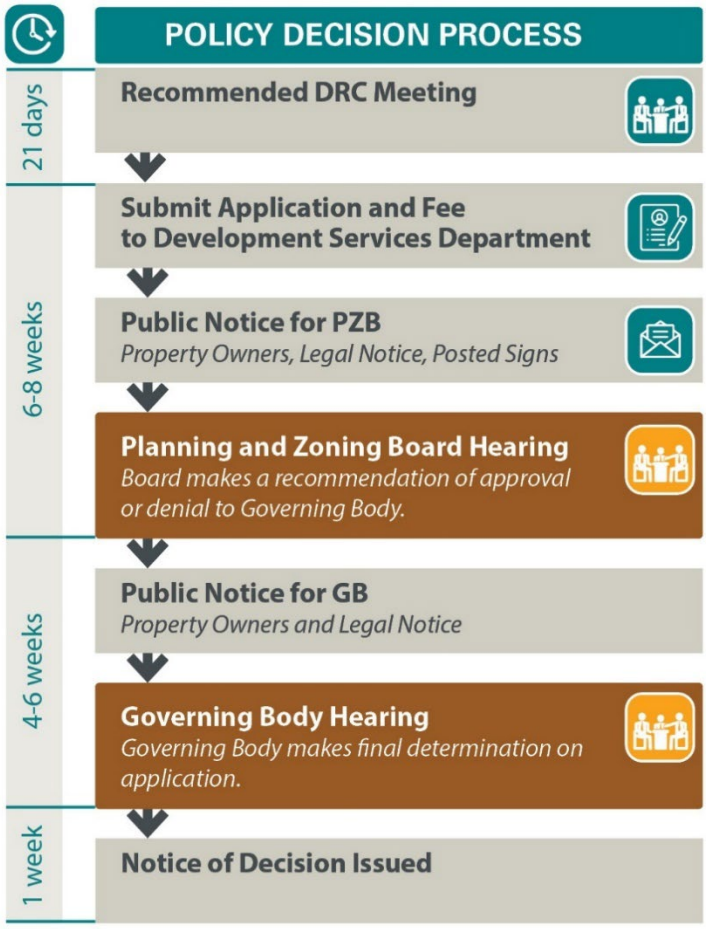


2.3.D.IV. GOVERNING BODY DECISION APPEAL PROCESS

Appeals of Governing Body decisions are made in District Court. The rules and procedures for these appeals are found in NMSA Section 39-3-1.1.

2.4 Policy Decisions

Development applications classified as Policy Decisions refer to those that implement large City goals and policies contained within officially adopted plans, including the Comprehensive Plan, Master Plans, and Specific Area Plans. Policy Decisions include annexations and land use plan approvals. Such applications are reviewed by the Planning and Zoning Board at a public hearing. The Planning and Zoning Board makes a recommendation of approval or denial to the Governing Body. The Governing Body makes the final decision at a public hearing. The general process of policy decisions is laid out below. Applicants can expect a policy decision development application process to take 3 to 5 months from the date the application is submitted to final approval.



2.4.A Annexation

Annexation is the process of bringing property into City Limits. It provides a means to expand the City's boundaries with an agreement for the timely provision of municipal services, such as utilities, roads, and other benefits of being part of the City, as approved by the Governing Body. Annexation is regulated by New Mexico State Statutes (NMSA 1978) Section 3-7 Annexation of Territory.

The City's Comprehensive Plan contains an annexation policy that recommends annexing land into the municipal corporate limits when one of the following is a consideration:

1. There is a positive cost-benefit analysis reflecting significant potential for increasing municipal revenue generation.
2. There is an expressed or requested need for land use regulation and/or management by the municipality.
3. There is an urgent necessity to provide municipal services or to install municipal facilities.
4. Landowner petitioners execute development agreements to provide resources (water rights or funding) sufficient to sustain the area without constituting a drain on the municipal budget.

2.4.A.I. ANNEXATION PROCESS

New Mexico State Statutes (NMSA 1978) Section 3-7 Annexation of Territory establishes three different methods of annexing territory to a municipality: arbitration, boundary commission, and petition.

The arbitration method is initiated by the governing body of a municipality and the rules and procedures are established in NMSA 1978 Sections 3-7-5 through NMSA 1978 Sections 3-7-10. In this method the Governing Body must declare its intent by a resolution, which indicates that the benefits from the City's annexation are available now or within a reasonable time to the area being annexed and that the City desires to annex this land. A seven-member board of arbitration, elected from the territory proposed to be annexed and appointed from the municipality, then determines if the annexation is appropriate.

The boundary commission method involves a Governor-appointed commission which determines the outcome of an annexation into a municipality if either the municipality or a majority of the property owners in the proposed annexation area petitions the State Municipal Boundary Commission. The rules and procedures for this method are established in NMSA 1978 Sections 3-7-11 through 3-7-16.

The petition method allows the majority of property owners of a property that is contiguous to the existing City boundaries to present a petition to the municipality's governing body. The City then approves or denies the annexation request by ordinance. The rules and procedures for this method are established in NMSA 1978 Section 3-7-17.

2.4.B Land Use Plans

Land use plans provide a general framework for a proposed development on a site. They include details on the proposed activities, uses, zoning, infrastructure, and other improvements on a property. The goals of the City's Land Use Plan(s) are to provide a general pattern for the location, distribution and character of the future land uses within Rio Rancho's planning jurisdiction. Rio Rancho's land use plans generally follow a hierarchical structure with the comprehensive plan as the primary or first-level plan that supersedes all other plans. All other planning documents must be consistent with the comprehensive plan. The types of land use plans utilized by the City of Rio Rancho are described below:

1. **Comprehensive Plan**

   The City's comprehensive plan provides a general, broad overview of the physical development of the community. The Plan reviews past development patterns which have led directly to present conditions. Secondly, the Plan provides a long range, futuristic view of how the City should develop or redevelop. In this respect, the Plan examines past trends and utilizes various analytical planning techniques to determine desired future scenarios. The Comprehensive Plan depicts where the City has been, where it is presently, where it wants to go, and how it plans to get there.

   The comprehensive plan is used to direct the City's current and future growth and development. Comprehensive plan consists of eight fundamental principles or areas of concern related to future development of the community: Land Use – Fiscal Analysis, Urban Design, Transportation & Circulation, Infrastructure & Capital Facilities, Environmental Sustainability, Housing, Community Services & Public Facilities, and Economic Development.

2. **System and Facility Plans**

   Rio Rancho's system and facility plans address a singular function such as infrastructure systems or community facilities, (e.g., Parks and Recreation Master Plan). System and Facility Plans are typically created by the respective City Department responsible for City-wide community facilities or by Utility companies representing their specific infrastructure systems.

3. **Specific Area Plans**

   These plans encompass large geographic areas of the City providing a higher degree of detail than the comprehensive plan. Area plans establish planning criteria and land use goals specific to the physical development consistent with the Principles and Policies of the Comprehensive Plan. Area plans are primarily created by the City due to the high number of properties and owners involved.

4. **Master Plans**

   Master Plans are prepared by either the City or private sector and submitted to the City for review and approval. Master Plans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres. For subdivisions that are 20 acres or less, master plans may be less detailed, and certain sections may be omitted per staff discretion and approval. At a minimum Master Plans shall require conceptual Grading & Drainage, Circulation and Utilities layouts and an updated land use map maybe required, if changes are proposed. Ownership of at least 75% of the subject area acreage shall be required for the preparation and submission of a Master Plan.

5. **Corridor Plans**

   Corridor Plans cover a smaller geographic area of the City such as a transportation corridor. Corridor Plans often address specific issues such as architectural control, design guidelines, buffering and transportation access elements. Corridor Plans are usually created by the City to address specific issues as noted above. Occasionally, they are prepared by the private sector for a specific development project when development of an arterial is identified in the Traffic Impact Analysis.

6. **Project Specific Site Plans**

   The site development plan as required by Zoning, specifies the present characteristics of a particular parcel of land and its surroundings and describes intended activities and their potential impact on the community. The terms "site plan" and "site development plan" are interchangeable.

Site development plans have two functions. First, they illustrate the intended design, arrangement and uses of the land to be improved. Second, they describe the proposal's physical, social and economic effects on the City.

Information on factors such as the following may be the subject of concern in the site development review process means of access, parking, landscaping, buffers, architectural features, and location of structures, impact on adjacent land uses and other elements related to the health, safety and general welfare of the community.

2.4.B.I. LAND USE PLAN ADOPTION

Adoption of a land use plan formally approves the plan as part of the City's future land use framework and makes the standards contained within the plan enforceable by the City.

2.4.B.I.a. Land Use Plan Criteria for Approval

The criteria for approval are based on the whether the proposed land use plan amendment is consistent with the goals and policies of the Comprehensive Plan.

2.4.B.I.b. Land Use Plan Process

Land Use Plan applications are reviewed through the following process. Applications and appropriate fees are submitted to the Development Services Department. Applications may be submitted by the property owner, their agent, or City Staff. City staff will review the application for completeness and inform the applicant of any deficiencies. Once complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. The Planning and Zoning Board will make a recommendation to the Governing Body on whether the application should be approved. Public notices are issued for the Governing Body hearing in accordance with State Statutes. The Governing Body makes the final determination at their meeting: approval, approval with conditions, continuation, or denial. If approved, the plan is adopted by resolution of the Governing Body. Any accompanying regulations are adopted by Ordinance. A notice of the decision will be sent to the applicant within one week.



2.4.B.II. LAND USE PLAN AMENDMENT

A Land Use Plan Amendment changes an existing land use plan by updating the development framework. An amendment can change any or all elements of the land use plan, including the proposed activities or uses, the proposed zoning, or the infrastructure or other proposed improvements. Land Use Plan Amendments are regulated by New Mexico State Statutes (NMSA 1978) Section 3-19 Planning and Zoning and by Rio Rancho Municipal Code Section 150.07 Amendments. New Mexico state law allows the City to amend, extend or add to any adopted land use plan per NMSA § 3-19.

2.4.B.II.a. Land Use Plan Amendment Criteria for Approval

The criteria for approval are based on the whether the proposed land use plan amendment is consistent with the goals and policies of the Comprehensive Plan.

2.4.B.II.b. Land Use Plan Amendment Process

Land Use Plan Amendments applications are reviewed through the following process. Applicants submit an application and fee to the Development Services Department. Applications may be submitted by the property owner, their agent, or City Staff. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. The Planning and Zoning Board will make a recommendation to the Governing Body of whether the application should be approved. Public notices are issued for the Governing Body hearing in accordance with State Statutes. The Governing Body will

make the final determination of approval, approval with conditions, continuation, or denial at their meeting. If the plan is approved, it is adopted by resolution of the Governing Body. Any accompanying regulations are adopted by Ordinance. A notice of the decision will be sent to the applicant within one week.



2.5 Decisions Requiring a Public Hearing

Decisions requiring a public hearing make a determination on a development application by asking decisions makers to use reason and judgement based on City and State regulations. The goal of these decisions is to guide and accomplish a coordinated, adjusted, aesthetically appealing and harmonious development of the City.

Decisions requiring a public hearing include subdivision applications, zone map amendments, conditional use permits, and variances. With the exception of zone map amendment, such applications are reviewed by the City Staff who makes a recommendation to the Planning and Zoning Board. The Planning and Zoning Board makes a final decision at a public hearing. For zone map amendments, the Planning and Zoning Board makes a recommendation, but the Governing Body, which serves as the ultimate decision-maker, makes the final decision at a public hearing. The general process of decision requiring a public hearing is laid out below. Applicants can expect a decision requiring a public hearing development application process to take 2 to 4 months from the date the application is submitted to final approval.



2.5.A Subdivision of Land

Subdivision is the process of dividing a portion of land into lots and parcels for development. Subdivisions are platting actions that involve reviewing and deciding a preliminary and then a final plat. A preliminary plat is the proposed subdivision and improvements, including the number and location of the proposed lots, the size and location of the proposed roads, and where the proposed infrastructure will tie into the existing roadway and utility network. A final plat is the highly detailed document showing the lots, roadways, and any easements that is recorded with the Sandoval County Assessor to formally divide the land.

The City's Subdivision Code is found in Rio Rancho Municipal Code Chapter 155. The code regulates how new lots are created and arranged to ensure protection of the public's health, safety, and welfare. Consolidation of lots also requires a platting action and follows subdivision procedures. Included in the subdivision process is the design of infrastructure such as streets, water and sewage systems. These infrastructure elements must be adequately sized, designed, and constructed. Streets must be able to accommodate the maneuvering of emergency equipment. These requirements ensure that future property owners have a parcel with access to public right-of-way and utilities that can adequately and safely serve the intended use.

2.5.A.I. BULK PLAT PROCEDURE

A bulk land division does not require infrastructure improvements until future subdivision or site plans are prepared. The intent of the bulk land subdivision is to facilitate the zoning of master planned developments, dedicate right-of-way, grant easements, and convey land to intermediaries.

2.5.A.I.a. Bulk Plat Criteria for Approval

The criteria for bulk plat approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions.

2.5.A.I.b. Bulk Plat Process

Bulk plat approval is requested by the following process. Applicants submit an application, application materials and appropriate fee to the Development Services Department. City staff reviews the application for completeness and lets the applicant know of any deficiencies. When the application is complete, staff schedules the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board makes the final determination of approval, approval with conditions, continuation, or denial at the public hearing and a notice of the decision is sent to the applicant within one week. Following approval at a public hearing, the plat is signed and recorded. The applicant is responsible for collecting the signatures of the property owners and the utilities first. After these parties have signed, staff collects signatures from City staff, including the City Clerk, Engineer, Mayor, and Planning and Zoning Chairperson, as applicable. The applicant then records the plat with the appropriate County Clerk. The applicant returns a printed copy of the plat to the City for the City records.



2.5.A.II. PRELIMINARY PLAT PROCEDURE

Preliminary Plats provide the proposed subdivision and improvements. When a development is not ready for construction, a Preliminary Plat can be considered without the submittal of preliminary construction plans; if, however, the applicant wishes to move forward with immediate consideration of a Final Plat and construction of infrastructure, complete engineering plans must accompany the Preliminary Plat.

2.5.A.II.a. Preliminary Plat Criteria for Approval

The criteria for preliminary plat approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions.

2.5.A.II.b. Preliminary Plat Process

Preliminary plat approval is requested by the following process. Applicants submit an application, application materials and fee to the Development Services Department. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week. Final plats must be submitted within one year of the Planning and Zoning Board hearing. If the final plat is not submitted or a preliminary plat extension is not granted, the preliminary plat will be considered withdrawn.



2.5.A.III. PRELIMINARY PLAT EXTENSION PROCEDURE

A preliminary plat will be considered withdrawn if the required final plat is not submitted within one year per Rio Rancho Municipal Code Section 155.22(F). A preliminary plat extension may be requested if the final plat is not ready within one year of preliminary plat approval to prevent the plat from being considered withdrawn. No more than three extensions maybe granted for the same preliminary plat.

2.5.A.III.a. Preliminary Plat Extension Criteria for Approval

The criteria for preliminary plat extension approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions.

2.5.A.III.b. Preliminary Plat Extension Process

Preliminary plat extension approval is requested by the following process. Applicants submit an application, and application materials to the Development Services Department. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week.



2.5.A.IV. FINAL PLAT PROCEDURE

Final Plats are the final highly detailed document to be approved by the Planning and Zoning Board. Accuracy is critical when platting property. The plat includes exact measurements, easement locations and dedication language for all public dedications. The requirements for final plats can be found in Rio Rancho Municipal Code Section 155.24. Final Plats are filed for record with the appropriate County Clerk's Office. Procedures

for plat recording are found in Rio Rancho Municipal Code Section 155.24(D). Final plats must be applied for within one year of preliminary plat approval per Rio Rancho Municipal Code Section 155.22(F).

2.5.A.IV.a. Final Plat Criteria for Approval

The criteria for final plat approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions. Final plats must also conform to the approved preliminary plat and any associated conditions of that preliminary plat approval.

2.5.A.IV.b. Final Plat Process

Final plat approval is requested by the following process. Applications are submitted to the Development Services Department. City staff reviews the application for completeness and lets the applicant know of any deficiencies. Required infrastructure improvements must be completed or a Subdivision Improvement Agreement with a financial guarantee must be executed prior to the public hearing before the Planning and Zoning Board. When the application is complete, staff schedules the application to be heard by the Planning and Zoning Board on the next available agenda. The Planning and Zoning Board makes the final determination of approval, approval with conditions, continuation, or denial at the public hearing and a notice of the decision is sent to the applicant within one week. Following approval at a public hearing, the plat is signed and recorded. The applicant is responsible for collecting the signatures of the property owners and the utilities first. After these parties have signed, staff collects signatures from City staff, including the City Clerk, Engineer, Mayor, and Planning and Zoning Chairperson, as applicable. The applicant then records the plat with the appropriate County Clerk. The applicant returns a printed copy of the plat to the City for the City records. The final plat is in full force and effect only after having been recorded in the office of the appropriate County Clerk and copies filed with the City Clerk. Approval of the final plat shall become null and void if the plat is not so recorded with six months after the date of approval unless an extension of time is granted by the Planning Board.



2.5.A.V. VACATION PLAT PROCEDURE

A vacation plat is required to eliminate lot lines, rights-of-way or easement lines dividing a parcel when no new lots are created. Vacation plat criteria are found in Rio Rancho Municipal Code Section 155.29.

2.5.A.V.a. Vacation Plat Criteria for Approval

The criteria for vacation plat approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions.

2.5.A.V.b. Vacation Plat Process

Vacation plat approval is requested by the following process. Applicants submit an application, application materials, and appropriate fee to the Development Services Department. City staff reviews the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff schedules the application to be heard by the Planning and Zoning Board on the next available agenda. If the vacation request involves an easement or right-of-way owned by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA), approval from the SSCAFCA Board is required prior to a hearing before the Planning and Zoning Board. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board makes the final determination of

approval, approval with conditions, continuation, or denial at the public hearing and a notice of the decision is sent to the applicant within one week. Following approval at a public hearing, the plat is signed and recorded. The applicant is responsible for collecting the signatures of the property owners and the utilities first. After these parties have signed, staff collects signatures from City staff, including the City Clerk, Engineer, Mayor, and Planning and Zoning Chairperson, as applicable. The applicant records the plat with the appropriate County Clerk. The applicant returns a printed copy of the plat to the City for the City records.



2.5.A.VI. SUBDIVISION VARIANCES

A subdivision variance provides an exemption from the strict application of the subdivision design standards found in Rio Rancho Municipal Code (R.O. 2003) Sections 155.40-46. Per Rio Rancho Municipal Code Section 155.60, Financial gain or loss, monetary savings, cannot be considered solely as a basis for a variance request. Rulings consider the existence of unusual conditions and whether the variance is deemed to provide an

improved design. Subdivision variance requests may be submitted and reviewed prior to or at the same time as the preliminary plat with which they are associated.

2.5.A.VI.a. Subdivision Variance Criteria for Approval

The criteria for subdivision variance approval are found in Rio Rancho Municipal Code (R.O. 2003) Section 155.60.

2.5.A.VI.b. Subdivision Variance Process

Subdivision variances are requested by the following process. Applicants submit an application and fee to the Development Services Department. Subdivision variance requests may be submitted and reviewed concurrently with the preliminary plat with which they are associated. City staff reviews the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff schedules the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the mailing, posting, and publishing of applicable notices with the applicant. The Planning and Zoning Board makes the final determination of approval, approval with conditions, continuation, or denial at the public hearing and a notice of the decision is sent to the applicant within one week.



2.5.B Street Naming

The City assigns addresses for all residences (single family and multi-family), commercial, industrial, and institutional buildings within the City. This assists emergency services, the United States Postal Service and the public, allowing timely and efficient services to residents and businesses. Address assignments are submitted through either the subdivision review and approval process or on an individual basis.

The naming of new streets is typically established during the subdivision review and approval process. A street name change may be initiated by either a petition signed by 66% of the owners of property abutting the affected roadway or by the City. The Planning and Zoning Board, in considering a street name change must determine if the public benefit outweighs the public burden created by the change. Street name changes may also be initiated by a member of the Governing Body and approved through adoption by resolution.

2.5.B.I.a. Street Naming Criteria for Approval

Street name change requirements are laid out in Rio Rancho Municipal Code (R.O. 2003) Section 157.04

2.5.B.I.b. Citizen Petition Street Name Change Process

Applicants submit an application, petition, and fee to the Development Services Department. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week.



2.5.B.I.c. Governing Body Street Name Change Process

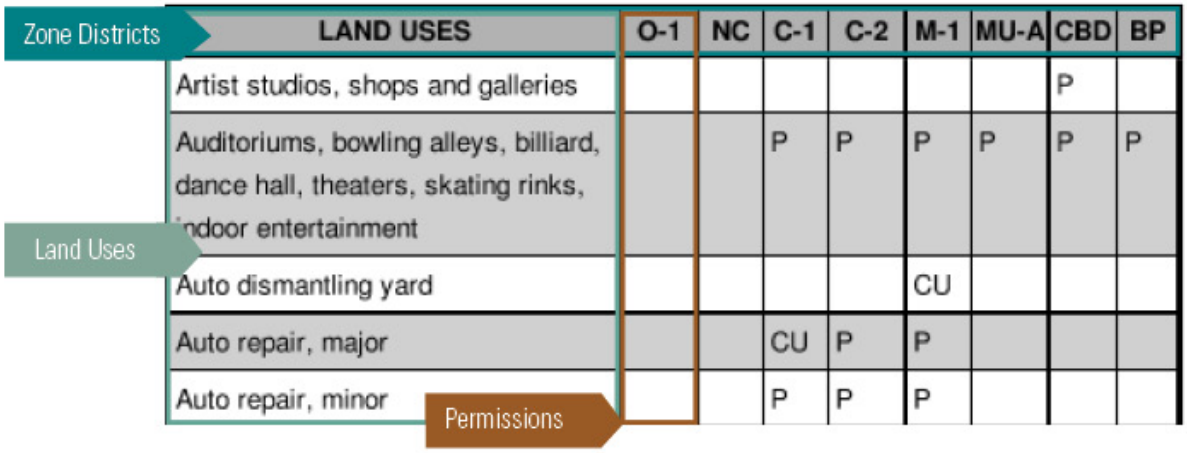
A member of the Governing Body introduces the proposed street name change as a potential resolution for adoption at a regular meeting of the Governing Body. The proposed change is reviewed and discussed by the Governing Body and adopted by resolution if approved.

2.5.C Zoning

Zoning divides the City of Rio Rancho into Zone Districts, established to classify and regulate the uses of land and create development regulations. Zoning is intended to ensure compatible land use patterns, minimize conflicts between uses, protect property values, and enhance the urban environment. Zoning district regulations address three basic sets of issues:

1. The permitted use of land and buildings.
2. The intensity of the use expressed as density through minimum lot sizes.
3. Height, bulk, and other dimensional standards.

The permitted uses within zone districts are established in R.O. 2003 Section 154.19 Residential Land Use Table and R.O. 2003 Section 154.35 Nonresidential Land Use Table. The Director may authorize any commercial uses not listed in this table as permitted or conditional following notification and approval by the Planning and Zoning Board per Section 154.02(G). An illustrative graphic of this table is shown below.



LAND USES	O-1	NC	C-1	C-2	M-1	MU-A	CBD	BP
Artist studios, shops and galleries							P	
Auditoriums, bowling alleys, billiard, dance hall, theaters, skating rinks, indoor entertainment			P	P	P	P	P	P
Auto dismantling yard					CU			
Auto repair, major			CU	P	P			
Auto repair, minor			P	P	P			

Permission Abbreviation	Permission
P	Permitted use by right
CU	Conditional Use. These uses are allowable subject to conditional approval by the Planning and Zoning Board based on a review of potential adverse impacts of the use and any appropriate mitigations to minimize those impacts on nearby properties. These uses require a Conditional Use Permit (See *Section 2.4.E*).
Blank	Any use not designated as permissive or conditional and left blank is specifically prohibited in that zone.

2.5.D Zone Map Amendment

Zoning is a flexible instrument that can be adjusted to accommodate changing conditions. A zone map amendment request is a measure to change the district classification of one or more parcels of land. Zone map amendment requests are reviewed for their compatibility with existing land uses, land use plans, zoning patterns, and the Comprehensive Plan.

2.5.D.I. ZONE MAP AMENDMENT CRITERIA FOR APPROVAL

The criteria for zone map amendment approval are found in R.O. 2003 Section 150.07.

2.5.D.II. ZONE MAP AMENDMENT PROCESS

Zone Map Amendment applications are reviewed through the following process. Applicants submit an application and fee to the Development Services Department. The submittal requirements for zone map amendments are listed in Section 2.11.E and in Section 2.11.F for zone map amendments seeking a Special Use Zone District. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make a recommendation to the Governing Body of whether the application should be approved. Public notices are issued for the Governing Body hearing in accordance with State Statutes. The Governing Body will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week.



2.5.E Conditional Use Permit

A conditional use permit is required for land uses that are listed as conditional uses ("CU") in R.O. 2003 Section 154.19 Residential Land Use Table and Section 154.35 Nonresidential Land Use Table. These conditional uses are allowable in a particular zone district, subject to approval by the Planning and Zoning Board. These land uses are reviewed for potential, adverse impacts and mitigations needed to minimize the impact on nearby properties. Conditional Use Permit Criteria for Approval. The criteria for conditional use permit approval are found in Rio Rancho Municipal Code (R.O. 2003) Section 150.04.

2.5.E.I. CONDITIONAL USE PERMIT PROCESS

Conditional use permits shall be requested by the following process. Applicants submit an application and appropriate fee to the Development Services Department. The submittal requirements for permits are listed in Section 2.11.G. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week. Certain land uses, as laid out in Rio Rancho Municipal Code Chapter 154, require a site plan to be reviewed and approved by the Governing Body, following the process of DPM Section 2.5.G.III.



2.5.F Variances

A zoning variance provides an exemption from the strict application of area, height, dimension, distance, parking, or setback requirements. Variances are not granted for use requirements. Per Rio Rancho Municipal Code Section 150.06, financial gain or loss, monetary savings, mere inconvenience upon the property owner, or difficulty caused to one's personal comfort cannot be considered as the sole basis for a variance request. Rulings consider the existence of unusual conditions.

Variances may follow an administrative or a public hearing process depending on the scale of the request and how drastically the proposed design would deviate from the requirements. The administrative variance process is used for requests that impact less than 10% of the area, height, dimension, distance, parking, or setback requirements and for requests to convert a garage into living space. The applicability of the administrative variance process is found in Rio Rancho Municipal Code (R.O. 2003) Section 150.06(D). All other variance requests go through a public hearing and are reviewed by the Planning and Zoning Board. The processes for each are outlined below.

2.5.F.I. VARIANCE CRITERIA FOR APPROVAL

The criteria for variance approval are found in Rio Rancho Municipal Code (R.O. 2003) Section 150.06.

2.5.F.II. ADMINISTRATIVE VARIANCE PROCESS

Administrative variances shall be requested by the following process. Applicants submit an application and fee to the Development Services Department. The submittal requirements for variances are listed in Section 2.11.A. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, the Director of Development Services will review and make the final determination of approval, approval with conditions, continuation, or denial and a notice of the decision will be sent to the applicant within one week.



2.5.F.III. PLANNING AND ZONING BOARD VARIANCE PROCESS

Variances to be heard by the Planning and Zoning Board shall be requested by the following process. Applicants submit an application and appropriate fee to the Development Services Department. The submittal requirements for variances are listed in Section 2.11.A. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Planning and Zoning Board on the next available agenda. Staff coordinates the posting, mailing, and publishing of public notices approximately 15 days prior to the hearing. The Planning and Zoning Board will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week.



2.5.G Special Use Site Plans

Properties within a Special Use (SU): Special Use Zone District require site plan approval prior to development. A site plan provides detail on how the property is proposed to be developed, including the use, the location, size, and design of structures, location and design of parking areas and drive aisles, location and capacity of infrastructure, landscape design, drainage design and other design details. Requirements for site plans are found in Rio Rancho Municipal Code Section 154.43.

Site plans are approved by the Governing Body. The Director of Development Services may approve minor changes to an approved site plan if the change is consistent with the use and other written requirements and/or conditions of approval, if the buildings are of the same general configuration, if the total square footage is not greater than 10% than the approved plan, the site circulation is similar in its effect on adjacent property or streets, and the approving official finds that neither the city nor any person will be substantially aggrieved by the altered site plan. Approvals are typically valid for two years from date of approval, in which time a building permit for the proposed structures must be applied for and issued, remain active, and the authorized construction shall be started and diligently pursued to completion without cessation of thirty days.

2.5.G.I. CRITERIA FOR APPROVAL

Requirements for site plan approval are found in Rio Rancho Municipal Code Section 154.43.

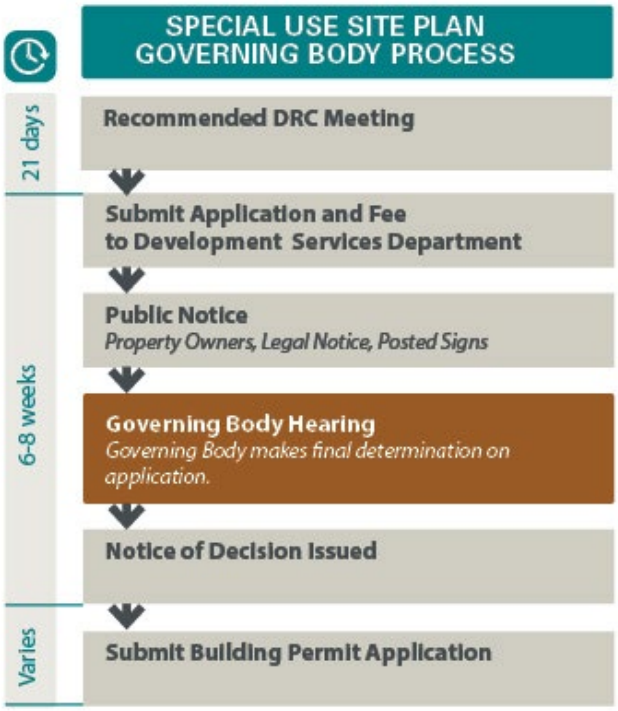
2.5.G.II. SPECIAL USE SITE PLAN ADMINISTRATIVE PROCESS

The Director of Development Services may approve minor changes to an approved site plan if the change is consistent with the use and other written requirements and/or conditions of approval, if the buildings are of the same general configuration, if the total square footage is not greater than 10% than the approved plan, the site circulation is similar in its effect on adjacent property or streets, and the approving official finds that neither the city nor any person will be substantially aggrieved by the altered site plan per Rio Rancho Municipal Code Section 154.43. Applicants submit an application to the Development Services Department. The submittal requirements for site plans are listed in Section 2.11.F. Development Services Planning and Zoning Staff review the application and make a recommendation of approval or denial to the Development Services Department Director. The Development Services Department Directors reviews and approves the application. Notice of the approval is issued within one week of the Director's decision.



2.5.G.III. SPECIAL USE SITE PLAN GOVERNING BODY PROCESS

New site plans or substantial changes to site plans that will change more than 10% of the site, are reviewed and approved by the Governing Body. These approvals shall be requested by the following process. Applicants submit an application and fee to the Development Services Department. The submittal requirements for site plans are listed in Section 2.11.F. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, staff will schedule the application to be heard by the Governing Body on the next available agenda. The Governing Body will make the final determination of approval, approval with conditions, continuation, or denial at their meeting and a notice of the decision will be sent to the applicant within one week.



2.6 Construction Permits

A building permit is an official approval issued by the City or the appropriate inspecting agency that allows construction to commence on a new structure or a remodeling project. The permitting process is intended to ensure the project complies with local standards for land use, zoning, and construction to ensure the health, safety, and welfare of the community.

Building permits are required whenever a building or structure is erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted, or demolished. No electrical wiring, plumbing or mechanical work and gas work may be installed, repaired, or maintained in or on such building or structure without a permit. All re-roofs and roof coatings require a building permit. Building permit requirements are established by New Mexico Administrative Code Section 14.5.2.

Building Permitting is the process through which the City ensures compliance with all codes and ordinances, relative to the construction of buildings and building sites. Any new construction or alteration to an existing structure in the City of Rio Rancho requires a permit.

The process includes the review and approval of construction and site plans, the payment of plan check, permit and impact fees, the issuance of a building permit, scheduled inspections of the work in process, and approval at its completion. Construction permits are reviewed by relevant City Staff, including staff from the Development Services Department Building Division, Engineering Division, and Planning and Zoning Division, the Public Works Department, the Utilities Department, and the Parks Recreation, and Community Services Department. The general permitting process is laid out below. Applicants can expect the permitting process to take 2 to 8 weeks from the date the application is submitted to permit approval.

2.6.A Building Permits

Building permits are required whenever a building or structure is erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted, or demolished. No electrical wiring, plumbing or mechanical work and gas work may be installed, repaired, or maintained in or on such building or structure without a permit. All re-roofs and roof coatings require a building permit. Building permit requirements are established by New Mexico Administrative Code Section 14.5.2.

Building Permitting is the process through which the City ensures compliance with all codes and ordinances, relative to the construction of buildings and building sites. Generally, such Permits will fall into one of two categories:

1. Residential (including add-on construction).
2. Commercial/Multifamily.

In each case, the process will include the review and approval of construction and site plans, the payment of plan check, permit and impact fees, the issuance of a building permit, scheduled inspections of the work in process, and approval at its completion.

Any new construction or alteration to an existing structure in the City of Rio Rancho requires a permit.

2.6.A.I. RESIDENTIAL BUILDING PERMITS

Residential building permits are required for the following improvements and projects:

1. New single-family homes.
2. Manufactured home placement.
3. Additions.
4. Remodels.
5. Repairs.
6. Garage conversions.
7. Attached garages.
8. Patio covers & sunrooms.
9. Re-roofs.
10. Accessory Buildings and Structures including, but not limited to, Detached Garages, Storage Sheds (>120 SF), Guest Houses, Swimming Pools, Carports, Fences, Walls & Sheds.
11. Solar Energy Systems.
12. New Windows.
13. Decks exceeding 120 SF and are 30" above grade.
14. Retaining walls supporting more than 3 feet of unbalanced backfill.

The residential improvements that do not require building permits include the following:

1. Platforms, walks, and driveways not more than 30 inches above adjacent grade and not over a story or basement below and not part of an accessible route.
2. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
3. Window awnings not projecting more than 54 inches that are supported by an exterior wall, and nothing else, of a building regulated by the International Residential Code.
4. Prefabricated swimming pools accessory to buildings regulated by the International Residential Code that are less than 24 inches deep and are installed entirely above ground.
5. Repairs to structures less than $1000.00 in valuation.
6. Interior plastering or paneling of existing surfaces provided the material meets all applicable requirements of flame spread required by the Fire Code.
7. Exterior re-plastering that any does not require the application of exterior lath.

2.6.A.I.a. Permit Submittals

Residential building permit submittals generally require the following plans and information to be submitted. Please see the appropriate permit application packet or checklist for specific information required for each residential project type.

1. Site plan to show setbacks from property lines, landscaping (new residences only), pad and site reference elevations, building area (SF) and dimensions, all weather driveway.
2. Foundation plan.
3. Floor plan.
4. Framing plan.
5. Roofing plan.
6. Grading and Drainage Plan or Disclosure Requirement.
7. Finished elevation drawings (show building height).
8. Electrical and plumbing plan.
9. Engineered, stamped truss details (current date).
10. Energy Code Compliance Worksheet (Rescheck, ResNet, or equivalent).
11. Copy of approved liquid waste permit, if applicable.
12. Copy of well permit, if applicable.

8. Water & Wastewater Availability form signed by the City of Rio Rancho's of Public Works Department.

2.6.A.II. COMMERCIAL AND MULTIFAMILY BUILDING PERMITS

Building permit applications are required for the following improvements and projects:

1. New commercial structures.
2. New multifamily structures.
3. Additions.
4. Remodels.
5. Repairs.
6. Tenant Improvements.
7. Re-roofs.
8. Solar Energy Systems.
9. Public and Private Parks.

A complete list of commercial improvements and projects that do not require a building permit is laid out in New Mexico Administrative Code Section 14.5.2.9.

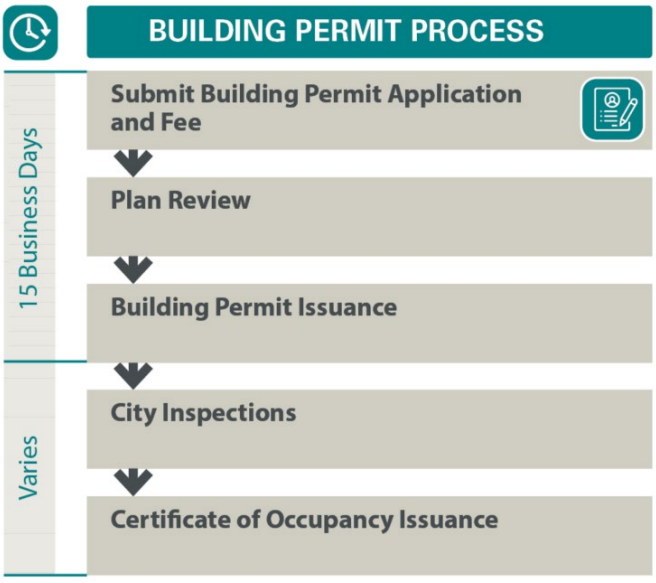
2.6.A.III. BUILDING PERMIT PROCESS

2.6.A.III.a. Building Permit Criteria for Approval

Building permits are reviewed using the criteria of the applicable building and fire codes and Rio Rancho Municipal Code (R.0. 2003) Title XV Land Usage.

2.6.A.III.b. Building Permit Process

Permits application submittal begins the building permit approval process. Applications are submitted to the Development Services Department and routed for review by applicable City departments. New commercial and business registrations need to submit a Fire 1 Plan to the Fire Marshall's Office. Review comments are returned to the applicant and resubmittal of revisions may be required. After all review comments are resolved, the applicant pays any required impact fees, the permit is issued, and construction may commence.



2.6.A.IV. CONSTRUCTION INSPECTION PROCEDURES

During the construction process, after permits are issued, inspections are required to ensure compliance with approved plans and ordinances. Applicants are notified of required inspections at the issuance of their permit. Applicants are responsible for scheduling all required inspections by calling the building department.

The following types of inspections are generally required:

1. Building Inspections:
    a. Foundation inspection to be made after excavation for footings are complete and any required reinforcing steel is in place; and for a mono pour, after all rough-in plumbing or electrical equipment are in place and approved, but before any concrete is poured. These inspections include the tilt wall, dumpster pad & walls, parking lot bases, partial footing/foundation.
    b. Frame inspection to be made after the roof, all framing, fire blocking and bracing are completed, all pipes, chimneys, and vents are complete and the rough electrical, plumbing, and heating wires, pipes and ducts are in place, inspected, and approved. These inspections include the partial frame, fire wall, and party wall.
2. Electrical Inspections
    a. Temporary Pole Inspection confirms that the disconnect and receptacles are weatherproof and proper clearance at the point of attachment. In addition, check conductor capacity, fuses, switches and a check for GFCI for 15- and 20-amp receptacles.
    b. Low Voltage Inspection checks for integrity, markings on conductors, conductors are supported properly, conductors are kept 6’ away from attic access and no more than three (3) outlets per cable.
    c. Rough In Inspection occurs when wires are run into the building and prior to being covered by finished walls, ceiling or floors, when the ground wires are made up to the boxes, the home runs are terminated in the panels, conduit work is secured (including boxes and nm cable).
3. Plumbing Inspections
    a. Rough In Inspection occurs after all piping has been installed and before any piping has been covered or concealed or any appliances have been attached.
    b. Top Out Inspection occurs after all piping above the floor to the extensions through the roof and/or walls have been completed and before any piping is covered or concealed.
4. A final inspection and approval of all buildings and structures is made when the structure is complete and ready for occupancy. This inspection to be made after final approval from electrical, mechanical/plumbing and the structure is complete and ready for occupancy.

Applicants are responsible to call to reschedule any inspections that were disapproved (failed) and pay any re-inspection fees if assessed.

The following inspections are required by the City (based on the complexity and size of the project):

1. Insulation.
2. Sheet Rock.
3. Seismic Inspection.
4. Ceiling Grid.
5. Lath/Stucco.
6. Rebar.
7. Engineering 1 and 2.
8. Water Meter Final.

2.6.A.V. CERTIFICATE OF OCCUPANCY PROCEDURES

All new public, commercial, and multifamily structures must be issued a Certificate of Occupancy before they can be used or occupied. It is unsafe and unlawful to use or occupy a public, commercial, or multifamily building without a Certificate of Occupancy.

After all inspections are passed showing compliance with approved plans, a Building Inspector removes the Final Inspection Sheet from the job site. The Certificate of Occupancy will be provided by the Building Inspector in the field for all construction.

2.6.B Parks Permits

Parks permits are required for parks and recreational facilities which will be owned and maintained by the City of Rio Rancho or private entities. Park and recreational requirements and design standards are found in Chapter 6 Parks and Trails.

2.6.B.I. PARKS PERMIT PROCESS

Park permits application submittal begins the review and approval process. Applications are submitted to the Development Services Department and routed for review by applicable City departments. The submittal requirements for permits are listed in Section 2.11.J. Review comments are returned to the applicant and resubmittal of revisions may be required. After all review comments are resolved, the applicant pays any required impact fees, the permit is issued, and construction may commence.



2.6.B.II. PERMIT SUBMITTALS

Park permit submittals generally require the following plans and information to be submitted.

1. Site Plan.
2. Grading and Drainage if not already included in a Preliminary Plat.
3. Structures Over 120 sf.
4. Backflow Preventers.

2.6.B.III. INSPECTIONS AND ACCEPTANCE

1. City of Rio Rancho Inspectors shall inspect all permitted park improvements as per their published process.
2. Inspections and testing of backflow preventers shall be conducted as required in Rio Rancho Municipal Code Chapter 54 Backflow Prevention and Cross Connection Control Program.
3. PRCS staff will inspect parks and improvements throughout construction, and at substantial and final completion as shown in Chapter 6 of this DPM. See Section 2.6.B.VI. for process and minimal inspection list to be conducted by PRCS Staff. PRCS will accept the park and or trail after final inspection and

completion, receipt of playground audits and any corrections they have identified, verification of all required permitting and inspection, and acceptable establishment of seeded or sod turf areas when applicable.

4. For parks dedicated to the City, the Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The developer shall not transfer and record the deed prior to the completion of improvements and final inspection.
5. The one-year warranty period shall begin on the date that the Deed is recorded.

2.6.B.IV. ACCEPTANCE OF PARK INFRASTRUCTURE

1. The developer submits park construction plans to the Development Services Department.
2. Plans are routed to appropriate Departments for review, approval, and inspections.
3. Final inspection approval memo forwarded to the Engineering Division of DSD for acceptance by the City.



2.6.B.V. MAINTENANCE AND PROTECTION

1. The developer shall be responsible for maintenance and protection of all park features and amenities, including paved surfaces, trails, lighting systems, fencing, sod, and landscaping, and shall begin immediately following the last operation of installation and shall continue until final acceptance of the park or recreation feature.
2. Maintenance shall include the following:
    a. Regular use.
    b. Weather and vandalism related repair and replacement.
    c. Removal of debris, including the emptying of trash receptacles and dog waste stations.
    d. For fencing, fixing breaks and tightening sections.
    e. For play structures, tightening and adjusting of bolts as needed.
    f. For playground surfacing, to ensure property depth of materials and maintenance of fall attenuation properties.
    g. For sod and landscaping, watering, mowing, weed removal, re-seeding, repair to damage from vandals or acts of God, and fertilizing., cultivating, removal and replacement of dead plant material, removal of debris, resetting of trees to upright positions, restoration of earth basins, and such other operations as may be necessary for the health of the planted stock and the general appearance of the landscape areas. Care shall include protection of planted stock from damages resulting from trespass, erosion (including watering), weather, vandalism, disease and other hazards.
    h. Other operations as may be necessary to guarantee safe use and proper functioning of all park features and amenities.
3. For sod, the Contractor shall maintain the grass until a dense stand of grass is obtained. A dense stand of grass for turf grass shall be defined as having been mowed twice at a uniform height of 2”, having a uniform green color, having no weeds and no bare areas on 75% of the seeded areas, and with no bare areas greater than 2” in diameter. A dense stand of grass for low water use grass shall be defined as having a uniform growth of 2”, having a uniform green color, having no weeds and no bare areas on 75% of the seeded area, and with no bare areas greater than 6” in diameter.
4. For irrigation systems for a period of one (1) year from final acceptance of the facility, the Contractor will promptly furnish and install damaged or inoperative materials or systems that may be defective in material or workmanship. Damage due to irrigation system line breaks shall be repaired and brought to original condition by the Contractor at no expense to the City. In the fall, at the City’s request, the contractor will drain the system and otherwise prepare the system for winter. In the spring, at the City’s request, the Contractor will reactivate the system, repair any defects or damage and adjust the system. As these services are performed, the Contractor will inform and instruct the City.
5. Replacement surfacing or City directed patching shall be with material of the same quality as that which is being replaced.
6. Replacement shall be with materials of the same brand, from the same manufacturer, and quality as that which is being replaced. If a replacement brand or model is not available, the City may consider appropriate alternatives.

2.6.B.VI. INSPECTIONS

The following inspections shall be the minimum required inspections during construction. Additional inspections shall be made at any time at the discretion of the City or Landscape Architect.

1. It shall be the responsibility of the Contractor to notify the City’s Representative by phone, 48 hours in advance of each required inspection.

2. The sequence of required observations shall not be changed from the sequence listed in Table 2 below. The Contractor shall not proceed with the work of the next sequence without written approval of the work of the previous sequence.
3. For City-built facilities, the Contractor shall attach a copy of the written reports prepared by the City's representative or the Landscape Architect to all applications for payment. Payment will not be made for items that have not been observed and approved in writing.

Table 1.2: Required Inspections for Park Elements

Park Feature or Element	Required Inspections
Paving	1. Sub grade prepared prior to paving. 2. Asphalt and/or concrete surfaces within 48 hours of paving. 3. Ponding test. 4. Asphalt and/or concrete courts following striping. 5. Paved surfaces shall be inspected 6 months after completion. 6. Paved surfaces shall be inspected 12 months after completion.
Trails	1. Sub grade prepared prior to trail installation. 2. Surfaces treated with stabilizer within 48 hours of application. 3. Asphalt trails within 48 hours of paving. 4. Trail surfaces shall be inspected 6 months after completion. 5. Trail surfaces shall be inspected 12 months after completion.
Lighting	1. Lighting system trenching and conduit. 2. Meter, transformer, box, wiring and connections within 48 hours of installation. 3. All light fixtures within 48 hours of installation. 4. Lighting system shall be inspected 6 months after completion. 5. Lighting system shall be inspected 12 months after completion.
Fencing	1. Post Installation prior to fencing installation. 2. Fencing and gates within 48 hours of installation. 3. Fencing shall be inspected 6 months after completion. 4. Fencing shall be inspected 12 months after completion.
Playgrounds	1. Play area border. 2. Structures shall be inspected after completion, an Independent/Third Party Playground Audit performed, and all issues addressed. 3. Playground/Play structure surfacing shall be inspected after completion, an Independent/Third Party Playground Audit performed, and all issues addressed. 4. Structures shall be inspected 6 months after completion. 5. Structures shall be inspected 12 months after completion.
Park Amenities	1. Amenity (including shade structures and water fountains) installation area including dirt or concrete pad prior to amenity installation. 2. Installed amenity within 48 hours of installation. 3. Activity area surfacing (such as for fitness stations). 4. Amenities shall be inspected 6 months after completion. 5. Amenities shall be inspected 12 months after completion.
Landscape Plantings	1. If required by City, observe plant material at Contractor's yard prior to delivery to job site. 2. Observe material at the job site prior to and during planting. Observe proper planting of trees as required in DPM Chapter 6 Parks and Trails. 3. Observe at end of 30-day maintenance period. 4. Observe 6 months after final completion.

Table 1.2: Required Inspections for Park Elements	
Park Feature or Element	**Required Inspections**
	5. Observation 12 months after final completion.
Turf Grass	1. Automatic irrigation system shall be installed, tested, and approved prior to laying sod or applying seed. (See Standard Specifications for Irrigation Systems) 2. Each phase of soil preparation shall be inspected in process. 3. Finish grade shall be inspected. 4. Sod or seed shall be inspected prior to laying or seeding. The proposed seed mix or sod turf specifics shall be provided to the City to illustrate compliance with cool season turf limitations as required by Rio Rancho Municipal Code Chapter 154. 5. Sod or seeded area shall be inspected after completion. 6. Sod or seeded area shall be inspected at end of 30-day maintenance period. 7. Sod or seeded area shall be inspected 6 months after completion. 8. Sod or seeded area shall be inspected 12 months after completion.
Irrigation System	1. Inspect locations of mainline, valves, laterals, and sprinklers heads. 2. Inspect and pressure test mainline installation. 3. Inspect 24-volt control wire installation. 4. Inspect and pressure test automatic valves and lateral irrigation installation. 5. Inspect automatic controller installation and operation. 6. Inspect sprinkler and bubbler head placement, coverage and operating pressure, pass irrigation audit prior to planting. 7. Inspect back flow preventer as required by Rio Rancho Municipal Code Chapter 54. 8. Inspect at end of maintenance period.

2.7 Administrative Permits

There are several activities or projects where proposed work may physically impact a property, but because of their limited impact, there is no need to place the project or activity through a formal development process involving a public hearing. Listed below are permits for such activities that may, under circumstances noted below, be included in this category. However, in all cases, the City reserves the right to require that any activity proceed through the formal development process.

2.7.A Business Registrations and Business Licensing

Any persons proposing to engage in business within the municipal limits of the City of Rio Rancho shall apply for a business registration or license, as applicable, and pay fee for each business, prior to engaging in business unless the business is exempt under Rio Rancho Municipal Code § 110.03(A). The City of Rio Rancho's Business Registration and Business Licensing is the legal authorization to operate a business within the City of Rio Rancho. Any company doing business from a commercial location within the municipal limits of the City of Rio Rancho must obtain a Business Registration or Business License for each business location. The Business Registration and Licensing fees are renewed annually, except Limited-Time Businesses who are operating a business temporarily.

Home-based businesses are referred to as home occupations and also require business registrations.

2.7.A.I. BUSINESS REGISTRATION CRITERIA FOR APPROVAL

Business registrations and business licenses are governed by Rio Rancho Municipal Code (R.O. 2003) Title XI Business Registrations, Chapter 121 Home Occupations, and Chapter 154 Planning and Zoning.

2.7.A.II. HOME OCCUPATION LICENSE PROCESS

A Home Occupation is defined as any business, occupation or activity conducted for gain, on residential property, within a residential building, or an accessory building thereto, which is incidental or secondary to the use of such building for dwelling purposes and which does not change the essential character of the building.

Home Occupation Business Registrations and Permits are completed by the following process. Applicants return all forms completed to the City Clerk's Office. The City Clerk staff review the application to verify completeness and accuracy. Completed applications are forwarded to Development Services Planning and Zoning Division for review and approval of the Home Occupation Permit in compliance with local law. The City Clerk will finalize the business application and email the applicant the payment information to include the business registration or licensing fee, home occupation permit fee, and fire fee, as applicable. Annually each business must pay a business registration or licensing fee, and fire inspection fee based on square footage of location, as applicable. Business registrations and licenses must be renewed annually, except Limited-Time Businesses who are operating a business temporarily.



2.7.A.III. COMMERCIAL BUSINESS LICENSE PROCESS

Commercial Business Registration and Licenses are requested by the following process. Applicants return all forms completed to the City Clerk's Office. The City Clerk staff review the application to verify completeness and accuracy. Completed applications are forwarded to Development Services Development Services-Planning and Zoning Division for review and approval of the application in compliance with local law. The applicant then schedules a fire inspection and a building inspection. After these inspections are complete and approved, the applicant submits the signed and approved application to the City Clerk's Office. The City Clerk finalizes the business application and emails the applicant the payment information to include the business registration or licensing fee and fire fee, as applicable. Annually each commercial business must pay a business registration or licensing fee, and fire inspection fee based on square footage of location, as applicable, except Limited-Time Businesses who are operating a business temporarily.

2.7.B Change of Address

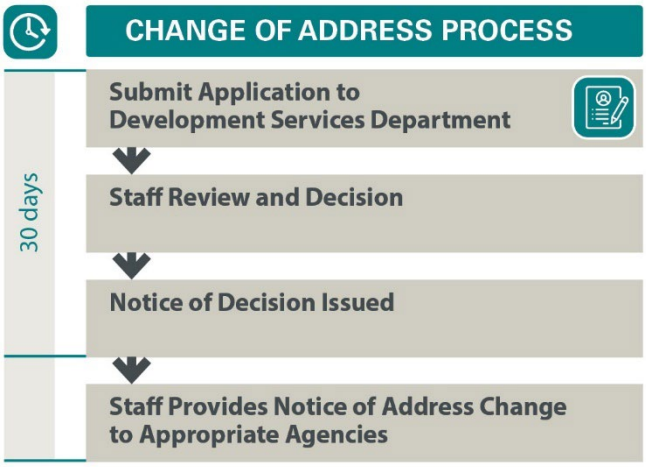
A change of address request is an administrative process by which an address may be changed, and notification provided to the affected agencies.

2.7.B.I. CHANGE OF ADDRESS CRITERIA FOR APPROVAL

Address change requests are approved if found to be logical and fall within the numerical sequence of the surrounding neighborhood.

2.7.B.II. CHANGE OF ADDRESS PROCESS

Applicants submit an application to the Development Services Department office. The Development Services Zoning Division review and decide on the application. Staff provide notice of the address change to the appropriate agencies, including but not limited to, the United States Postal Service, utility providers, and the appropriate County.



2.7.C Fences, Walls, and Small Accessory Structure Permits

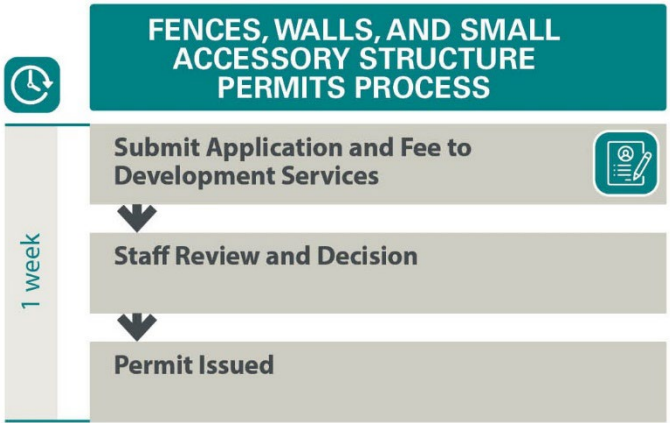
All fences, walls and accessory structures that do not exceed 120 square feet require a zoning plan review by obtaining a permit. Accessory structures are structures detached from and located on the same lot as a primary building, clearly incidental and subordinate to the primary building or use.

2.7.C.I. FENCE, WALL, AND SMALL ACCESSORY STRUCTURE PERMIT CRITERIA FOR APPROVAL

Fence requirements are laid out in Rio Rancho Municipal Code (R.O. 2003) Section 154.77 Fence/Wall Regulations. Accessory structure requirements are laid out in R.O. 2003 Section 154.70 Accessory Buildings, Structures, and Uses.

2.7.C.II. FENCE, WALL, AND SMALL ACCESSORY STRUCTURE PERMIT PROCESS

Fence and wall or small accessory structure permits are requested by the following process. Applicants submit an application to the Development Services Department. Development Services Zoning Division review and decide on the application.



2.7.D Garage Conversions

Rio Rancho Municipal Code Section 154.76 requires single family dwelling units to include off-street parking within an enclosed garage. Garage conversion requests are required to convert an existing garage into any use that does not accommodate parking of vehicles, including living spaces, bathrooms, kitchens, and the like. Per Rio Rancho Municipal Code Section 150.06 Variances garage conversion requests may be approved administratively by the Development Services Director if the following conditions apply:

1. The dwelling unit was constructed prior to December 23, 1999, when the requirement for off-street parking within an enclosed garage was enacted.
2. There is adequate space on the site to accommodate the required number of parking spaces per Rio Rancho Municipal Code Section 154.76.
3. The conversion meets building code requirements and inspections.

The applicant must provide proof that the conditions are met to proceed with the following administrative garage conversion approval process. If these conditions are not met or if substantial proof that these conditions are met cannot be provided, the garage conversion must be approved through the variance process outlined in Section 2.5.F.

2.7.D.I. ADMINISTRATIVE GARAGE CONVERSION CRITERIA FOR APPROVAL

Administrative garage conversions are governed by the building code, Rio Rancho Municipal Code Section 150.06 Variances, and Rio Rancho Municipal Code Section 154.76 Off-Street Parking.

2.7.D.II. ADMINISTRATIVE GARAGE CONVERSION PROCESS

Applicants submit an application to the Development Services Department office. The Development Services Zoning Division review and decide on the application. Staff provide notice of decision to the applicant.



2.7.E Model Home/Sales Office

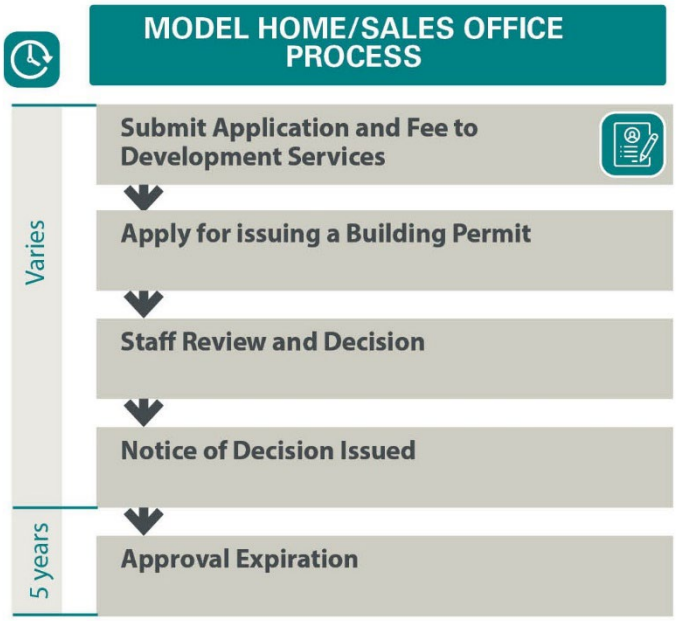
Model homes and sales offices require a model home and sales office permit approval. A model home is defined as any dwelling, which is primarily used as a marketing tool to show prospective homebuyers a particular plan, type of construction, accoutrements, or floor plan and which is not a residence at the same time. A sales office is defined as an office accessory use, used specifically for the purpose of conducting business transactions associated with the sale of residential dwelling units.

2.7.E.I. MODEL HOME/SALES OFFICE CRITERIA FOR APPROVAL

Model home requirements are laid out in Rio Rancho Municipal Code (R.O. 2003) Section 154.75 Temporary Buildings and Structures.

2.7.E.II. MODEL HOME/SALES OFFICE PROCESS

Model homes sales offices in Residential zone districts are registered by the following process. Applicants submit an application to the Development Services Department. Development Services Zoning Division review and decide on the application. Approvals are valid for 5 years. Extensions may be requested. Temporary model home sales offices in the C-1: Retail Commercial Zone District require a Conditional Use Permit.



2.7.F Residential Care Facilities and Childcare Facilities

Residential Care Facility Business Registrations are required for the licensing of facilities and providers who are interested in opening a Day-Care or Community Residential Care Facility in Rio Rancho. Community residential care facilities and family childcare facilities are completed by the following process. Family childcare facilities planning to serve 7 to 12 individual children at one time which are in residential zone districts are required to also obtain a Conditional Use Permit prior to beginning the Business Registration process. Family childcare facilities serving 7 to 12 individual children at one time which are in nonresidential zone districts are not required to obtain a Conditional Use Permit.

2.7.F.I. RESIDENTIAL CARE FACILITIES AND CHILDCARE FACILITIES CRITERIA FOR APPROVAL

Community residential care facility business registrations are governed by Rio Rancho Municipal Code (R.O. 2003) Chapter 120 Community Residential Care Facilities and Chapter 154 Planning and Zoning. Day care facilities are regulated by R.O. 2003 Chapter 115 Day-care Facilities.

2.7.F.II. RESIDENTIAL CARE FACILITIES AND CHILDCARE FACILITIES PROCESS

Community residential care facilities and day care facilities with fewer than 7 children must complete a Residential Care Facility Business Registrations by the following process. Applicants submit all required forms to the City Clerk's office. The City Clerk staff review the application to verify completeness and accuracy. Completed applications are forwarded to Development Services Zoning Division for review and approval of the application. The applicant pays the application fees and then schedules a fire inspection and a building inspection, as applicable. After these inspections are complete and approved, the applicant submits the signed and approved application to the City Clerk's Office. The City Clerk finalizes the business application and email payment link and other options to pay the required business registration and fire fees, as applicable. Annually each Community Residential Care Facility must pay a business registration fee and fire inspection fee based on square footage of location, as applicable.

Day care facilities planning to serve 7 to 12 individual children at one time require a Conditional Use Permit per Section 2.5.E prior to beginning the Business Registration process outlined in Section 2.7.A.


RESIDENTIAL CARE FACILITY AND CHILDCARE FACILITY
2-6 weeks
Submit Application to City Clerk's Office
City Clerk to Review and check for completeness and forward to Development Services Division
Development Services Zoning Division to Review and Approve and collect fee
Zoning field inspection for Daycare uses
Fire and Building Inspection to be conducted
Residential Care or Childcare Facility Registration Issued
Business Registration Process
Administrative Permit or Conditional Use Permit Issued

2.7.G Signs

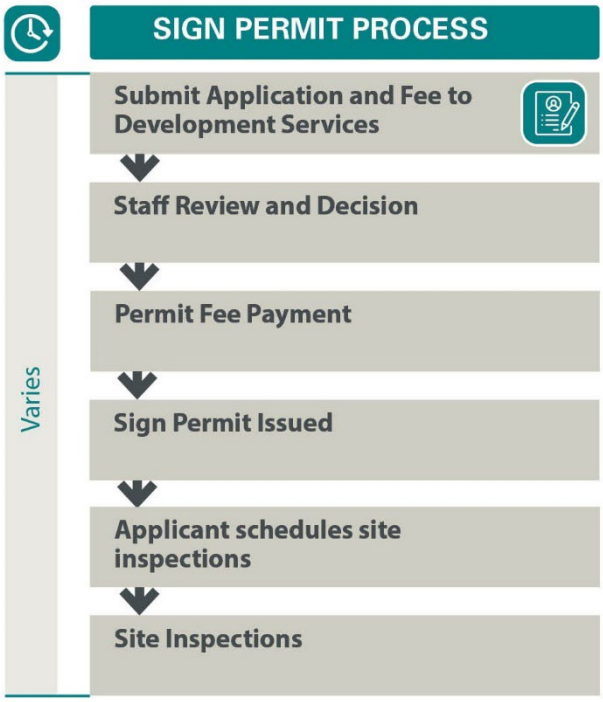
Sign permits are required prior to the construction, placement, erection, or modification of a sign. A permit is not required for such activities as general maintenance, face changes, and erection of certain temporary construction signs.

2.7.G.I. SIGN PERMIT CRITERIA FOR APPROVAL

Sign requirements are laid out in Rio Rancho Municipal Code (R.O. 2003) Chapter 156 Sign Regulations.

2.7.G.II. SIGN PERMIT PROCESS

Sign permits are requested by the following process. Applicants submit an application to the Development Services Department. Development Services Zoning Division review and decide on the application.



2.7.H Summary Plat Procedure

The summary platting procedure is an administrative procedure that applies to subdivision actions that meet the requirements for both preliminary and final plats, and one of the following conditions, per Rio Rancho Municipal Code Section 155.26:

1. Subdivision contains no more than two (2) new lots.
2. Re-subdivisions where the combination or recombination of portions of previously platted lots does not increase the total number of lots.
3. Lot consolidation combining adjacent property to eliminate property lines or reducing the total number of lots.
4. Adding or vacating easements for public utilities, drainage, or access.
5. Subdivisions of two or more parcels of land in areas zoned for industrial use.

The required improvements listed in Rio Rancho Municipal Code Section 155.27 must be in place for the summary plat procedure to apply. The required improvements include permanent markers, street improvements, sidewalks, water and sewer mains, drainage, and street lighting. The required improvements may be waived for summary plats where the total number of lots is not increased, such as lot line adjustments or lot combinations.

2.7.H.I. SUMMARY PLAT CRITERIA FOR APPROVAL

The criteria for summary plat approval are found in Rio Rancho Municipal Code (R.O. 2003) Chapter 155 Subdivisions. Summary plats must meet the standards for plans and data for both preliminary plats and final plats.

2.7.H.II. SUMMARY PLAT PROCESS

Summary plat approvals are requested by the following process. Applicants submit an application and appropriate fee to the Development Services Department. City staff will review the application for completeness and let the applicant know of any deficiencies. When the application is complete, applicable City Departments review the plat and provide any comments back to the applicant. The applicant resubmits the plat with any necessary revisions. After a subsequent review and preliminary approval, the plat is signed. The applicant is responsible for collecting the signatures of the property owners and the utilities first. After these parties have signed, staff collects signatures from City staff, including the City Clerk, Engineer, and others as applicable. The applicant then records the plat with the appropriate County Clerk. A printed copy of the plat is returned to the City by the applicant to be included in the City records.

SUMMARY PLAT PROCESS

2-6 weeks

Submit Application and Fee to Development Services

Plat Review and Revisions as necessary

Plat Signed

Applicant responsible for collecting property owner and utility signatures first. After those parties have signed, staff collects signatures from City staff, including Clerk and Engineer, as applicable.

Plat Recorded with the County

Mylar copy of Recorded Plat submitted to the City

2.7.I Special Event Permits

The purpose of a special event permit is to allow for the facilitation of a successful special event while minimizing any impacts of the event on community members and to ensure the City's ability to provide emergency services to the public at all times. Special event permits are required when any of the following requires a permit:

1. Selling or vending of food or/and alcohol.
2. Dedicated safety resources are necessary.
3. Tents or other structures are erected.
4. Traffic flow and access is impacted.

Additional permit(s), license(s), or inspection(s) such as a business license, tent/canopy inspection, temporary food service permit, may also be required depending on the specifics of the event and/or event activities.

2.7.I.I. SPECIAL EVENT PERMIT CRITERIA FOR APPROVAL

Special event permit requirements are laid out in Rio Rancho Municipal Code (R.O. 2003) Section 154.83 Special Event Permits.

2.7.I.II. SPECIAL EVENT PERMIT PROCESS

Special event permits are requested by the following process. Applicants submit an application to the Development Services Department no less than 30 days prior to the proposed special event date. The City Clerk, Development Services Planning and Zoning Division, Fire Department, Police Department, and Parks, Recreation and Community Services Department review and decide on the application. If approved, the applicant pays any required permit fees, the permit is issued, and the event may commence. If the event includes the use of tents or canopies, a Fire Inspection must be scheduled with the Fire Rescue Department which will inspect tents and canopies prior to the event.



2.7.J Wireless Telecommunication Facilities

A telecommunications permit is required to site, place, build, construct or materially modify a wireless telecommunications facility. Telecommunication permit approvals are required in addition to a building permit approval. There are three separate telecommunication permit approval processes depending on the scope and location of a project:

1. Eligible Facility Requests are any request for modification of an existing tower or base station that is not a substantial change to the physical dimensions of such tower or base station involving the collocation of new transmission equipment, the removal of transmission equipment, or the replacement of transmission equipment. A substantial change is defined by 47 CFR § 1.6100(b)(7) or any subsequent provision. These require an administrative approval along with a building permit.
2. Substantial Changes, Collocations, and New Towers in Residential Zone Districts require an administrative hearing, if applicable, and a building permit.
3. Substantial Changes, Collocations, and New Towers in Nonresidential Zone Districts require an administrative approval and a building permit.

2.7.J.I. WIRELESS TELECOMMUNICATION FACILITY CRITERIA FOR APPROVAL

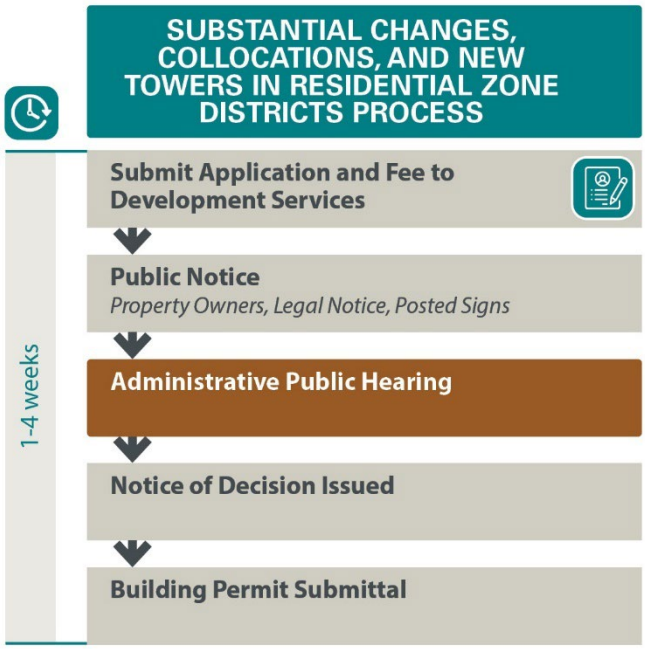
Wireless telecommunication facility requirements and approval procedures are laid out in Rio Rancho Municipal Code (R.O. 2003) Chapter 158 Wireless Telecommunication Facilities. Design criteria for wireless telecommunication facilities are established in Resolution No. 23 Enactment No. 20-021.

2.7.J.II. ELIGIBLE FACILITY REQUEST PROCESS

Eligible Facility Request approvals are requested by the following process. Applicants submit an application to the Development Services Department prior to building permit submittal. The Development Services Planning and Zoning Division review and decide on the application based on the criteria found in R.O. 2003 Section 158.19 Eligible Facility Requests.

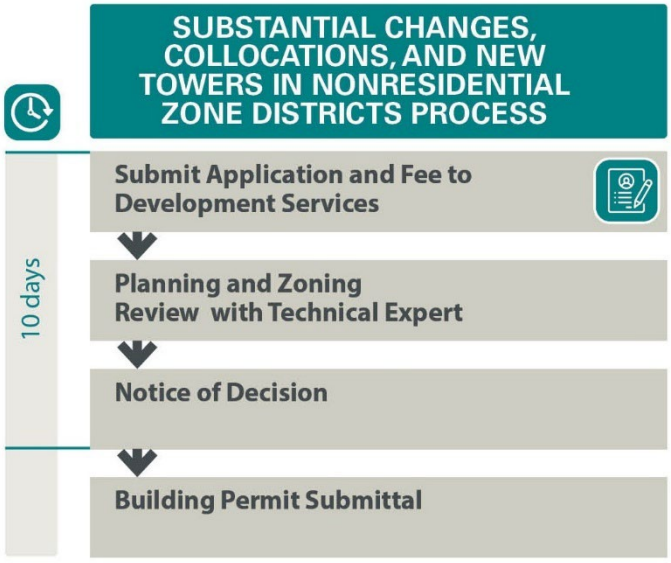
2.7.J.III. SUBSTANTIAL CHANGES, COLLOCATIONS, AND NEW TOWERS IN RESIDENTIAL ZONE DISTRICTS PROCESS

Substantial changes, collocations, and new towers in residential zone districts require telecommunications permit approval which is requested by the following process. Applicants submit an application to the Development Services Department prior to building permit submittal. The Development Services Planning and Zoning Division review the application, typically with a consultant or expert hired to assist the city in reviewing and evaluating applications, if applicable. Staff coordinates the mailing, posting, and publishing of applicable notices for the administrative public hearing with the applicant. Within 30 days of the complete application submittal, the Development Services Director makes the final determination of approval, approval with conditions, continuation, or denial at an administrative public hearing and a notice of the decision is sent to the applicant within 10 calendar days.



2.7.J.IV. SUBSTANTIAL CHANGES, COLLOCATIONS, AND NEW TOWERS IN NONRESIDENTIAL ZONE DISTRICTS PROCESS

Substantial changes, collocations, and new towers in nonresidential zone districts require a telecommunications permit approval which is requested by the following process. Applicants submit an application to the Development Services Department prior to building permit submittal. The Development Services Planning and Zoning Division review the application, typically with a consultant or expert hired to assist the city in reviewing and evaluating applications. If the City approves the application, a notice of the decision is sent to the applicant within 10 calendar days.



2.8 Submittal Requirements

2.8.A Technical Reports, Studies and Analysis

2.8.A.I. GENERAL REQUIREMENTS

In addition to the required plans, review submittals may include additional technical reports, studies or analysis including but not limited to Drainage Reports, Drainage Implementation Plan, Geotechnical Report, Traffic Impact Study (TIS, and/or Water and Sewer Availability statements). These may be required by Rio Rancho Municipal Code or by thresholds established within this DPM. The purpose of these reports, studies, and analyses is assessing changes to existing infrastructure that a proposed development may create and identifying mitigation measure to be provided by the site developer to address the infrastructure impacts associated with the development.

2.8.A.II. REPORT FORMAT AND ORGANIZATION GUIDELINES

Technical reports, studies, and analyses shall be formatted and organized using the following structure as guidelines. All information, including exhibits, tables, and calculations, shall be presented in the report in an organized and easy to follow format. Submittals should be formatted as follows:

- Use a 1-inch margin at the top, bottom, left, and right.
- Use single spaced typing.
- The entire document should be fully justified.

Reports should generally be organized using the following outline and elements:

- Section 1 Title Page – Project Name, Type of Report, Author's name, who it is prepared for, Approval Block, and the date. Indicate whether the report is a "preliminary" or "final" submittal.
- Section 2 Table of Contents – include all sections and subsections w/ appropriate page numbers.
- Section 3 List of Appendices - can be provided on the same page as the List of Tables, include page numbers.
- Section 4 Introduction – Introduces the reader to the material and the area of interest. This section should provide a project description and purpose of the report.
- Section 5 Methods and Procedures – Provide schematic diagrams where appropriate. Organize methods/procedures used in the analysis in chronological order.
- Section 6 Conclusions - Summarize the results of the study in terms of original motivation, and important conclusions from the analysis.
- Section 7 References – Use full citations including titles of reports. If using numbered references, numbers should be according to chronological appearance in the text.
- Section 8 Appendices - Appendices may include derivations or tabulated data which you feel the reader should have access to but are not appropriate for the body of the article. All the supporting data, calculations, analysis, and information contained in the appendix of the report should be discussed and summarized in the body of the report. The information contained on the appendix is only for reference to be used by the reviewer if needed.

2.8.A.III. SPECIFIC REPORT / STUDY REQUIREMENTS

The applicability of and minimum requirements for the technical reports and studies are laid out in the following section. Chapter 2 Procedures of this DPM lay out the submittal and review processes for these technical reports.

2.8.A.III.a.Utility Engineering Report

2.8.A.III.a.i. Applicability

The City Engineer or designee will require the preparation of a utility engineering report to assess the impacts and service demands of any project or development proposal connecting to the public water and wastewater systems. The utility report shall be prepared by a licensed engineer and include a technical report, preliminary plan, connection and isolation plan as outlined in the following subsections.

2.8.A.III.a.ii. Report Requirements

For designs including water and wastewater system components, the utility engineering report shall provide an overview of the proposed project or development, proposed water and wastewater utility improvements, service demands and flows, system impact and feasibility, and basic design requirements, and include the information, as overviewed in the following sections:

2.8.A.III.a.iii. Water System

1. Water Demands: Include estimated water demands based on projected land use, occupancy, and building type for the following conditions.
    a. Peak Hour (gallons per minute, gpm).
    b. Gpm/day - maximum D.
    c. Gpm/day - average D.
    d. The Fire Marshal will determine Fire Flows (gpm), and Irrigation (gpm).
2. Conformance with City's Water Master Plan: Describe how the proposed improvements conform to the City's adopted Water Master Plan.
3. System Layout: On a plan sheet describe the proposed distribution system layout, including locations for connections with the existing water utility system.
4. Network Analysis: Once the data is gathered it will be submitted to the City Engineer or designee who will use it to perform a computer simulation, identifying any systems impacts based on proposed demands and providing design solutions to ensure perpetuation of future water utility system growth and maintain system pressures and flow rates. Computer simulations of hydraulic analyses are to be performed using electronic input data for the existing water system provided by the City on software compatible with the City's network analysis program (Innovyze Infowater). Results of the computer analyses are to be submitted in hard copy format.
5. Main Sizing: Indicate the required sizing of proposed distribution mains based on water demands. It is possible that a larger size line will be required after the City Engineer or designee evaluates the requirements for the surrounding developments.
6. Design Alternatives: Discuss alternative system layouts and methods of providing water service, including an evaluation of each alternative and reasons for selecting the recommended design.
7. Special Conditions: Identify any special conditions, such as presence of erosive soils, conflicts with other utilities, unusual installation depths, or over sizing requirements that require special provisions for improvements construction.

2.8.A.III.a.iv. Wastewater System

1. Wastewater Demands: Include estimated wastewater demands based on projected land use, occupancy, and building type for the following conditions.
    a. Average Day (gallons per day, gpd).

   b. Peak Flow or Maximum Day (gpd).
   c. Minimum-day (gpd).
   d. Infiltration/Inflow (gpd).
2. Conformance with City's Wastewater Master Plan: Describe how the proposed improvements conform to the City's adopted Wastewater Collection Master Plan.
3. Service Area: Describe the initial and ultimate area, measured in acres, which could be served by the new wastewater facilities.
4. Population Density: Define the initial and ultimate population densities that could be served by the new wastewater facilities.
5. Industrial Wastes: Define the estimated quantities and quality of any industrial wastes that could be discharged to the wastewater system.
6. System Layout: Describe the proposed collection system layout, including locations for connections with the existing wastewater utility system.
7. Collection System Analysis: Include a collection system analysis as required by the City Engineer or designee, identifying any system impacts based on proposed demands and providing design solutions to ensure perpetuation of future wastewater utility system growth and maintain system capacity.
8. Main Sizing: Indicate the required sizing of proposed collection mains based on wastewater demands. It is possible that a larger size line will be required after the City Engineer or designee evaluates the requirements for the surrounding developments.
9. Design Alternatives: Discuss alternative system layouts and methods of providing wastewater service, including an evaluation of each alternative and reasons for selecting the recommended design.
10. Special Conditions: Identify any special conditions, such as conflicts with other utilities, unusual installation depths, or oversizing requirements that require special provisions for improvements construction.
11. Wastewater Characteristics: Include information concerning the characteristics of proposed wastewater effluent, as described in 40 C.F.R, Part 122, Appendix D, Tables 2-5, at each connection to the City's wastewater collection system as required by the City Engineer or designee, including the following:
    a. Acidity-alkalinity.
    b. Phosphorus.
    c. pH.
    d. Sulfates and sulfides.
    e. Synthetic and organic compounds.
    f. Hazardous constituents.
    g. BOD5 (total and soluble fraction, carbonaceous and nitrogenous demand).
    h. COD (total and soluble).
    i. TSS.
    j. Nitrogen (TKN, NO3, NO4, NH4, organic).
    k. Inorganics (salts and metals).

2.8.A.III.a.v. Conceptual Layout

A conceptual layout shall be included in the utility engineering report to provide a plan view and reference for the proposed water and wastewater system improvements, and identify issues addressed in the report. The preliminary plan/layout is to include the following:

1. Preliminary Design: Illustrate proposed methods and alternatives for providing site water distribution and service and wastewater collection and service.

2. Property Boundaries: Include legal boundaries of the proposed project or development site, including existing and proposed property and lot lines, existing and proposed rights-of-way, any utility easements, and boundaries of adjacent properties. Identify any right-of-way, easements, and/or rights of entry/temporary construction permits that must be acquired to legally construct improvements.
3. Topography: Include site topography at 2-foot (minimum) interval contours and the elevation and location of City-recognized benchmarks with reference to local, USGS, and NAD 83 data.
4. System Area: Define and delineate the system area included in the network analysis.
5. Existing Utilities: Illustrate all existing utilities (private and public), including waterlines and services, meters, fire hydrants, valves, sanitary sewer lines and services, sanitary sewer manholes, drainage facilities, storm drains, natural channels, and improved channels within 400 feet of the proposed development.
6. Unusual Features: Identify unusual features, such as creeks, railroads, and irrigation ditches, which might influence the location of underground utilities.
7. Proposed System Layout: Identify the general layout, drawn to scale, of the proposed water distribution mains, valves, and fire hydrant locations, wastewater collection mains, and manhole locations including construction phasing.
8. Emergency Maintenance Access: Identify methods and routes for providing emergency and maintenance access to all proposed fire hydrants, valves, and manholes.

2.8.A.III.a.vi. Connection and Isolation Plan

A connection and isolation plan shall be provided in the utility engineering report to identify proposed connection points with the existing water systems and design conditions for providing required system isolation for maintenance and flushing. The connection and isolation plan is to include the following:

1. Valve Locations: Identify all valves necessary to isolate a point of connection for the proposed water system onto the existing system. Existing system valves should be inspected for location and accessibility.
2. Thrust Restraint: Determine and include design and construction requirements for sufficient thrust restraint for existing water mains and valves at proposed connection points (“stub-outs” and terminal extensions) to allow construction while the existing water system remains in service in accordance with Chapter 1, Section 10.
3. System Isolation: Identify water main sections that can be isolated within the proposed and existing water systems that provide for emergency maintenance and identify discharge points for system flushing.

2.8.A.III.b.Drainage Submittals

A Drainage Submittal is generally in the form of either a Conceptual Grading and Drainage Plan, Drainage Report or Grading and Drainage Plan. All drainage submittals shall include a cover letter explaining the purpose of the submittal and clearly identify the action being requested from the City. Quite often, the terms are used interchangeably. The following are definitions of these three types of submittals:

1. Conceptual Grading and Drainage Plans are a graphic representation of existing and proposed grading, drainage, flood control, erosion control and stormwater pollution prevention information. The information should be of sufficient detail to determine project feasibility. The purposes of this plan are to check the compatibility of the proposed development within grading, drainage, floodplain, erosion control and stormwater pollution prevention constraints as dictated by on-site physical features as well as adjacent properties, streets, alleys and channels. Modifications to the comprehensive plans and the development of area plans, sector plans, site development plans and

landscaping plans on tracts of five (5) acres or more are appropriate applications of conceptual grading and drainage plans.

2. A Drainage Report is a comprehensive analysis of the drainage management, flood control, erosion control and stormwater pollution prevention constraints on and impacts resulting from the proposed platting, development or construction of a particular project. Drainage Reports are required for subdivisions containing more than 10 lots or comprising more than 5 acres, platting or construction proposed within a designated flood hazard area, and for platting or development proposed adjacent to a major arroyo.
3. A Drainage Plan is a comparatively short, yet comprehensive, presentation for small, non-complex development submittals. Drainage Plans are often combined with or accompany the detailed Grading Plan, and address both onsite and offsite drainage management, flood control, erosion control and stormwater pollution prevention. Drainage Plans are required for the approval of Building Permits, Site Development Plans, and Landscape Plans for the development of projects 5 acres or less in size.

2.8.A.III.b.i. Report Requirements

2.8.A.III.b.i.1. Introduction

1. Provide a brief yet comprehensive Executive Summary of the following:
    a. Drainage concept for the site (include relevant #'s as appropriate).
    b. How offsite flows will be handled.
    c. How onsite flows will be handled and discharged.
    d. Downstream capacity and how determined.
    e. Impacts on or requirements of other jurisdictions.
2. Identify all approvals being requested in conjunction with this submittal, such as:
    a. Zone Change.
    b. Subdivision Plat.
    c. Site Plan for Subdivision.
    d. Site Development Plan for Building Permit.
    e. Building Permit.
    f. Sidewalk Culverts, Drain Line through Curb, Drain Line to Existing Storm Inlet.
    g. Grading Permit.
    h. Paving Permit.
    i. DPM Design Variance.
    j. CLOMR, LOMR or LOMA.
    k. USACE 404 Permit.
3. Narrative description of project scope. The narrative should expand on the Executive Summary, providing additional project details. For non-complex projects, combine this section with the Executive Summary for clarity and efficiency.
4. Project requirements:
    a. Discuss and reference required infrastructure and associated infrastructure list.
    b. Platting and/or easements.
    c. Approvals by and/or coordination with other Agencies and/or entities.
5. Attachments (when applicable):
    a. Infrastructure List (draft, preliminary, amended or approved).
    b. Preliminary or Final Plat.
    c. Easement Documents.
    d. Drainage Covenants.
    e. Approval Letters.

2.8.A.III.b.i.2. Project Description

1. Location. Discuss relationship of the site to the following:
    a. Well known landmarks.
    b. Municipal limits.
    c. City Zone Atlas page and reference.
    d. Other jurisdictional boundaries.
    e. Previously approved Drainage Management Plans, Drainage Reports, Plans or studies including watersheds, basins, drainage ways, etc. as defined therein.
2. Provide copy of Zone Atlas page, or equivalent, with the site location identified.
3. Legal Description
    a. Identify the current legal description(s) of the land which comprises the site.
    b. Identify the proposed legal description(s), when applicable, of the land which comprises the site.
    c. Include a copy of existing and/or proposed platting as an attachment in cases where its inclusion will lend clarity or facilitate the review.
4. Flood Hazard Zone
    a. Identify proximity of site to a designated Flood Hazard Zone.
    b. Provide reference to the above referenced Flood Hazard Zone.
    c. Identify whether or not the site drains into, or has an adverse impact on, a designated Flood Hazard Zone.
    d. Include a copy of the relevant FEMA Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map with the site clearly identified along with all affected Flood Zones.
    e. Identify portion of designated Flood Hazard Zone to be revised or amended when CLOMR, LOMR or LOMA approval requested.

2.8.A.III.b.i.3. Background Documents

1. Planning History
    a. Reference and discuss relevant Planning and Zoning actions, plans or studies.
    b. Verify and/or demonstrate compatibility with the above actions, plans and studies.
2. Drainage History and Related Documents
    a. Reference and discuss relevant Drainage Management Plans, Drainage Plans, Reports and Studies.
    b. Reference applicable Hydrology Files.
    c. Discuss status of above referenced Plans, Reports and Studies.
    d. Describe compatibility with or deviation from the above referenced Plans, Reports and Studies.
    e. Describe the location of site with respect to previously defined watersheds or drainage basins.
    f. Provide copies of pertinent data from above referenced Plans, Reports and/or Studies when applicable.

2.8.A.III.b.i.4. Existing Conditions

1. Site Investigation. Describe by text or clearly show graphically the following:
    a. Onsite drainage patterns.
    b. Onsite drainage facilities.
    c. Point(s) of discharge.
    d. Drainage basin(s) boundaries.
    e. Offsite drainage facilities.
    f. Offsite drainage patterns including offsite flow conditions.
    g. Condition and status of adjacent properties (e.g. Developed, undeveloped, under construction, etc.).

h. Condition and status of adjacent right-of-way (e.g. Developed, undeveloped, under construction, etc.).
i. Presence of any other relevant features.

2. Site Evaluation. Discuss the significance and impacts of the following:
   a. Onsite drainage facilities.
   b. Offsite drainage facilities.
   c. Point(s) of discharge.
   d. Drainage basin(s) boundaries.
   e. Offsite flow conditions.
   f. Proximity to designated flood hazard zone(s).
   g. Presence of any other relevant features or conditions which may impact or be impacted by the development of the property or project.
3. Form of Analysis
   a. Most situations - most submittals require both qualitative and quantitative analyses.
   b. Unique situations - for some cases, such as infill sites, a qualitative analysis by itself may be appropriate. Examples of appropriate qualitative analysis criteria are:
      i. A comparison of the runoff generated by the proposed development to that generated by the overall drainage basin with respect to the impacts of the anticipated increase.
      ii. Impacts on downstream floodplains.
      iii. Potential offsite problems which may or may not be attributed to this development.
      iv. Anticipated impact(s) and/or precedent to be set on the development of the remaining infill sites by following the same drainage concept.
4. Downstream Capacity. The evaluation of downstream capacity shall include, but not be limited to, the following:
   a. Assumptions
      i. Fully developed watershed.
      ii. Ability to accept and safely convey runoff generated from the 100-year design storm.
   b. Hydraulic capacity
      i. Channel.
      ii. Crossing structure.
      iii. Storm inlet and/or entrance conditions.
      iv. Storm drain.
      v. Street and/or alley.
   c. Storage capacity
      i. Detention pond/reservoir.
      ii. Retention pond.
      iii. Flood zone.
   d. Stability
      i. Channel/arroyo.
      ii. Natural slope.
      iii. Cut/fill slope.
   e. Existing publicly owned ROW and Easements.

2.8.A.III.b.i.5. Developed Conditions

1. Onsite
   a. Discuss the following as applicable:

i. Proposed development/construction.
ii. Impacts on existing drainage patterns.
iii. Impacts on existing drainage basins.
iv. Impacts on existing onsite facilities.
v. Identification of offsite flow conditions.
vi. Compatibility/compliance with previously approved and/or adopted plans, reports and studies.
vii. Sediment bulking.
viii. Aggradation and/or degradation potential.
ix. Impacts on designated flood hazard zones.
x. Required private drainage improvements.
xi. Required infrastructure.
xii. Required easements.
xiii. Phasing and future improvements.
xiv. Ownership, operation and maintenance responsibilities.
xv. Stormwater pollution potential during construction and post construction.
xvi. Evaluate and/or quantify the following:
    1. Capacity and freeboard of existing onsite facilities.
    2. Capacity and freeboard of proposed onsite facilities.
    3. Impacts on designated flood hazard zones.
    4. Impacts on existing drainage patterns and drainage basin boundaries.
    5. Impact of offsite flows on the proposed development.
    6. Erosion potential and erosion setback requirements.
    7. Phased system capacities and ability to function as a standalone system.
    8. Emergency overflow spillway conditions.

2. Offsite
    a. Discuss the following:
        i. Impacts on existing drainage basins and/or watersheds.
        ii. Impacts on existing offsite facilities and downstream capacity.
        iii. Compatibility/compliance with previously approved and/or adopted plans, reports and studies.
        iv. Impacts on designated flood hazard zones.
        v. Required improvements to ensure runoff from development can be properly conveyed to a publicly owned arroyo or storm sewer system.
        vi. Required easements to ensure runoff from development can be properly conveyed to a publicly owned arroyo or storm sewer system.
        vii. Right-of way dedications to ensure runoff from development can be properly conveyed to a publicly owned arroyo or storm sewer system.
        viii. Phasing and future improvements.
        ix. Ownership, operation and maintenance responsibilities.
        x. Concurrence and/or approval from affected property owners for offsite grading or construction activities.
        xi. Evaluate and/or quantify the following:
            1. Capacity of existing offsite facilities.
            2. Capacity of proposed offsite facilities.
            3. Impacts on downstream designated flood hazard zones.
            4. Impacts on downstream drainage basins and/or watersheds.

5. Downstream capacity. Any excess downstream capacity, based on a fully developed watershed, will be allocated by the City/SSCAFCA.

2.8.A.III.c. Traffic Impact Analysis (TIA)

The primary concerns to be addressed in the TIA are site access, impact on the existing roadway system, and what construction is necessary to mitigate both the on-site and off-site impacts. Site design should be tailored to the traffic requirements, and the City reserves the right to require changes to the access points to better serve the transportation system. For roads with a projected ADT, the City will require two lanes in each direction only for roads with a projected ADT above 18,000 vehicles.

2.8.A.III.c.i. Applicability / Traffic Impact Analysis Thresholds

The City of Rio Rancho has developed thresholds that may be used as a general guideline to determine if a TIA will be required for a given development proposal. Though a development may not meet these thresholds, the City reserves to right to require a TIA in some cases, such as, but not limited to, creating safety or neighborhood traffic concerns and developments that generate a high volume of truck traffic. These thresholds are based upon the specific land use generating more than 100 peak hour trips during either the AM or PM peak design hours. If the proposed site is estimated to generate less than 100 peak hour trips, the requirement for a TIA may be waved and only a trip generation report must be submitted.

Depending on the amount of vehicle trips a development is estimated to generate during either the AM or PM peak hour, an expanded TIA may be required. Please verify the project scope with City staff prior to developing or initiating a TIA.

Table2.3: Traffic Impact Analysis Level of Effort

	a **Access Location & Design Review**	**b** **Small Development:** **TIS**	**c** **Medium Development: TIS**	**d** **Large Development: Regional TIS**
	T≤ 100 Peak Hour Trips	100 < T≤ 500 Peak Hour Trips	500 < T≤ 1000 Peak Hour Trips	T > Peak Hour Trips
Scoping Meeting	X	X	X	X
Analysis of Roadway Issues				
Existing Conditions Analysis	X	X	X	X
Site Distance Evaluation	X	X	X	X
Nearby Driveway Locations	X	X	X	X
Crash History	X	X	X	X
Mitigation Identification and Evaluation		X	X	X

Table2.3: Traffic Impact Analysis Level of Effort				
	a **Access Location & Design Review**	**b** **Small Development:** **TIS**	**c** **Medium Development: TIS**	**d** **Large Development: Regional TIS**
	T≤ 100 Peak Hour Trips	100 < T≤ 500 Peak Hour Trips	500 < T≤ 1000 Peak Hour Trips	T > Peak Hour Trips
Trip distribution analysis		X	X	X
Existing traffic conditions at nearby intersections and driveways		X	X	X
Trip generation of adjacent developments			X	X
Background traffic growth			X	X
Future conditions analysis at nearby intersections			X	X
Future Road Improvements			X	X
Site Issues				
Traffic Generation	X	X	X	X
Access design evaluation: queuing, etc.	X	X	X	X
Site circulation evaluation	X	X	X	X
Trip Distribution		X	X	X
Access point evaluation: number, location, and spacing		X	X	X
Other Analysis				
Gap analysis for unsignalized locations			X	X
TSM/TDM mitigation measures (car or van pooling, transit, etc.)			X	X
Traffic Signal Progression Analysis			X	X

2.8.A.III.c.ii. Report Requirements

2.8.A.III.c.ii.1. Study Area

1. The TIA study area shall include all site access points, as well as any adjacent intersections.
2. Inclusion of any additional intersections shall be determined during the scoping meeting by City staff, and may include, but are not limited to, signalized or potentially signalized locations within 2 miles of the development, residential roads that are projected to have a 25% increase in volumes, or truck routes for a development whose site traffic consists of at least 5% truck traffic.

2.8.A.III.c.ii.2. Trip Generation

1. The latest version of the ITE Trip Generation Manual shall be used for all trip generation calculations unless more appropriate data is available.
2. Unless otherwise stated in preliminary project meetings with City staff, average trip generation formulas or rates shall be used.

2.8.A.III.c.ii.3. Methodology

1. All intersection analysis shall be done in accordance with most current Highway Capacity Manual (HCM) procedures for two-way stop control, four-way stop control, roundabouts, and signals.
2. Level of service (LOS) determination for all stop and signal-controlled movements shall be calculated for:
    a. Design year
        i. No-build condition.
        ii. Build condition.
    b. Horizon year
        i. No-build condition.
        ii. Build condition.
3. Queue analysis shall be completed for:
    a. Horizon year
        i. No-build condition.
        ii. Build condition.
    b. Where high volumes prevent adequate operation of a two-way stop-controlled intersection (LOS E or worse), a signal warrant analysis shall be completed according to current MUTCD standards. Theoretical performance of a roundabout shall also be calculated. Estimated ADTs for all system streets shall be included in the report. In some cases, a crash analysis may be requested by city staff to help identify unsafe conditions in the project area that may be exacerbated by an increase in traffic.

2.8.A.III.c.ii.4. Traffic Impact Analysis Study Time

All analysis shall be done for both AM and PM peak weekday periods. In some cases, an off-peak hour or weekend may need to be studied if the development is, or is near, an atypical traffic generator, such as a school or church. Peak hour baseline traffic counts shall be done for all specified intersections. Existing counts may be used if less than two years old and approved by City staff. These numbers shall be used to analyze the existing conditions.

1. In some cases and based on City staff direction, a historical growth rate may be obtained from MRCOG Traffic Flows Maps for the Albuquerque area. However, due to rapidly changing infrastructure, some of the values extrapolated from the maps may not provide an accurate estimate for future traffic, when this is the case, a background growth rate of 2.5% shall be used.
2. The addition of the traffic growth to the existing numbers shall be used for the horizon no-build condition. Any funded infrastructure improvements can also be used during the horizon analysis.

2.8.A.III.d.Water and Sewer Availability

The most current water and wastewater availability requirements are available from the Department of Utilities Department at the City's website: www.ci.rio-rancho.nm.us.

2.8.B Construction Plan Standards

2.8.B.I. GENERAL PLAN INFORMATION

Plans shall be prepared using the current City of Rio Rancho standards and drawings first, then NMDOT standards and drawings, unless directed by the Project Manager. Bridge standard details and specifications shall be the latest version of NMDOT standards and drawings unless a City of Rio Rancho equivalent exists.

2.8.B.II. PLAN SUBMITTALS[1]

2.8.B.II.a. Review Sets Residential and Commercial Developments

Each plan set submitted for development review shall include the following:

1. Electronic and print copies of the design plans.
2. Appropriate supporting documentation & calculations (See Section 3.1 Technical Reports, Studies and Analysis).
3. Project/Plan Submittal Letter, See Appendix A, from the Design Engineer.
4. Previous redlined plans/reports, if applicable, supplied to the applicant by the reviewer.

Drawings submitted without a submittal letter, or the original redline comments will not be accepted and will be returned for resubmittal. All submittals shall be reviewed for quality control by the applicant before submittal. Submittals that do not address the redline comments made by the reviewer at a previous submittal will be returned without further review.

At any point during the review process if the City reviewer determines that a significant change has occurred to the project plans or the design then a new review process may be started.

2.8.B.II.b. Final Plan Submittals of Approved Construction Documents

Once the City has accepted all letters, reports, and construction plans indicating that they are acceptable for quality, the applicant or the Construction Management Team shall obtain City signatures and submit an electronic copy of the signed construction plans, the final approved plat and supporting document to the Development Services Department.

1 Existing content from Chapter II-1 Recordable and Development Documents

1. Signed and sealed plans with Final Approved Plat of the Construction Project Plans for City signature.
2. Electronic PDF version (600 DPI minimum resolution) of all accepted plan sheets and supporting documentation (i.e. construction plans, estimates, all reports, and etc.).

2.8.B.II.c. Record Drawing Submittals

Construction Record Drawings for all improvements within City of Rio Rancho's right-of-way or easements shall be submitted for review and approval. "Working Record Drawing" plans (redline drawings with correct survey data) shall be submitted once a month to the Developer's Engineer or Record. They require initial and date by the reviewer to be considered valid.

At the end of the project/subdivision, the Contractor will provide the Developer's Engineer of Record the valid redline drawings with correct survey data. The Developer's Engineer of Record will then make digital changes to the original Construction Plans. A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land Surveyor with the "Record Drawing Certification (Appendix C)" approval block included will then be submitted to the City along with a PDF (600 DPI minimum resolution) of the Final Record Drawings. On any sheet where a change to the original construction drawings has been made "Redrawn for Record" shall be placed on that sheet. The Developer for private development or the Construction Management Team for capital projects will also provide the City with the digital changes in accordance with Section 3.2.6 Digital Record Drawing Requirements of this Chapter.

Record drawing submittals shall include the following:

1. Record drawings prepared in accordance with the requirements of Section 3.2.6 Record Drawing Criteria.
2. Materials List of all items installed during the project.
3. New Street Data Sheet Appendix D. This will need to be completed by the Contractor on the Final Inspection. City concurrence is required before submitting this form as part of the project closeout.
4. Certificate of Completion and Acceptance. Certification of Acceptance of Infrastructure completed pursuant to a Subdivision Improvements Agreement (SIA) and/or Development Agreement (DA), and Release from Financial Guarantee shall be obtained from the City's Development Review Section-Engineering Division and submitted as part of the project closeout package.
5. Actual Cost Information. Actual cost information corresponding with the itemized Materials List of capital contributed. Actual cost information is required by the City as a condition of acceptance and/or release of financial guarantee related to the development. Such cost information includes, but is not limited to, final invoices of the developer's prime contractor for infrastructure improvements and contract pricing for land and right of way dedications.

2.8.B.III. TIME LIMITATION OF APPROVAL

The City approval of residential developments, commercial developments, and road construction plans shall be valid for a period of one (1) year. Plans not under construction within this time are to be resubmitted and approved by the City prior to construction.

2.8.B.IV. PLAN PREPARATION INFORMATION

Plan sheets shall be organized to include the following elements and should be based on the Standard Plan Sheets available online on the Public Works Department website.

If a plan is submitted as a hard copy, it shall be provided on a 24" x 36" (ARCH D) sheet. All drawings shall be set up to be plotted true half-scale on 11x17/tabloid.

2.8.B.IV.a.Cover Sheet

The Cover Sheet, included in the City's AutoCAD Standard borders, shall contain the following information:

1. The Consultant's seal.
2. Key Map.
3. The appropriate signatory blocks.
4. A project vicinity map.
5. Identification of a minimum of two City benchmarks by number, description, brief location, and elevation of the benchmarks utilized.
6. A plan sheet index listing shall be provided, either on the cover sheet or a separate sheet located near the front of the plan set. Plan and Profile sheets may be summarized in the sheet index.

2.8.B.IV.b.Title Blocks for Non-cover Sheets

Original drawing sheets shall have a title block along the right side of the sheet. This title block, included in the City's AutoCAD Standards, shall have the following information clearly displayed:

1. Name of Engineering Consulting Firm preparing the plans.
2. The Project Name.
3. The sheet number and the total number of sheets in the plan set.
4. The type of plan sheet (i.e. typical sections, details, plan & profile, etc.) shall be indicated.
5. City of Rio Rancho logo.

2.8.B.IV.c.Legend and General Notes

The Legend and General Notes shall be located on the second sheet or near the front of the plan set. The Design Engineer can obtain the latest version of the General Notes Sheet from the Department of Public Work's website. The Consultant shall use the symbols & abbreviations found on this sheet consistently throughout the entire plan set.

The Consultant can add notes as they pertain to each project, as needed. The note additions must be identified under the header "SPECIAL NOTES". Notes relieving the Engineer from utility coordination and/or line location will not be allowed (all due diligence shall be completed to show existing utilities on the plans).

The Standard Legend can also be found on the Department of Public Work's website.

2.8.B.IV.d.Plan Sheet Orientation and Layout

In general, project work shall be oriented on the sheets such that north will be pointing "up" or "to the right" on the sheet. Normally, no more than 1,000 feet of street length should be shown per plan sheet. This allows room on the right side of the plan sheet for the Construction Notes or Keyed Notes.

For curvilinear streets, the drawing shall be oriented so that the north arrow points to the top or the right edge of the sheet as appropriate to a practical representation of the curved portion of the street depicted. If the orientation of the street is northwest-southeast or southwest-northeast, place the western-most end of the street segment near the left edge of the sheet.

Construction centerline stationing, at intervals of 100 feet, shall be shown on both plan and profile views from left to right. Subsequently, stationing is read from west to east or from south to north.

Portions of the same street or intersection shall not be shown beyond match lines on separate sheets. Match line information shall provide stationing and matching sheet number.

2.8.B.IV.e.General Plan and Profile Sheets

Most plan/profile layouts shall be shown on standard half plan/half profile sheets. In the case where steep grades or wide plan views prohibit plotting on these sheets, separate full plan and full profile sheets may be used.

Plan views shall show the limits of existing ROW and call out new ROW limits as well as construction easement areas.

Sheet number references for storm drain plans, connector pipe plans, etc. shall be noted on the plans.

All points of connection to existing facilities shall be clearly shown and the appropriate elevations indicated on the plans.

2.8.B.IV.f. Horizontal Geometrics

As a general rule, the following pertains to roadway geometrics:

1. Roadway centerline bearings and distances shall be shown on the plans.
2. All tangent points, point of intersection (P.I.) of curvilinear sections, beginning and ending taper points and monument lines of all intersecting streets shall be labeled and stationed.
3. Provide top of curb and flow line elevations at returns and valley gutters.
4. On curved sections, construction centerline stationing shall be shown along the centerline of the curve, and not the tangent lines. Curve data shall be shown on same sheet as the curve.
5. The plans shall show dimensions from monument line/construction centerline to ROW and to existing curbs.

2.8.B.IV.g.Survey Control

See DPM Chapter 7 Surveying and Permanent Monumentation.

2.8.B.IV.h.Topography and Notation

1. All subdivision names, block numbers, lot numbers, names of major business, schools, fire stations, and other public facilities shall be shown on the plans.
2. The Final ROW and easement limits shall be shown on the plans as a heavy line. Existing ROW where it differs from the new ROW line shall not be shown for Major Street projects.
3. Label all existing features. Include description and dimension as needed.
4. All topography to at least 10 feet beyond the ultimate ROW or easements shall be shown. Standard symbols shall be used where applicable.
5. Where certain items such as monuments, water valves, etc., are supposed to be, according to plan records, but cannot be found in the field, they shall be labeled “NOT FOUND” or “NF” on the plans.

2.8.B.IV.i. Grading Plan

Modifications to the comprehensive plans and the development of area plans, sector plans, site development plans and landscaping plans on tracts of five (5) acres or more are appropriate applications of conceptual

grading and drainage plans. Drainage Plans are required for the approval of Building Permits, Site Development Plans, and Landscape Plans for the development of projects 5 acres or less in size.

The Format presented below provides for a logical and comprehensive treatment of the topics relevant to the review and analysis of a complete Drainage Submittal. The Format is presented in outline form for simplicity. Each submittal shall include the Engineer's Seal signed and dated.

The following Outline is intended as a guide for the preparation of Drainage Submittals. Some items may not be applicable, while other items may require a more in-depth treatment or may have been overlooked in the preparation of the Outline.

2.8.B.IV.i.i. Grading

1. Description
    a. Reference the Grading Plan when included as an attachment to the Drainage Submittal.
    b. Describe elements of the Plan and how those elements relate to the Existing and Developed Conditions.
    c. Discuss and reference all other supporting drawings provided in support of the Drainage Submittal.
2. Content. Refer to the Grading Plan Checklist.

2.8.B.IV.i.ii. Calculations

1. Provide narrative description of the calculations performed to support the analyses and evaluations.
2. Discuss and reference calculations for Existing, Developed and Future hydrology.
3. Discuss and reference hydraulic calculations demonstrating capacity and/or adequacy of existing and proposed facilities.
4. Provide sample calculations, tables, charts, etc. as necessary to support the calculations and results.
5. Reference computer software, documents, circulars, manuals, etc. used to produce the calculations and results.

2.8.B.IV.i.iii. Conclusion

1. Summary of proposed drainage management strategy.
2. Justification of rationale for discharge of developed runoff from site.
3. Summary of proposed drainage improvements.
4. Identification of DPM design variances being requested.
5. Identification of required Drainage Covenants.
6. Identification of ownership, operation and maintenance responsibilities.

2.8.B.IV.j. Irrigation Plans

1. Each irrigation control valve shall be labeled by Irrigation controller and numerically identified. (Controller - Zone) Example (A-1,A-2,A-3).
2. Irrigation systems shall be designed so that the system has the capacity to place 2 inches of water per week on high water use grasses and 1 inch of water per week on low water use grasses. This water shall be applied in a three-to-six-day period during a watering window from 10:00 p.m. to 10:00 a.m. as per City of Rio Rancho Water Conservation Ordinance Chapter 52. Irrigation systems shall also be designed to

adequately water landscape other than turf. Landscaped areas other than turf shall generally be xeriscape in plant selection, placement, and irrigation system design.

3. Irrigation plans shall state existing static pressure at point of connection. Typical minimum design pressure is 65 psi, but actual pressure must be verified and documented prior to irrigation system design.
4. If the service pressure is too high, a pressure reducing valve may be necessary. If the service pressure is too low, a booster pump may be necessary.
5. Irrigation plans shall be reviewed and approved as part of a complete set of construction plans and shall also indicate proposed site grading and drainage.
6. Each irrigation plan shall have a System Performance Information Schedule that provides the following information for each control valve:
   a. Irrigation controller and control valve Number.
   b. Valve brand, model number and size.
   c. Type of irrigation application.
   d. Irrigation sprinkler assembly brand and model number.
   e. Irrigation head nozzle and model number, if applicable.
   f. Irrigation head spacing technique.
   g. Irrigation head gallons per minute.
   h. Total gallons per run time and cycle time.
   i. Design operating pressure at the head.
   j. Designed operating pressure at point of connection.
   k. Length of time required to operate the valve in order to apply 0.33 inches of water.
   l. Total run time of operation time for the irrigation cycle to apply 0.33 inches of water.
7. At time of final acceptance, the contractor shall demonstrate to the city, that the operating pressure at the heads has been adjusted to match the specified design operating pressure for each valve.

2.8.C Plan Sheet Sequence

2.8.C.I. PLAN SHEET SEQUENCE FOR RESIDENTIAL/COMMERCIAL DEVELOPMENT

Sheet 1: Signature Cover Sheet, including Index of Sheets.

Sheet 2: General Notes Sheet.

Sheet 3: Standard Legend and Abbreviations.

Sheet 4: Subdivision Plat.

Sheet 5: Overall Grading Plan.

Sheet 6: Yard/Retaining Wall Plan & Profiles.

Sheet 7: Yard/Retaining Wall Details.

Sheet 8: Typical Sections, Pavement Structural Sections, etc.

Sheet 9: Plan/Profile and other sheets as needed in the following order:

1. Median Island Details.
2. Plan and Profile of Paving.
3. Intersection Design Sheets for Major Intersections.

4. Plan and Profile of Storm Drain.
5. Profiles of Catch Basins and Connector Pipes.
6. City Standard Details (no less than 8 and no more than 10 details per sheet).
7. Special Detail Sheets.
8. Bridge and Structural Detail Plans (see Sheet Sequence Bridge and Structural Plans for plan sheet order).
9. Landscaping/Irrigation Plans.
10. Erosion and Sediment Control Plan.
11. Erosion and Sediment Control Details/calculations.
12. Traffic Signing & Striping Plans.
13. Traffic Signal Plans.
14. Street Lighting Plans.
15. Traffic Control Plans.

Sheet 10: Typical Section showing location of water and sewer line.

Sheet 11: Plan/Profile and other sheets as needed in the following order:

1. Plan and Profile.
2. City Standard Details (no less than 8 and no more than 10 details per sheet).
3. Special Detail Sheets.

2.8.C.II. SHEET SEQUENCE BRIDGE AND STRUCTURAL PLANS

Sheet 1: Typical Legend, Notes, and Detail Sheets, plus notes specific to the bridge project.

Sheet 2: Paving plans and profile sheet (if bridge is also part of a paving project).

Sheet 3: Detour Plan and Profile, if required, showing all details required for the detour in plan and profile.

Sheet 4: Plan and Profile for any water, sewer or irrigation alterations to be included as a part of the bridge construction.

Sheet 5: Soil boring log sheet showing all obtained soils information.

Sheet 6: Abutment details.

Sheet 7: Pier details.

Sheet 8: Deck details.

Sheet 9: Miscellaneous details.

Sheet 10: Handrail details.

2.8.C.III. SHEET SEQUENCE FOR WATER AND SANITARY SEWER PLANS

If separate from roadway, drainage, or traffic improvements, as in offsite plans, then water and sewer designs shall be under a separate cover sheet following the sequence below:

Sheet 1: Signature Cover Sheet, including Index of Sheets.

Sheet 2: Legend, Abbreviations, and Notes Sheet.

Sheet 3: Plan Sheet Key Map (place on Cover Sheet if size permits).

Sheet 4: Water/Sewer Quantity Summary Sheet.

Sheet 5: Typical Section showing location of water and sewer line.

Sheet 6: Plan/Profile and other sheets as needed in the following order:

1. Plan and Profile.
2. City Standard Details (no less than 8 and no more than 10 details per sheet).
3. Special Detail Sheets.

2.8.D Digital Record Drawing Requirements

Once the plans have been approved and signed off by the method stated in Record Drawing Submittals, either GIS compatible files (shapefiles) or AutoCAD drawing files and InRoads files used to create the Record Drawings (AutoCAD, and PDF) shall be submitted to the City. The file shall include the Contractor's name, the Engineer's name, the Project/Subdivision name, the Project/Subdivision location, and the Final Inspection date. The AutoCAD file shall depict the final Record Drawings with the rights-of-way and the project/subdivision tied to the state plane coordinates. These submitted files shall include all survey data as stated below. The files shall contain the following information and shall be in the City's schema for structure (attribute table shall match the City's). Please contact the City Project Manager or the Records & GIS Section for the appropriate file schema.

2.8.D.I. GIS SHAPEFILE REQUIREMENTS

If GIS files will be submitted in lieu of the AutoCAD documentation, the shapefiles required shall be, but not limited to:

1. Lot Lines (Parcels).
2. Easements as listed on the Project Plat.
3. Road Centerlines.
4. Curb & Gutter.
5. Sidewalks.
6. Water & Sewer Utilities (Must be separate files):
    a. These files shall include any infrastructure related to water and sewer if a lift station, booster station, etc. was installed as part of the project, they must be shown.
    b. Manholes, valves, pressure release valves (PRVs), and fire hydrants shall all be included in these files where applicable.
7. Traffic Infrastructure:
    a. Signs.
    b. Signal Infrastructure.
8. Drainage:
    a. Strom Drain Infrastructure.
    b. Ponds.
    c. Box Culverts.

2.8.D.II. SURVEY DATA REQUIREMENTS FOR ALL HARDCOPY OR ELECTRONIC FILES

The files shall contain the following information:

2.8.D.II.a. General

1. Street Centerlines.
2. All right of way and easement lines with docket or recordation numbers are shown on included approved plat. The elevations required in the section above must be performed under the supervision of a Registered Land Surveyor.

2.8.D.II.b. Street, Storm Drains, and Grading & Drainage Plans

1. Station for all grade breaks.
2. Back of curb offset dimension at all changes in alignment.
3. Top of curb, gutter and pavement centerline elevations at all grade breaks, curb return, valley gutters, plus any other location necessary to adequately show drainage.
4. Survey monuments.
5. Street centerline station and offset dimensions to the storm drain mainline at all changes in alignment and/or changes in grade.
6. Street centerline station and offset dimension to all structures and changes in alignment.
7. Rim and invert elevations for each manhole, catch basin, and miscellaneous structures.
8. The pipe material and diameter actually installed shall be shown on all plan and/or profile sheets.
9. Station, location and limits of utility encasements, caps, pipe supports, etc.
10. Station, location, limits and dimensions of facilities which are abandoned in place, including the size, depth and type of materials remaining.
11. Elevations shall be provided at all drainage control points (. detention overflow point, tops and bottoms of detention basins, drain rim, valley gutters, curbs, etc.).
12. Dimensions shall be provided for all detention areas.
13. Drainage Control (Retention) Basin Calculations revised, with written approval, to the as-built condition, and certification of compliance.
14. Location of all existing structures (buildings, drainage structures) including finished contours and dimension shall be provided.
15. Dimensions and elevations of all pipe, culvert, scupper, catch basin, channel top width and bottom width, channel longitudinal slope changes, grate and invert elevations.
16. Elevations at the end of laterals and one elevation shot midpoint between manholes.
17. Elevations at the center of the building pad, all four corners, and four elevation shots for lot slope and drainage.
18. Elevations of the tops and toes of all slopes at intervals of 50 feet.
19. Street, Storm Drains, and Grading and Drainage Plan.
20. Supplemental Record Drawings Requirements for Grading and Drainage Improvements.
21. Permanently marked benchmark based on NAVD 88 and located on or very near the facility.
22. Pond(s) (include as-built volumes, e.g., 100-year water surface elevation, and flow information).
23. Pipe inlet(s) and outlet(s) (include as-built capacity calculations).
24. Rundown(s) (including the required inlet dimension).
25. Graphic depiction of complete storm drainage system on 1 sheet. Size of sheet to be agreed upon with City/SSCAFCA.
26. Spillways(s) (including the required outlet dimensions).
27. Channel(s).
28. Flowlines.
29. Erosion control and stormwater pollution prevention structure(s).

30. Temporary drainage, erosion control and stormwater pollution prevention facilities required for phased development.
31. Retaining and/or garden wall(s).
32. Other features critical to the drainage facility.
33. Cost of drainage improvements proposed for maintenance.
34. Operation and maintenance schedule and pictures taken during the construction.

2.8.D.II.c. Water Plans

1. Street centerline station and offset dimensions to:
   a. All fire hydrants and fittings (i.e. valves, bend, tees).
   b. Main line at all changes in horizontal and vertical alignment.
   c. All horizontal control points (i.e. centerline intersects, PC, PT).
2. Dimension to all operating nuts referenced to the water main on valves with offset operating devices.
3. If the designed topography does not allow for the service standards to be used, centerline station and offset to each service tap; size of tap and dimension to nearest side property line are required. If topography allows for the standard to be used, then a survey point is only required at the end of the service for location purposes.
4. Note centerline station, offset and elevations to all changes in vertical alignment (i.e. dips, bends, etc. required to avoid conflicts with other utilities).
5. The installed water pipe material and diameter shall be shown on as-built plan and/or profile sheets.
6. Station, location and limits of utility encasements, caps, pipe supports, etc.
7. Station, location, limits and dimensions of facilities which are abandoned in place, including the size, depth and type of materials remaining.
8. If the pipe depth follows current City standards, survey points for the water line are only required at the fittings for grade changes. If the pipe does not follow City Standards, two top of pipe elevation shots equal distance between valves are required.

2.8.D.II.d. Sewer Plans

1. Street centerline station and offset dimension from street centerline to main line at manholes and all changes in alignment.
2. Sewer line station at centerline of each manhole.
3. Calculated slope between manholes.
4. Sewer line stationing at centerline of each service tap at 90 degrees to main; if not installed 90 degrees to main, station and offset to end of each service tap.
5. The installed sewer pipe material and diameter shall be shown on all plan and/or profile sheets.
6. Station, location and limits of utility encasements, caps, pipe supports, etc.
7. Station, location, limits and dimensions of facilities which are abandoned in place, including the size, depth and type of materials remaining.
8. Rim and invert elevations.
9. If the designed topography does not allow for the service standards to be used, elevations at the end of the laterals are required. If topography allows for the standard to be used, then a survey point is only required at the end of the service lateral for location purposes.
10. One elevation shot midpoint between manholes.

2.8.D.II.e. Traffic Plans

1. Foundation location and modifications to the structural details noted.
2. Conduit location, size, alignments, and type noted.
3. Cabinet location, dimensions, and type.
4. Size, type, and location of battery backup for power pedestals.
5. Power Service Address.
6. Phone or fiber optic communication line location and connection with applicable service address and phone number.
7. Pole location and types.
8. Mast arm type, length and pendent locations.
9. Head locations and types.
10. Loop detector location, length, and type.
11. Changes to items in the schedules.
12. Interconnect conduit location and pull box type and location.
13. Sign base location, size or type changes from the approved plan.
14. Striping layout changes from the approved plan noted.
15. Changes to location, spacing, and type of raised pavement markers.
16. Traffic Conduit: All manholes and pull boxes.
17. Locations of all streetlights pull boxes, and service locations.

2.8.D.II.f. Park Plans

1. The Park developer shall provide and keep up to date a complete set of “record” drawings which shall be corrected after all modifications to show all changes in the location of sprinkler assemblies, irrigation controllers, backflow preventers, valves, drains, meters, points of connection, pull boxes and wire splice boxes, pipe and wire routing, and other changes that may have been made from the original drawings and specifications as provided to Park developer. All straight valves, manual drains, wire splices and automatic and manual valve locations shall be shown with actual measurements to reference points so that they may be easily located in the field. Valve locations shall be shown with actual measurements to reference points so they may be located in the field.
2. At the time of final acceptance, the Park developer shall furnish a complete set of As-Built Plans, prepared by a qualified draftsperson showing the entire completed system as actually installed. This is the responsibility of the Park developer and shall not be construed to be the responsibility of any other party. This plan set shall be accurate and to scale. The legend shall also be modified to designate any “record” changes. These As-Built Plans shall be drawn on/over the approved construction plans, shall be dated, and clearly labeled “AS-BUILT PLANS, RECORD DRAWING.”
3. The Park developer shall also provide and install a legible reduction of the As-Built Irrigation Plan sheet with color coded zone map, laminated in plastic, in the controller enclosure at the Job Site.

2.8.E Recordable Documents

This section presents detailed specifications for the preparation of significant development related documents which ultimately are filed or "recorded" with the appropriate County Clerk.

The major and most significant document discussed is the Final Plat as required by the current Subdivision Ordinance of the City of Rio Rancho (Chapter 155 – Subdivisions). The preparation of a preliminary plat is also discussed in detail since the preliminary plat, when approved by the Planning and Zoning Board, becomes the basis for preparation of the Final Plat.

Examples of appropriate dedication statements on plats and formats for grants of easement by separate instrument for certain purposes, are also included. The other major types of documents discussed are Construction Plans, including but not limited to; Site Development Plans, Grading and Drainage Plans and Landscaping Plans, Traffic Impact Analysis, Geotech Report, Drainage Master Plan, Drainage Implementation Plan, and a Water and Wastewater Availability Statement. Detailed criteria for these types of plans have been developed to assure that information may be consistently found on the plans and that no information is lost due to illegibility when the documents are scanned for record.

2.8.E.I. DEFINITIONS

"Plat" means, for the purposes of this section, a formal graphic presentation of subdivided land prepared in the manner specified herein and containing required descriptions of subdivided land, acknowledgment by owners of consent to subdivision, dedications, and certification by the plat preparer.

2.8.E.II. GOVERNING REGULATIONS

The Subdivisions (Chapter 155-Subdivisions) ordinance is the primary regulation governing plat preparation for subdivided land within the jurisdiction of the City of Rio Rancho Planning and Zoning Board. Additional requirements related to processing and recording are promulgated by the appropriate County Clerk.

2.8.E.III. GENERAL REQUIREMENTS FOR ALL PLATS

This section covers requirements for (1) Preliminary Plats which are required as a step toward Final Plat preparation and approval; (2) plats intended for abbreviated procedure called Summary Plats [generally Final Plats involving minor subdivisions with no increase in the number of lots, a decrease in the number of lots, minor boundary changes, or are for a limited special purpose and which by their nature are appropriate for abbreviated processing; (City of Rio Rancho Ordinance Chapter 155.26)] and (3) Final Plats of proposed subdivisions submitted for approval to the Planning and Zoning Board.

The following are requirements for all plats (detailed requirements for specific types of plats are given in subsequent subsections):

2.8.E.III.a. Title of Plat

The name of the subdivision or legal description created by the plat should be placed near the upper right-hand corner of each plat sheet and should be the boldest lettering on the sheet.

2.8.E.III.b. Subtitle of Plat

Immediately below the Title of Plat and in the form of a brief statement is the subtitle of the Plat. Examples are “Replat of (lands being replatted) …to… (new name)” or “Subdivision Plat” or “Annexation Plat”.

2.8.E.III.c. Date of Plat

The month and year in which the plat is prepared should be placed immediately below the Subtitle of the plat on each sheet.

2.8.E.III.d. Location Map

A reduced scale vicinity map showing the relationship of the lands of the plat to well-known principal landmarks and municipal boundaries should be placed in the upper left-hand corner of the plat sheet or "first sheet" if a multiple sheet plat.

2.8.E.III.e. Scale and North Arrow

Drawing scale must be shown as both equivalent scale and graphic scale, preferably immediately below the north arrow which must be shown in proper orientation with respect to the plat lines on each plat sheet. A north arrow must also be provided to orient the location map.

2.8.E.III.f. Purpose of Plat

The purpose of plat statement is a description of the intent of the platting action application. This should delineate at a minimum 1) what is being created by the plat, 2) all dedications of Right-of-Way, 3) easements granted and 4) any vacations of Rights-of-Way or easements.

2.8.E.III.g. Plat Boundary Lines

Plat boundary lines must be shown as the boldest lines on the plat sheet and must be properly oriented and annotated giving the bearings and distance of all lines in degrees, minutes, and seconds and the basis for such bearings. The distances of all lines must be drawn to correct scale and dimensioned in feet, correct to hundredths or other functional reference system.

2.8.E.III.h. Tie to Permanent Survey Monuments

Ties to Permanent Survey Monuments from the plat boundary lines must be shown giving monument identification, New Mexico State Plane, Central Meridian Datum Coordinates, and bearings and distances of courses establishing ties; bearings in degrees, minutes and seconds, and distances in feet to hundredths. (See Chapter II.6, Surveys and Permanent Monumentation of the DPM, City of Rio Rancho ordinances; Chapter 155.24, (C), (3), (a), and Chapter 155.25, (C), (5) for more information).

2.8.E.III.i. Existing Easements

Existing easements within, along, or intersecting the plat boundaries must be shown giving correct location, dimensions, and purpose or nature of right of easement. Existing easements which are to remain in the Final Plat should be drawn in light lines or dashed lines and clearly labeled. Easements intended to be abandoned or vacated by Final Plat approval should be shown as ghost lines, easily distinguished from lines for easements to remain, and must be clearly labeled including the intent to abandon or vacate. Vacation of easements will require additional documentation; see subsection D of this chapter.

2.8.E.III.j. Existing Public Right-of-Way

Existing public right-of-way along or intersecting the plat boundary or boundary streets of the plat must be shown giving correct locations and dimensions, purpose or nature, and name, if applicable.

2.8.E.III.k. Total Area of Plat

Total area of plat within the plat boundaries must be shown in acres, rounded to four decimal places for the type of plat being prepared.

2.8.E.III.l. Monument Description and Location

Monument description and location must be shown for all found monuments and for all monuments set or, if a Preliminary Plat, intended to be set within or related to the plat boundary and ties thereto. Monument description must include the registration number of the surveyor who set the monument or the number which appears on found monuments. Reference DPM Chapter II.6- Surveys and Permanent Monumentation.

2.8.E.III.m. Disclosure Statement

A disclosure statement is required of all plat packages. The Preliminary and Final Plat shall be accompanied by a disclosure statement in accordance with the standardized format provided in Appendix 2.1.2 of this chapter. The purpose of the disclosure statement is to permit the prospective purchaser, lessee, or other person acquiring an interest in the subdivided land to make an informed decision about the purchase, lease, or other conveyance of the land.

2.8.E.III.n. Signature Blocks

The signature blocks will conform to the sample provided below. Applicable signatures vary with the complexity of the plat. Dry Utilities, then SSCAFCA's signature should be obtained prior to the City Engineer. When these are complete, Development Services Department will route for Planning & Zoning Board Chairman's signature or Department Director signature and City Clerk. Other signatures may be obtained in any order most convenient to the applicant/agent.

Utilities Signature Block:

_____

Public Service Company of New Mexico Date

_____

Lumin Date

_____

Sparklight Date

_____

Comcast Date

_____

Qwest Communications Date

_____

Ezee Fiber Date

_____

New Mexico Gas Company Date

_____

City of Rio Rancho Date

The utility companies may require additional language stating that the Public Utility Easements are granted for their common and joint use. Contact should be made with these companies prior to submittal of the initial plat to clarify their requirements.

Signature Block For Subdivisions:

RIO RANCHO PLANNING AND ZONING BOARD

Approved at their meeting of this _____ day of _____, 20__.

_____

By _PZB chairperson's name_____ Chairman Date

CITY CLERK CERTIFICATE:

I, _City Clerk's name__, City Clerk of the City of Rio Rancho, Sandoval County, New Mexico do hereby certify that the plat shown hereon was approved by the Rio Rancho Planning and Zoning Board on the _____ day of _____, 20__.

_____

City Clerk's name, City Clerk

Signature Block For Summary Plats:

_____

Development Services Director name, Development Services Department Director Date

CITY CLERK CERTIFICATE:

I, _City Clerk's name__, City Clerk of the City of Rio Rancho, New Mexico do certify that the summary plat shown hereon was approved administratively by the Rio Rancho Director of the Development Services Department on the _____ day of _____, 20__.

_____

City Clerk's name, City Clerk

County Signature Block:

County Treasurer

I, _County Treasurer's Name____, Treasurer of Sandoval County, New Mexico, do hereby certify that the previous ten (10) years of property taxes due and payable for the property shown hereon have been paid in full.

_____

Sandoval County Treasurer Date

County Clerk

STATE OF NEW MEXICO)

COUNTY OF SANDOVAL SS

This instrument was filed for record on _____, 20__ at _____, __.m., recorded in Volume___, of records of said County, Folio_____ as Document No. _____.

(Rio Rancho Estates Plat Book Number _____, page_____

_____

County Clerk and Recorder Date'

Southern Sandoval County Arroyo Flood Control Authority

_____ _____

Chair of the Board, Southern Sandoval Arroyo Flood Control Authority (SSCAFCA) Date

NOTE: SSCAFCA's signature block will vary depending on the plat. Contact SSCAFCA for the correct wording.

2.8.E.III.o. Registered Surveyor Certification

Certification is required by the registered land surveyor who performed the surveys for the plat and who prepared the plat certifying the accuracy of the surveys and the plat. Registered land surveyor must also certify that the surveys were either performed by the surveyor or under his or her supervision, and that the plat was prepared by the surveyor or under his or her supervision. If the plat is prepared from record documents only, the certification should so state.

Note: Plats which do not contain clearly identified ties to permanent survey monuments by either record or existing found monuments will not be accepted.

2.8.E.III.p. Jurisdictional affidavit

Jurisdictional affidavit by surveyor stating the subject property is within the platting jurisdiction of the City of Rio Rancho.

2.8.E.IV. RECORDABLE DOCUMENT SUBMITTAL MATERIALS

1. Preliminary Plats must be drawn on stable reproducible transparent material.
2. Final Plats must be drawn in permanent black ink on stable reproducible, polyester, transparent material or produced by other means resulting in a permanent, stable, and reproducible transparency. All signatures must be original, not reproduced. Plat sheet size for single sheet plats may be any of the following sizes currently accepted by the County Clerk: a (8 ½" x 14"), b (12" x 18") c (18" x 24"). The maximum acceptable sheet size for any plat is 24”X 36”. The sheet size chosen must accommodate adequately all required data at the required scale. Multiple sheets may be required for large or complex plats. Sheet size for multiple sheet plats must be at least 18" x 24". Spliced plat sheets are not acceptable.
3. Adhesive materials or notes may not be used for line work or dimensions bearings of lines or notes on Final Plats. Signatures must be original. Plats assembled with adhesive materials are not considered acceptable.

2.8.E.V. PRELIMINARY PLAT REQUIREMENTS

Reference City of Rio Rancho, Chapter 155: Subdivisions, for subdivision procedures.

The following requirements for preliminary plats are in addition to the General Requirement for Plats, listed above:

2.8.E.V.a. Scale

Must be 1" = 200', or larger (1" = 100' preferable)

2.8.E.V.b. Additional Plat Specific Data Required for Construction Plans

2.8.E.V.b.i. Proposed Monumentation

1. Proposed benchmark locations.
2. Proposed Permanent Survey Monument(s) location and method of tie to plat boundary.
3. Proposed subdivision control monuments location and type.

2.8.E.V.b.ii.Existing Conditions

1. Type and width of paving on existing streets intersecting, along, or within 150' of the plat boundaries.
2. Existing utilities within and adjacent to plat, including the location and size of:
   a. Water Wells.
   b. Water Reservoirs.
   c. Water Lines.
   d. Sanitary Sewer Lines.
   e. Storm Drains, Channels and Other Drainage Facilities.
   f. Gas Lines.
   g. Fire Hydrants.
   h. Power Lines and Poles.
   i. Telephone Lines and Poles.
   j. Street Lights.
   k. Existing Structures.
3. If not on or immediately adjacent to site, direction to, distance to, and size of:
   a. Nearest Water Lines.
   b. Nearest Sanitary Sewer Lines With Invert Elevations.
4. Ground elevation and site based on mean sea level as established by the National Geodetic Survey North American Vertical Datum, 1988 (NAVD, '88):
   a. For land having slopes less than l% by contour lines at intervals of not more than 1' and spot elevations not more than 100' apart at selected locations sufficient to define all breaks in grade and drainage features.
   b. For lands sloping between l% and 5%, contour lines at intervals not to exceed 2'.
   c. For lands sloping more than 5% by contour lines at intervals not to exceed 5'.
5. Existing property lines to be eliminated by light dashed lines clearly annotated to indicate elimination intent.

2.8.E.V.c. Proposal Elements – Preliminary Plat

1. Plat boundary gross area in acres to the nearest tenth of an acre.
2. Proposed public right-of-way locations and widths, street widths, and street names.
3. Proposed private way, locations and widths and street widths.
4. Proposed easements of any nature; locations, dimensions, nature or purpose, ownership and any limitations thereto.
5. Proposed block and lot lines with number or letter identification of each block and lot to be created. Lot fronts must be designated on any double fronting residential lots by placement of a one-foot. No Vehicular Access Easement on one of the frontages. Access and addressing must be from the minor street. Areas of all lots in acreage or square feet must be shown on the plat.
6. Locations, dimensions, and approximate area of reserved or dedicated public lands.
7. Proposed ground elevations presented as specified in C.2.b.3. of this section.
8. Locations, dimensions, and approximate areas of proposed multi- family or non-residential areas.
9. Proposed locations of any planned water wells, reservoirs.
10. Any significant topographic features or conditions on-site.
11. Zoning of properties abutting and adjacent to the site.
12. City of Rio Rancho Plat Book & Page numbers and appropriate County Clerk recordation for all abutting or adjacent properties.

2.8.E.VI. FINAL PLAT DETAILED REQUIREMENTS

The following detailed requirements for Final Plats are in addition to the general requirements for all plats given in Section 3.3.3.

2.8.E.VI.a. Scale

Must be either 1" = 100', or 1" = 50' (1" =50' preferable, when practical).

2.8.E.VI.b. Additional Data Required – Construction Plans

2.8.E.VI.b.i.Plat Boundary

In addition to the boundary items required by Subsection B, both record and measured distances and bearings must be shown and identified for all courses in the plat boundary on Final Plats.

2.8.E.VI.b.ii. Plat Area

The total gross area expressed to four decimal places within the plat boundary must be shown on the Final Plat located on the plat as specified in the Subsection B.

2.8.E.VI.b.iii. Planning and Platting Jurisdiction

Final Plats must contain a jurisdictional statement indicating that the plat either does or does not lie with the municipal boundaries at the time of submission for final City approval. If the plat does not lie within the municipal boundaries, the plat must contain a statement that the plat either does or does not lie within the planning and platting jurisdiction of the City of Rio Rancho.

2.8.E.VI.b.iv.Interior Data

The following additional data must be shown within the plat boundary of all Final Plats.

1. All existing public rights-of-ways which will remain and those to be created by the plat. Required information includes the following:
   a. Names of streets.
   b. Right-of-way widths and locations.
   c. Right-of-way data including the length, central angle, and radius of all curves in right-of-way lines.
   d. Centerline data including the length, central angle, and radius of all curves.
2. All easements, both existing and those to be created by the plat giving the following information:
   a. Location and dimensions by bearing and distance.
   b. Purpose.
   c. Limitations, if any.
3. Any easements intended to be abandoned, identified as "to be abandoned or vacated by this plat". Easements may only be vacated by this means if legal consent of all those holding legal interest in the easement is provided on the Final Plat. If vacated by separate procedure or instrument, the approved document must be identified by title and appropriate County Clerk recordation identification.
4. All block and lot lines giving the following information:
   a. Location and dimensions of all lot lines by bearing and distance, lot widths and lot depths.
   b. Areas of all lots in acreage or square feet.
   c. Number or letter identification, in progression, for each lot and each block. No lot identification may be duplicated within a single block and no block identification may be duplicated within a plat

boundary. When combining lots, label the new lot with the subsequent number and a letter, ex. Lot 5+Lot 6=Lot 5A.

d. Corner lot fronts must be designated by an "F" for all single-family residential lots.

5. Any lots dedicated or reserved for public use must be identified giving location and dimensions by bearing and distance, area in acres or square feet, and the intended purposes. If dedicated by a separate instrument, the document identification and County Clerk recordation information is to be included.
6. Emergency access roads, fire hydrants and anything else required by the International Fire Code.

2.8.E.VI.b.v. Exterior Data

The following information concerning elements exterior to the plat boundary must be shown on the Final Plat:

1. Identification of lands adjoining the platted land, giving the identity of recorded subdivision plats, including the County Clerk recordation information, and City of Rio Rancho Plat Book and Page numbers. Other parcels of land with other types of legal descriptions shall use the most accurate identification available.
2. All streets on adjacent lands which intersect the boundary or boundary streets of the plat must be shown giving the location, dimensions of right-of-way and name. Private ways which intersect the plat boundary or boundary streets must be shown similarly.

2.8.E.VI.b.vi.Subdivision Data

The following additional general information must be shown on the Final Plat:

1. The total miles of full-width streets and the total miles of half-width streets, as well as the total miles of all streets created by the plat.
2. The total number of lots and or tracts created by the plat.
3. The case number of the plat as assigned by the City Development Services Department.
4. The date, including at least the month and year, of the survey.

2.8.E.VI.b.vii. Metes and bounds description

A metes and bounds description, of the exterior boundary of the platted land must be given on the Final Plat. The caption portion of the description must include reference to the most recent recorded identification of the lands being subdivided or platted and the County recordation information therein. The description is to be located within the central one third of the area of the first sheet of the Final Plat, beginning near the upper margin.

2.8.E.VI.b.viii.Consent and dedication statements

1. A statement or statements must be on the Final Plat clearly stating that the proposed plat represents the desires of the owners and that all dedications, grants of easements and other public features of the plat are given for public use in perpetuity with the knowledge and free consent of the owners. Separate clauses of such statements may be necessary for specific special purpose features such as drainage easements. Unless otherwise approved by the planning authority, all grants of easements to the City must generally allow use for other purposes (e.g., drainage easements must also allow for installation of underground sanitary sewer and water lines). The granting of easements shall not obligate the City of Rio Rancho to maintain natural arroyos, drainage channels, or facilities that do not meet the standards of the

City Engineer for design and construction, nor shall this granting require the protection of property lying outside of the easements granted.

2. All lands dedicated for public rights-of-way are to be dedicated in fee simple and the dedication statement must so state.
3. If lands are to be dedicated as parks within or associated with the plat, the dedicated park land must be clearly indicated on the plat, as described herein for public areas. A separate deed for the dedicated land is required and must be provided to the City after the plat to complete the land transfer.
4. If the plat includes any private ways, there must be a statement on the plat establishing the permanent legal character of such private ways, and the statement must be acknowledged by the owners. The statement must indicate the permanent owners of the rights granted in the private ways. A typical form of such statement might read:

   "Private ways (streets) shown hereon are hereby granted as permanent access easements to be indivisibly, privately and collectively owned by the owners of the individual properties which the easements serve."

   Similar statements must be provided if other ownerships are intended. However, the permanence of access rights to individual properties must be indicated.

   If any private way on the plat serves more than one (1) lot and is not to be paved prior to request for plat approval, a bond assuring required paving must be posted with the City.

5. All owners' signatures on the plat must be acknowledged in the manner required for acknowledgment of deeds.

2.8.E.VI.b.ix. Certifications/ Signatures:

The following certifications/signatures are required to be on the Preliminary and Final Plat:

1. Certification by the registered land surveyor who performed the surveys for the plat and who prepared the plat certifying the accuracy of the surveys and the plat, and that the surveys were either performed by the surveyor or under his or her supervision, and that the plat was prepared by the surveyor or under his or her supervision. If the plat is prepared from record documents only, the certification should so state. Reference DPM Chapter II.6 Surveys and Permanent Monumentation. Plats which do not contain clearly identified ties to permanent survey by either record or existing found monuments will not be accepted.
2. Jurisdictional affidavit by surveyor stating the subject property is within the platting jurisdiction of the City of Rio Rancho.
3. Certification by utilities that respective needs, if reasonable, are met by the plat. Xfinity, CenturyLink, and Sparklight PNM Electric Services and New Mexico Gas Services are the firms currently providing local service which should make such certification by authorized representatives.
4. Certification by the City Engineer or his/ her designee that:
   a. The requirements of the Department of Public Works, Utility Division have been met.
   b. Required monumentation is in place or that satisfactory arrangements for deferred monumentation have been made, including financial security and that surveys have been found in compliance with design standards.
   c. Water courses and storm drainage provisions are approved.
   d. Street and alley configuration, right-of-way width, street width, and any private ways are approved.
5. Certification of the Planning and Zoning Board Chairman noting the date that the plat was approved by the Planning and Zoning Board and acceptance of all dedications and/or vacations, if applicable.

6. Certification of the City Clerk noting the date that the plat was approved by the Planning and Zoning Board.
7. Certification of the appropriate County Treasurer that all current and previous property taxes have been paid in full.
8. Certification of the appropriate County Clerk noting the date, time and recording information.
9. Certification by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) that its needs have been met. Either the SSCAFCA Chairman of the Board or the City Engineer can provide more detailed limits for questionable cases. The requirement for SSCAFCA approval applies only to plats lying generally east of the north and south diversion channels constructed under SSCAFCA auspices and west of the Middle Rio Grande Conservancy District channels on the west side of the Rio Grande.
10. Certification by the Planning and Zoning Board Chairman of plat approval noting date and time of the Planning and Zoning Board approval.
11. Certification of the City Clerk of the date the plat was approved either by the Planning and Zoning Board.
12. Certification by the Mayor of conditional acceptance of all dedications and grants of easement for public use. This certification must be accompanied by a statement on the plat indicating such approval and acceptance. An acceptable form of such statement is shown in subsection 7 of this chapter.
13. If lot lines are changed from existing locations and public infrastructure such as water systems, and sanitary sewer systems are in place prior to the proposed platting, the owners of the lands being replatted or seeking such lot line change must certify acceptance of responsibility for any necessary relocation of water or sanitary sewer services to the lots affected by the lot line change.

2.8.E.VI.b.x. Graphic standards

The following standards provide minimums required to achieve satisfactory microfilm reduction and reproduction with current methods. Use of larger sizes of lines and letters is encouraged, providing relative size relationships are maintained.

2.8.E.VI.b.x.1.Lines (See Appendix 2.1.1)

1. Plat boundary lines must be the most outstanding lines on the plat and must be clearly distinguished solid lines.
2. Interior property lines must be solid lines if created by the plat or distinctively dashed lines if existing and to remain or existing and to be changed by the plat. The lines must be less bold than the plat boundary. Dashed lines used for existing property must be distinguished by either pattern or notation to identify clearly, whether they are to remain, relocated or eliminated by the plat.
3. Easement lines must be dashed lines of a pattern distinctively different from that used for existing property lines. Easement lines to be created by the plat must be clearly distinguished from existing easement lines by either pattern of dashing or notation. Existing easement lines to remain must be similarly and further distinguished from existing easement lines which are to be altered by the plat.
4. Public right-of-way lines, other than coincident with plat boundaries must be solid lines if created by the plat or if existing and to remain. Existing public right-of-way lines must be dashed if they are to be altered by the plat. Notation must be provided to distinguish existing lines of public right-of-way which are to remain clearly from lines of public right-of-way to be created by the plat.
5. Border lines must be provided on plat sheets, drawn as a solid line.

2.8.E.VI.b.x.2.Lettering Standards

1. Plat title or subdivision name lettering must be the boldest lettering on the sheet.

2. Plat subtitle or purpose lettering must be at least 6.3 mm high.
3. Plat boundary dimensions and bearings of lines must be of font size lettering at least 10 point.
4. The minimum height of freehand lettering for any information on the plat must be no smaller than 1/4 inch tall.
5. The minimum height of mechanical/font size lettering must be no smaller than 12 point.
6. Typed lettering must be of a clear, vertical type style. Gothic or elite is preferred. Italic type styles are acceptable for notable elements only on the plat. Typed material must be smear-proofed by a suitable fixative spray. Typed material which does not provide for satisfactory reduction and reproduction by current methods employed by the City and the County will not be acceptable.
7. Adhesive or pressure applied lettering will not be acceptable. Subject to the requirements for permanency and smear proofing all changes to final plats either added or erased by hand must be done and initialed by the Surveyor of Record.

2.8.E.VI.b.xi. Acceptable forms of language

In general, the plat must be in common English. The following are examples of acceptable forms of language for generally required plat elements. The persons preparing the plat and those who are signatory to any aspect of the plat are cautioned that it is their responsibility to assure that the statements they make or certify to on the plat clearly express their desired intent, and that they have the legal right and authority to certify, consent, or dedicate as their signature indicates.

2.8.E.VI.b.xi.1. Surveyor's Certification

"I, _____, a registered professional land surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision, and meets the minimum requirements of monumentation and surveys of the City of Rio Rancho Subdivision Ordinance Chapter 155, and that it is true and correct to the best of my knowledge and belief.

_____ _____

John Q. Surveyor
NMS No. 0000

Date

Note: Title reports, when used, must be current as of the dates of the plat.

2.8.E.VI.b.xi.2. Jurisdictional Affidavit

“I, _____, New Mexico Professional Surveyor Number _____ hereby affirm that the property described does lie within the platting and extra-territorial subdivision jurisdiction of the City of Rio Rancho.

_____ _____

John Q. Surveyor
NMLS No. 0000

Date

2.8.E.VI.b.xi.3. Free consent and dedication

"The subdivision hereon described is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) do hereby dedicate all streets and public right-of-way shown hereon to the City of Rio Rancho (Sandoval County) in fee simple with warranty covenants and do hereby grant all utility easements shown hereon to the public use forever including the rights of ingress and egress (both surface and subsurface). The undersigned owner(s) and/or proprietor(s) also grant to the City of Rio Rancho in perpetuity all sanitary sewer, water line, and drainage easements shown hereon including the right to construct, operate, inspect, and maintain sanitary sewers, water lines, and drainage facilities therein. Unless specifically limited elsewhere on this plat, all easements granted to the City of Rio Rancho may be used for any or all of the purposes of sanitary sewer, water line, or drainage facility even though only one of these purposes is stated on the easement as drawn on the plat."

Note: Any special easements, private ways, reverter clauses, or other qualifying statements should be inserted in the body of this declaration prior to the concluding statement and signatures. If park land is dedicated, a separate deed is also needed and the County recordation information of such deed should be referenced. If cash in lieu of dedication is provided, the fact must be noted on the plat.

“The undersigned owner(s) and/or proprietor(s) do hereby freely consent to all the foregoing and do hereby represent that I/we am/are authorized to so act.”

_____

Owner/Proprietor name typed or printed

_____ _____

Owner/Proprietor’s Signature Date

If there are other holders of equitable interest in the property being platted or subdivided, the following statement should be added to the consent and dedication material:

"The undersigned holder of an equitable interest (either by reason of a mortgage, deed of trust, purchase contract, or option contract) in some or all of the real property included in the (plat or subdivision) herein described, hereby ratifies that (plat or subdivision) and subordinates (his, her, etc.) interest in the property to that (plat or subdivision).

_____

Equitable Interest Holder's Name Typed or Printed

_____ _____

Equitable Interest Holder's Holder of Equitable Interest Signature Date

2.8.E.VI.b.xii. Disclosure Statement

A disclosure statement is required of all plats. Plats shall be accompanied by a disclosure statement in accordance with the standardized format provided in **Appendix 2.1.2** of this chapter. A disclosure statement shall be required for all subdivisions. The purpose of the disclosure statement is to permit the prospective purchaser, lessee, or other person acquiring an interest in the subdivided land to make an informed decision about the purchase, lease, or other conveyance of the land.

Prior to selling, leasing or otherwise conveying any land in a subdivision, the subdivider shall disclose in writing such information as the City of Rio Rancho requires by regulation, to permit the prospective purchaser, lessee, or other person(s) acquiring an interest in the subdivider's land, to make an informed decision about the purchase, lease or other conveyance of the land.

2.9 Public Infrastructure Improvements

A permit is required prior to the construction, reconstruction, maintenance, alteration, repair, removal or replacement of any curb, gutter, driveway or other concrete work on public property. A Right-of-Way Work Permit is required when any construction activity or utility repair and maintenance activity occurs in the City Right-of-way or easements.

Examples include, but are not limited to, streets; sidewalks; sanitary sewer and water system facilities; drainage and flood control facilities; street lighting; traffic signals; bus bays and bus shelters; and other improvements used by the public or used in common by owners of lots within a subdivision that conform to adopted City design standards. Designs must be reviewed and approved by the City Engineer or designee and staff of other City offices concerned with Infrastructure Improvement Projects. Approval of the design is obtained from the Public Works Department.

The City will not accept maintenance responsibility unless all construction is warranted in accordance with the City Ordinance requirements and the City of Rio Rancho Standard Specifications for Public Works Construction, (Standard Specifications) current edition.

Final acceptance by the City of a completed project requires completed construction in accordance with approved plans and specifications along with any approved revisions. It also requires submittal of acceptable, reproducible, As-Built drawings of the work and payment of all outstanding fees and permits. All necessary easements, covenants and licenses must also be completed prior to acceptance.

2.9.A Development Agreements

Development agreements are written agreements between the developer and the City for construction of system improvements which memorializes the terms of construction, the estimated cost of the system improvements, the schedule for initiation and completion of the system improvements, a requirement that the system improvements be completed to accepted City standards, and such other terms and conditions as deemed necessary by the City. Development agreements are negotiated between the City and the developer. The need for a development agreement is determined in coordination with staff.

2.9.A.I. DEVELOPMENT AGREEMENT CRITERIA FOR APPROVAL

Pursuant to City of Rio Rancho Ordinance Chapter 150, Development Agreements for system improvements may be negotiated between the City, and the developer.

2.9.A.II. DEVELOPMENT AGREEMENT PROCESS

Development Agreements are completed by the following process. Applicants submit an application to the Development Services Department after the traffic impact analysis is accepted and the water/wastewater availability letter is granted. The Development Services Departments routes to the appropriate Departments for review of proposed system level infrastructure and proportionate share calculations. If not already included, system level improvements are proposed to be added to the Infrastructure Capital Improvements Plan via Capital Improvements Plan Citizen's Advisory Committee and final approval by Governing Body. The Legal Department and City Administration review the Development Agreement. Impact Fee Credits are issued as system level improvements are accepted by the City.


DEVELOPMENT AGREEMENT PROCESS
Varies
Submit Application to Development Services Department
After traffic impact analysis is accepted and the water/wastewater availability letter is granted.
Development Services Department-led Review
Proposed System Level Improvements are added to IFCIP if necessary
Legal Department and City Administration Review
Impact Fee Credits Issued

2.9.B Application for Construction within Public Right-of-Way

2.9.B.I. CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY CRITERIA FOR APPROVAL

The design standards for construction within the public rights-of-way are found in Chapter 4 Transportation.

2.9.B.II. CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY PROCESS

The first step is a preliminary design review by the Department of Public Works. The applicant submits plans that include any required materials to the Development Services Department. Construction Plans and Specifications must be prepared in accordance with current Standard Specifications unless otherwise approved. Format and content of plan sets shall be as outlined in Section 2.8. Plans submitted at this stage are required to be 60% to 95% complete. The Public Works Department reviews plans and returns comments generally within thirty (30) business days. The applicant must either incorporate the City review comments into the proposed final plans or propose acceptable alternatives. The applicant submits an estimate of the quantities of materials for the project. Materials listed on the estimate sheet must conform to that in the current Standard Specifications where applicable. After the approval of construction plans, letters, applicable reports, and estimates, a Pre-Construction Meeting is scheduled with all the relevant parties to discuss the construction phase. The final submittal shall include signed and sealed copy of the Construction Project Plans for City Signature. During the construction phase, Public Works Department staff will conduct inspections and a final inspection and post-construction acceptance.

“Working Record Drawing” plans shall be submitted, by the Contractor, as redline drawings with correct survey data for review, once a month, to the Construction Management Team. If the “Working Record Drawing” plans are not adequate, then that month’s progress payment will be denied until the deficiency is corrected. The Construction Management Team will be the Firm hired by the City to perform Construction Management Duties unless otherwise specified.

When the project is complete, construction Record Drawings shall be submittal for all improvements within the City of Rio Rancho’s right-of-way or easements. The submitted Record Drawings shall be a set that is stamped and sealed by a Professional Engineer or Registered Land Surveyor with the “Record Drawing Certification (Appendix C)” approval block included. Approvals shall be valid for one (1) year Projects that have not commenced construction within this time shall be resubmitted for approval prior to construction.


CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY PROCESS
Preliminary Design Review Phase
Submit Application to Development Services Department
Plans submitted at this stage are required to be 60% to 95% complete.
Public Works Department Review and Comment
Plan Revision to incorporate comments as necessary
Submit Estimate of Quantities of Materials
Staff Approval of Construction Plans, Letters, Applicable Reports, and Estimates
Construction Phase
Pre-Construction Meeting
Final Construction Plan Submittal
Includes signed and sealed mylars of the construction project plans for City Signature
Construction
Working Record Drawing Submittals
Redline drawings with correct survey data submitted for review, once a month, to the Construction Management Team
Inspections
Interim inspections conducted by Public Works Department staff.
Final Inspection and Post-Construction Acceptance
Construction Record Drawing Submittal
Mylar set stamped and sealed by a Professional Engineer or Registered Land Surveyor

2.9.C Grading and Drainage Improvements

2.9.C.I. CRITERIA FOR APPROVAL

The design standards for grading and drainage improvements are found in Chapter 4 Drainage, Flood Control, and Erosion.

2.9.C.II. PROCESS [2]

The process for development, design, and approval of infrastructure improvement plans for Private Development projects is laid out below. Submittal requirements are found in Section 2.8.

2.9.C.II.a. Pre-Design Phase

The Pre-Design Conference allows the developer, consulting engineer, and other City/SSCAFCA staff to discuss detailed design requirements, the consulting engineer's approach to implementing drainage infrastructure requirements, construction phasing for partial acceptance, and the subsequent design and review procedures. For complex projects, this phase shall begin with a Pre-Design Conference with staff.

To schedule a Pre-Design Conference, the applicant submits the following to the Development Services Departments:

1. A letter requesting a pre-design meeting.
2. A Sketch Plat/Plan (if available, a Preliminary Plat and Findings may be substituted).
3. A copy of the Conceptual Drainage and Grading Plan.
4. The cost of the land being dedicated, or the cost of the easement being granted.

If an applicant does not have all required submittals available, the developer may still apply for a Pre-Design Conference with the City/SSCAFCA. However, the outcome of the conference will be a limited instruction, pending receipt of the remaining required submittals.

Topics of discussion at the Pre-Design Conference may include the following:

1. Partial Acceptance: When application for design and construction of public infrastructure improvements is made, the developer indicates on the application if partial acceptance of the proposed construction will be requested. Partial acceptance will be a topic for discussion at the Pre-Design Conference. Each subdivision for which partial acceptance of improvements is requested will be examined at the Pre-Design Conference to determine what parts, if any, can function adequately without the remaining parts. These will be designated the "stand alone" parts. If no "stand alone" parts can be determined, then the infrastructure improvements cannot be partially accepted. If "stand alone" parts are identified, the developer may achieve partial acceptance of the infrastructure improvements for these parts by:
    a. Dividing the entire subdivision into projects for each of the "stand alone" parts (each project will have its own separate pre-construction).
    b. Assuring construction of required infrastructure in accordance with Section 9 of SSCAFCA's Drainage Policy.
2. The financial guarantee option selected by the developer.
3. The requirement (prior to acceptance of "stand alone" parts by the City) that the developer or agent must provide to the City all data, such As-Built drawings, GASB 34/35 information, etc., necessary for operation and maintenance of the improvements being accepted. Warranty will commence at the time a

[2] Existing content moved from Chapter II-2 Drainage, Flood Control, and Erosion Control

Certification of Completion and Acceptance Letter is issued by the City/SSCAFCA. If bonding is used, written acceptance will not occur until the bond is obtained by the developer for the City's/SSCAFCA's benefit.

Minutes of the meeting are prepared delineating the items discussed, and agreements reached for the signature of the participants.

2.9.C.II.b. Design and Review Phase

During Design Development, the consulting engineer prepares plans according to guidelines of the Pre-Design Conference, incorporating any required materials into the infrastructure design. Construction Plans and Specifications must be prepared in accordance with current Standard Specifications unless otherwise approved by the City.

The Preliminary Design Review consists of staff and SSCAFCA reviewing plans for completeness, quality, and content. If the submittal is unacceptable, areas of major concern are identified, and the submittal is returned to the Consulting Engineer for corrections.

The Consulting Engineer must either incorporate the review comments into the proposed final plans or propose acceptable alternatives. Reviewers must approve all proposed alternatives. The Consulting Engineer prepares an estimate of the quantities of materials and associated costs for the project.

The applicant submits final drawings with all corrections (with redlines) as required and all additional reports, technical studies and related documents to the City. The complete package of required submittals must be received prior to City/SSCAFCA signing the final plans.

2.9.C.II.c. Construction Phase

2.9.C.II.c.i. Pre-Construction Phase

1. During this phase, all arrangements required to complete the construction contract between the developer and the contractor, or City/SSCAFCA and contractor, are identified.
2. The applicant submits the necessary contract documentation to the City, including the following:
    a. Copy of the subdivision approval agreement and financial guarantee.
    b. Copy of construction contract with licensed contractor reflecting work detailed on approved plans and engineers estimate.
    c. Insurance certificate.
    d. Performance/Warranty Bond (or equal) and Labor and Material Payment Bond.
    e. Other items if applicable:
        1. Copy of necessary easements.
        2. Copy of State Highway Department permits.
        3. Copy of SWPPP and USEPA Stormwater NOI.
        4. Copy of utility company encroachment permits.
        5. Copy of USACE 404 permit.
        6. MRGCD approval and License Agreements.
        7. Approval of other entities or utilities as necessary for project scope.
        8. Reproducible copy of recorded plat for plan set as required.
        9. Construction Schedule.
        10. Material Testing Schedule.

2.9.C.II.c.ii. Contractor Obtains Permits

The contractor must obtain all the required City permits before release of the work order.

2.9.C.II.c.iii. Progress Inspections

For each inspection listed below a request shall be made by contractor to City, or SSCAFCA if applicable, 48 hours in advance.

1. Preconstruction meeting.
2. After construction staking and storm water quality best management practices have been completed and prior to any earthwork.
3. Concrete/shotcrete placement:
    a. Final subgrade is prepared prior to any rebar/steel being placed.
    b. Final placement of rebar/steel prior to concrete/shotcrete.
    c. First placement of concrete/shotcrete.
4. Placement of storm drainpipe (water truck and compaction equipment must be on-site during placement):
    a. Staking complete and prior to excavation.
    b. Final subgrade preparation.
    c. Placement of pipe prior to backfill.
    d. Placement of lateral connection to mainstem.
    e. Completion of pipe.
5. Outlet/inlet structures:
    a. Construction staking complete.
    b. Final subgrade.
    c. Form and rebar.
    d. Concrete/shotcrete.
    e. Rip rap.
6. Channel Construction:
    a. Construction staking complete.
    b. Subgrade preparation complete.
    c. Rebar installation.
    d. Concrete/shotcrete placement.
    e. Inlet placement.

2.9.C.II.c.iv. Interim Inspection

If partial acceptance is being requested per conditions of the Pre-Design Conference, the following steps and instructions generally apply except that "Final Acceptance" is identified as "Partial Acceptance". Under partial acceptance, a financial guarantee may be reduced, however the agreement cannot be released until all required drainage infrastructure on the approved Infrastructure List is completed and accepted. If the drainage infrastructures come under the jurisdiction of the Office of the State Engineer (OSE), the following items must be provided by the developer prior to final acceptance by SSCAFCA/City:

1. Written approval by OSE.
2. Transfer of ownership to City/SSCAFCA.
3. Transfer of all documents required by OSE.

The Inspector and contractor shall conduct an interim inspection to determine if the work is ready for final inspection. The contractor will contact City/SSCAFCA seven (7) working days in advance to schedule an inspection.

2.9.C.II.c.v. Completion of Record Drawings

Record Drawings and applicable data must be furnished to the City/SSCAFCA Inspector prior to the final inspection. If not available, final inspection will be delayed until they are available. Information required on the Record Drawings are detailed in *Section 2.10*. Record drawing submittals shall include the following information:

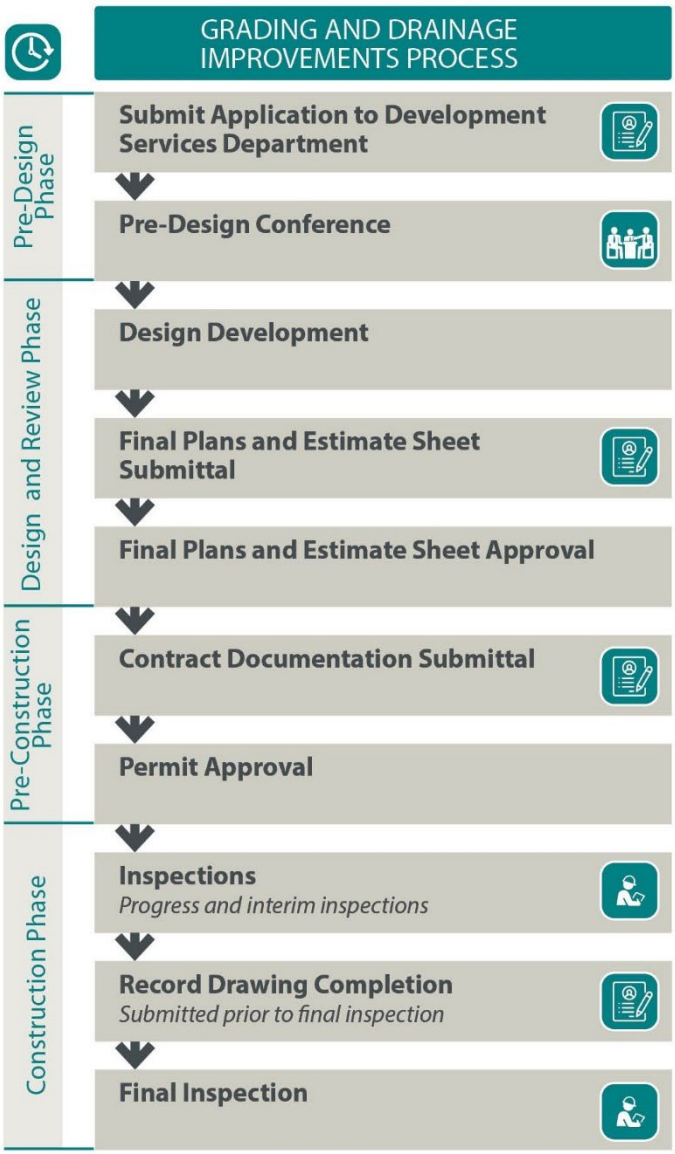
1. Record drawings prepared according to the requirements of Section 2.8.
2. All testing results.
3. Professional Certification (See *Section 2.8* for standard certification language).
4. Engineer's stamp dated and signed accompanied with a statement indicating substantial compliance with the approved construction drawings and/or deficiencies with recommended corrections.

2.9.C.II.c.vi. Final Inspection

The contractor must complete necessary work prior to requesting final inspection. When the project is ready for final inspection, the developer's construction inspector schedules final inspection seven (7) working days in advance with the Inspector.

1. A water test may be required at the final inspection to verify drainage system operation.
2. At final inspection, a list of discrepancies (punch list) is prepared by the consulting Engineer, or inspecting agency, which is given to the contractor for correction. A copy is sent to the developer, SSCAFCA, and City staff concerned with the project.
3. The Contractor completes work on punch-list items within 30 days and notifies the inspector and all affected parties when ready for verification.
4. If the inspector finds the constructed facility to be sufficient to function properly, a certificate of substantial completion can be issued.
5. Contractor sends Inspector final quantities sheet and invoices.
6. City prepares a Letter of Infrastructure Construction Completion after receiving the following:
    a. Final quantities sheet.
    b. Invoices from the contractor.
    c. Copy of recorded plat and/or copy of recorded easement.
    d. Revised Record Drawings (One hard copy) including a reproducible hard and electronic file copy (e.g.) an Auto-Cad/PDF file.
    e. Copy of all test results, construction pictures and copy of certifications.
    f. Submittal of a performance bond in accordance with Section 11 of SSCAFCA's Drainage Policy.
    g. Final quantities sheet, cost of drainage improvements (including the cost of the land) and invoices from the contractor.
    h. A letter from owner/developer/engineer requesting acceptance from the City/Executive Engineer for warranty period to begin.

Upon acceptance by the City the one year warranty period commences for the structure. The developer/contractor shall be responsible for O&M during the warranty period. Before City takes over responsibility for O&M there will be a post warranty inspection to ensure that the structure condition is as designed and no outstanding issues remain.


GRADING AND DRAINAGE IMPROVEMENTS PROCESS
Pre-Design Phase
Submit Application to Development Services Department
Pre-Design Conference
Design and Review Phase
Design Development
Final Plans and Estimate Sheet Submittal
Final Plans and Estimate Sheet Approval
Pre-Construction Phase
Contract Documentation Submittal
Permit Approval
Construction Phase
Inspections
Progress and interim inspections
Record Drawing Completion
Submitted prior to final inspection
Final Inspection

2.9.D Drainage Submittals

This section presents procedures for making drainage submittals. Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

Current copies of forms and certificates such as the drainage information sheet can be obtained from the Development Service Department (DSD), SSCAFCA or through SSCAFCA's website at www.sscafca.com.

2.9.D.I. CRITERIA FOR APPROVAL

2.9.D.II. PROCESS

1. All Drainage Submittals and follow-up correspondence should be submitted to the City. For record keeping purposes a Drainage Information Sheet (DIS) must be provided with the subject transmittal. The latest version can be obtained from the City. All Drainage submittals required for building permit, preliminary plat, site development plan, sector plan, grading plan approvals, etc, must be processed through the City's/SSCAFCA's Offices.
2. Upon receipt of a drainage submittal the City will assign a file number, and the submittal will be logged in for review. The submittal will be added to a list that identifies its status in the review process.
3. Correspondence related to drainage submittals must reference the file number assigned by the City upon submittal. These file numbers shall also be referenced on all re-submittals. The use of the file number facilitates the processing and tracking of drainage submittals and related correspondence.
4. Drainage submittals that do not include a DIS, vicinity map, legal description, engineer's seal for Drainage, date and other major items identified on the appropriate DPM format guideline will not be accepted. Only after the information is deemed complete will a submittal be accepted for review.
5. It is the policy of the City's/SSCAFCA's Offices to make responses to new submittals, resubmittals, and follow-up correspondence as soon as possible but not more than thirty calendar days after a complete submittal has been received by that office.
6. All revisions made to a particular submittal must be signed, sealed and dated by the Engineer of Record for all drainage submittals with revisions clearly noted. Resubmittals must be accompanied with the agency's original comments.
7. Approved drainage submittals are in effect for a period of one year (provided no significant changes have occurred which may alter the original submittal) from the date of approval. After one year, if no significant development has taken place, a resubmittal will be required and must reflect all changes in conditions and/or City requirements since the date of last approval.
8. Questions concerning the preceding items should be directed in writing to the City.

2.9.D.III. FLOOD HAZARD CERTIFICATION

Compliance with the requirements of the Flood Hazard Prevention Ordinance is required of every applicant for subdivision, site development plan and/or building permit approval. Compliance is achieved by either demonstrating that the proposed project does not lie within a designated flood hazard area or by

demonstrating adequate flood-proofing as required by the ordinance or by removing the site from a flood hazard area through the FEMA map revisions process.

2.9.D.IV. DEVELOPMENT WITHIN FLOOD HAZARD AREAS FOR BUILDING PERMITS

If the site is determined at the time of building permit application to lie within a Flood Hazard Area as shown on the Federal Emergency Management Agency (FEMA) maps on file with the City, then the City will determine if flood-proofing is required. Prior to final approval of building occupancy, certification by a registered professional surveyor or engineer as appropriate must be made so that these flood-proofing requirements have been met.

2.9.D.V. DEVELOPMENT WITHIN FLOOD HAZARD AREAS FOR SUBDIVISIONS AND/OR SITE PLAN APPROVALS

If any improvements are proposed which modify the existing floodplain boundary, an application for a Conditional Letter of Map Change (CLOMC) shall be submitted to the City Floodplain Administrator to be forwarded to FEMA. A Letter of Map Change (LOMC) must be obtained from FEMA after construction is complete. When a CLOMC has been issued by FEMA, a portion or all of the SIA (Subdivision Improvement Agreement) and financial guarantees may be released prior to the LOMC being issued by FEMA. Submittal of a copy of the LOMC from FEMA is required for release of the balance of the financial guarantees and SIA's when issuance is a condition of release.

The following floodplain note must be placed on the plat if a LOMC has not been issued by FEMA: "Portions of the subject property lie within a designated area of special Flood Hazard as shown on the most recent National Flood Insurance Program's Flood Insurance Rate Map. Until such time that a LOMC is issued by FEMA, flood insurance may be required."

2.9.D.VI. DRAINAGE COVENANTS

Occasionally, a developer of a property will choose to employ a drainage scheme that requires installation and maintenance of drainage features on the developer's property or other properties. In those instances where such drainage features must be perpetually maintained to minimize possible damage to other properties or to public properties, the City may require the developer enter into a covenant assuring maintenance of such facilities. There are four (4) types of covenants which are discussed below.

Covenants to run with the land. They generally require the owner of the land to maintain features to City standards and allow the City's entrance upon the property to inspect drainage features for such maintenance as needed. A typical example of such drainage covenant and instructions for the use of the covenant are presented in the DPM.

The following is a brief description of the four types of drainage covenants the City may require the developer to enter into:

1. Private Facility Drainage Covenant - for a privately owned, privately maintained facility, which places maintenance and inspection responsibility on the property owner(s). For example, a cutoff wall to protect property adjacent to an unlined arroyo.
2. Drainage Covenant (no public easement) - for a privately owned, privately maintained facility whose non-function or failure to perform, will cause damage to others. For example, a large detention pond in a shopping center. The maintenance responsibilities lie with the owner. The City, however, has the right to inspect periodically and to enforce proper maintenance.

3. Agreement and Covenant - for a privately maintained facility which is within the City's property (City right-of-way or City easement). The City has the right to inspect and to enforce proper maintenance. For example, phased developments that require temporary retention ponds and/or sediment ponds.
4. Private Facility Drainage Covenant and Reservation of Private Drainage Easement - for a privately owned, privately maintained facility which places maintenance and inspection responsibility on the property owner(s). For example, a pond used in common by more than one property owner.

2.9.D.VII. ENCROACHMENT AGREEMENTS

Occasionally the grading scheme for an approved drainage plan will employ the construction of a retaining wall or other drainage/grading structure outside the periphery of a private property, encroaching into public property. Although such encroachments are discouraged, it is recognized that certain circumstances will require installations of this type. In such event the City normally requires an encroachment agreement with the developer. The encroachment agreement, which runs with the land, allows the developer to install some semi-permanent features on public property meeting criteria established in the DPM. The developer is required to assure the City that such features will be removed in a timely manner if required by the City or, alternatively, that the City will be empowered to remove such encroachments, with the cost of such removal charged to the owner of the property. A standard encroachment agreement together with instructions for the preparation of same, can be obtained by contacting the City.

2.9.D.VIII. DRAINAGE FACILITIES CONSTRUCTION AGREEMENT AND FINANCIAL GUARANTEE

In those instances where financial guarantees are required, the developer enters into an agreement with the City assuring the construction of such facilities. The form of agreement and the nature of acceptable financial guarantee is dependent on the circumstances involved.

2.9.D.IX. FEMA REQUESTS

The consultant should be advised that FEMA has a cost for reviewing private development projects to recover their engineering review and processing associated with the issuance of Conditional Letters of Map Amendments (CLOMA's), Conditional Letters of Map Revision (CLOMR's), Letters of Map Revisions (LOMR's), and Letters of Map Amendments (LOMA's).

FEMA's current fee schedule may be obtained from the City Floodplain Administrator. All fees may be subject to change by FEMA.

Prior to preparing information for a map revision or amendment, it is recommended that a pre-design meeting be initiated with the City Floodplain Administrator to discuss your request. At this meeting, specific information relating to your CLOMA, LOMA, CLOMR or LOMR will be identified. All submittals must be made on current FEMA Forms. All submittals will be sent to FEMA by the City/County Floodplain Administrator.

2.9.D.IX.a. Letter of Map Amendment (LOMA)

The purpose of a LOMA is to provide an administrative procedure whereby FEMA will review the scientific or technical submissions of an owner or lessee of property who believes his property has been inadvertently included in designated A, AO, AE, AH, A99, VE, or V Zones, as a result of the transposition of the curvilinear line to either street or to other readily identifiable features. The necessity for this is due in part to the technical difficulty of accurately delineating the curvilinear line on a FIRM map. These procedures shall not apply when there has been any alteration of topography since the effective date of the FIRM map, which shows the property within an area of special flood hazard.

Any owner or lessee of property (applicant) who believes his property has been inadvertently included in a designated A, AO, AE, AH, A99, VE or V Zones on a FIRM map, may submit scientific or technical information to the City Floodplain Administrator to be forwarded to FEMA for review.

2.9.D.IX.b. Conditional Letter of Map Revision (CLOMR)

A Conditional Letter of Map Revision is FEMA's comment on the effectiveness or impacts of a proposed flood control project or flood plain modification. It is based on FEMA's review of the proposed project and states that if the proposed project is built as designed, it would be cause for a Letter of Map Revision. The CLOMR does not revise the FEMA flood maps.

2.9.D.IX.c. Letter of Map Revision (LOMR)

If land development involves the reclamation of a floodplain or floodway, it is recommended that you contact the City Floodplain Administrator to discuss the specific requirement for a LOMR. The criteria for LOMR's will be per FEMA's latest revision of The National Flood Insurance Program and Related Regulation.

Revisions to effective NFIP maps are most often requested because of physical changes that have taken place in the flood plain. Such changes include, but are not limited to, the construction of new bridges, culverts, levees, or channel improvements and the grading and filling normally associated with development (including the placement of fill to elevate individual structures above the BFE).

Occasionally, revisions will be requested because the analyses used to develop the data shown on the effective NFIP are found to contain errors, or because a requester believes that the use of alternative methodologies or better data will provide results that are more accurate than those obtained from the original FEMA analyses.

1. The typical required submittal for map revisions because of physical changes is as follows:
    a. General description of the changes (dam, diversion channel, detention basin, etc.).
    b. Construction plans for as-built condition, if applicable.
    c. New hydrologic analysis accounting for the effects of the changes.
    d. New hydraulic analysis using the new flood discharge values resulting from the hydrologic analysis.
    e. Revised delineations of the flood plain boundaries or floodway.

All requests to FEMA must be accompanied by the latest NFIP forms. Two sets of the required data must be submitted to the City Floodplain Administrator. The Administrator will forward the submittal to FEMA for the map revision. The consultant should be aware that FEMA may request additional data or fees prior to releasing a LOMR.

2.9.E Vacation Procedure for Rights-of-Way and Easements

Step I: Pre-Application Discussion

Discussion of the proposed vacation with the SSCAFCA staff is recommended prior to application filing. The purpose of the discussion is to review City and SSCAFCA policies and procedures applicable to the proposal so that incomplete, inadequate, and inappropriate applications are avoided. City staff may be included in this discussion.

2.9.E.I.a. Outcome of Pre-Application Discussion

The purpose of this discussion is to:

1. Review the appropriateness of the request as related to various applicable plans, policies, and ordinances including the Zone Code and/or Subdivision Ordinance.
2. Determine all appropriate procedures/information needed to obtain approval.
3. Determine a preliminary schedule/time frame for approval.
4. Determine a filing date for the application if appropriate.
5. Outline preliminary direction from staff based upon the information submitted.
6. Prepare a written summary of the requirements/procedures to obtain approval.

SSCAFCA and the applicant will sign a written summary of the meeting. Copies of the written summary are given to the applicant/agent and City.

Step 2: Application for a public hearing with SSCAFCA Board of Directors

Submit a letter to the Executive Engineer with all the required information determined at the pre-discussion meeting. The Executive Engineer will advise applicant the date of the public hearing.

Step 3: SSCAFCA Public Hearing

The public hearing gives the general public and area residents opportunity to discuss and speak for or against the request and to elicit additional information which may have a bearing on the request. The applicant or agent must be present at the hearing to speak on behalf of the request and respond to questions.

Step 4: Compliance with Conditions

A normal condition of approval requires SSCAFCA to dispose of all public right-of-way declared surplus through the vacation process. Generally, all utility and drainage easements are retained unless otherwise specified in the Board's decision.

The applicant must also prepare and record a plat which incorporates the vacated right-of-way with adjacent property. Under special circumstances other instruments of conveyance, such as a deed, may be appropriate.

Any conditions must be met within the time period established by SSCAFCA. SSCAFCA may grant an extension by written request. However, all conditions must be met within one (1) year from the date of the original decision.

2.9.F Storm Drainage Infrastructure Allocation

This section provides the procedure for the allocation of drainage infrastructure improvements that are generated by and attributable to new development. The purpose of this Procedure is to provide an equitable cost distribution method for drainage improvements that allows for the installation of public drainage facilities with new development and a mechanism to provide for the Cost Allocation to and payment of those facilities by the properties that are seeking development approval and benefit from the facilities.

The City acknowledges that new development may construct drainage facilities that benefit other property within a drainage basin. The provisions of this Procedure provide the manner in which such facilities may be constructed by an applicant and the method to allocate the Cost to benefited property owners.

This Procedure is intended to complement and supplement the Subdivision Ordinance, Erosion Control; Storm Drainage Ordinance and the Flood Hazard Prevention Ordinance of the City, SSCAFCA Drainage Policy and shall be administered in concert therewith. Pursuant to the City Erosion Control Ordinance and SSCAFCA Drainage Policy, all properties proposed for development must provide for the management and conveyance of storm runoff from a fully developed upstream drainage basin.

Administration and enforcement of this Procedure may be delegated to the City Engineer.

This Procedure shall apply to and be required of new development projects requesting platting, site plan and building permit approvals that, prior to the effective date of this Procedure, have not received preliminary plat (and such approval has not expired) and for which the construction of public drainage facilities are required. At the request of the Developer, development projects that have proceeded beyond preliminary plat approvals may be considered for review and application of this Procedure upon approval of the City. Where phasing of drainage facility construction is planned, the provisions of this Procedure shall be applied only to that phase of construction, or phases identified in an approved Allocation Plan, which has not been completed nor commenced.

For development projects for which a drainage submittal to the City has already been made, the applicant shall have the option of proceeding with a standalone project independent of the Allocation Plan or conform to this Procedure.

2.9.F.I. INFRASTRUCTURE ALLOCATION DRAINAGE MANAGEMENT PLAN (ALLOCATION PLAN)

1. Any new development which requires the construction of public drainage facilities that service more than a single platted parcel of land may prepare an Allocation Plan. An Allocation Plan shall be required to support a request for the Cost Allocation of the cost of drainage facilities to benefiting properties. Generally, the Allocation Plan shall (1) define the extent and limits of the drainage basin to be served by the drainage facilities to be constructed; (2) determine the drainage and water quality facilities necessary to collect, control and convey storm water runoff based on the design storm generated within the drainage basin; (3) identify a drainage outfall for the drainage facilities proposed for construction; (4) define the benefited area; and (5) include a Preliminary Cost Allocation Map and a Preliminary Cost Allocation Table. The Preliminary Cost Allocation Table and Preliminary Cost Allocation Map may be prepared based on existing or proposed platting of lands within the benefited area. Previous studies, reports and/or plans may be utilized in preparation of the Allocation Plan, as accepted by the City.
2. The Allocation Plan shall include a current estimate of the total calculated cost of constructing the drainage facilities, including the anticipated costs for engineering studies and design, surveying, planning, Federal Emergency Management Agency Map revisions and amendments construction, construction management, observation and administration, easement, right-of-way and property acquisition, and other incidental costs which can be anticipated. The City's estimated Unit Prices Contract Items, latest edition, shall be used whenever possible.
3. The Allocation Plan shall be prepared and/or amended by or under the direct supervision of a professional engineer registered in the State of New Mexico and competent in the areas of surface water hydrology and hydraulics. The design work referenced above shall be performed in accordance with the City Ordinances, Policies and DPM.
4. The Allocation Plan shall be based upon fully developed conditions, [excepting properties excluded under paragraph G(9)] taking into consideration the current elements of the applicable City land use master

plan(s), or other reasonable land use models, as they relate to the benefited area, and other relevant known factors, such as changes in zoning or development trends not reflected on the master plan(s).

5. The Allocation Plan shall specifically identify and address, but not be limited to, the following:
    a. Land use assumptions.
    b. The benefited area, drainage basin and benefit.
    c. Undeveloped and developed conditions and assumptions which shall be illustrated by a definitive table establishing the specific discharge rate for each property and volume.
    d. Hydrology/hydraulic analysis.
    e. Phasing.
    f. Required drainage facilities and associated infrastructure.
    g. All costs for the drainage facilities and associated infrastructures.
    h. Current conditions.
    i. Anticipated sources of funding independent of the Cost Allocations.
    j. Required right-of-way.
    k. How cost allocations are established (methodology).
    l. All properties within the benefited area (preliminary Cost Allocation Map).
    m. Preliminary Cost Allocations to properties and identify "excluded" or benefited properties that shall not be allocated, if any.
    n. A cost allocation Table.
    o. A cost allocation Map.
6. Neither the City or any other owner or developer of land in the benefited area shall subsequently construct a drainage facility that does not comply with an approved Allocation Plan.

2.9.F.II. REVIEW AND APPROVAL PROCEDURE

1. Pre-Application Meeting. It shall be mandatory that a pre-application meeting occur prior to initiating any of the following steps. Upon request, the City shall schedule a meeting with the applicant to discuss general Allocation Plan procedures and the merits of the proposed Allocation Plan.
2. City Review and Approval. The Applicant shall submit a draft Allocation Plan to the City for preliminary review and comment. The final Allocation Plan shall be approved by the City Engineer at a public hearing after notice in a newspaper of general circulation at least 15 days prior to the hearing prior to initiation of any subsequent steps in these procedures.
3. The approved Allocation Plan shall be on file at the City Engineer's office and open to public inspection.
4. Establishing Cost Allocations
    a. The method for determining the Cost Allocation associated with each property within the benefited area shall be set forth in the Allocation Plan, in accordance with this section. The Cost Allocation shall be determined by multiplying the total costs of the drainage facilities by a Cost Allocation Factor.
    b. The Cost Allocation Factor may be calculated by: (1) a proportion of individual parcel area to the total area of the Benefited Area, (2) a proportion of the designed discharge or runoff volume for the property as set forth in the Allocation Plan to the total designed discharge or runoff volume of the public drainage facility to be constructed as set forth in the Allocation Plan, or (3) of a cost sharing matrix which takes into account such factors as property size, designed discharge, floodplain removed, partial basin Cost Allocation, allocation of downstream capacity, ponds reclaimed, frontage, prudent line changes and other factors.
    c. The method or combination of methods selected for establishing Cost Allocations shall be approved by the City and used in preparing the Cost Allocation Table.

d. The total calculated cost of the drainage facilities to be constructed shall consist of all costs, including, but not limited to, engineering, surveying, planning, Federal Emergency Management Agency Map revisions and amendments, the acquisition of easements, rights-of-way or other property, environmental permitting and mitigation and construction.
e. The cost allocation of the required drainage infrastructure identified by the Allocation Plan for each new development shall be identified on the approved infrastructure list for the new development and shall be required as a condition to final plat, final site plan approval, or building permit approval.
f. All money collected through this procedure shall be due at the time of final plat approval or final site plan approval.
g. All money collected through the implementation of this Procedure shall be maintained by the City Engineer in a segregated account clearly identifying the payer and the drainage facility within the benefited area for which the payment was made. All money collected through this procedure shall be used to construct the infrastructure as shown on the approved Allocation Plan.
h. In the event that the drainage basin extends outside the City's municipal limits, the benefited area may also extend beyond those limits provided that the benefited property owners outside the City's municipal limits consent to participation.
i. The exclusion of properties from Cost Allocation shall be subject to the following conditions and qualifications.
    1. Properties within the Drainage Basin that will not benefit from the drainage facilities shall be identified in the Allocation Plan but excluded from Cost Allocation. For example, such excluded properties may not reasonably drain to the drainage facilities to be constructed, or which have already been developed with permanent standalone drainage systems and would receive no benefit from the proposed drainage facilities.
    2. Permanent Open Space within the Drainage Basin shall be identified in the Allocation Plan but excluded from Cost Allocation. The cost that would have been allocated to the open space will be distributed in accordance with paragraph G (2) to the remaining benefited properties.
    3. Public right-of-way shall not be subject to Cost Allocation.
    4. The Applicant may choose to exclude property within the benefited area, provided that (1) such exclusion does not increase the Cost Allocations of other properties, or (2) the applicant submits written verification that all of the other allocated properties have agreed to accept the excluded property's Cost Allocation in an equitable or agreed upon manner.
    5. Property owned by the United States of America, the State of New Mexico or any other property owned by an entity not subject to the jurisdiction of the City's Planning and Development regulations include ROW owned by SSCAFCA shall not be subject to Cost Allocation.
    6. Excluded properties, as approved by the City, shall be limited to existing condition discharge.

5. Design of Drainage Facilities
    a. After the City has approved the Allocation Plan and the applicant is ready to proceed with their development, the applicant shall have the drainage facilities designed by a professional engineer in accordance with the DPM and the approved infrastructure list. The construction plans and specifications shall be submitted to the City for review and, if acceptable, approval.

b. Construction cost/quantity estimates shall be prepared and approved in accordance with applicable policies of the City and prepared in such a manner that the total cost for Allocation Plan items alone can be determined.
c. The construction plans shall not necessarily be limited to Allocation Plan item construction only.

6. Construction and Inspection of Facilities
    a. Upon approval of the construction plans and specifications by the City, completion of applicable competitive bidding, and acquisition of the necessary easements, rights-of-way, environmental mitigation and permitting, or other necessary property interests, the applicant shall cause the drainage facilities to be installed, at the applicant's expense, strictly in accordance with the approved plans and specifications.
    b. Prior to construction, the applicant or applicant's contractor shall obtain approval from the City, complying with all procedures and practices normally required to obtain same, including but not limited to applicable bonds, subdivision improvement agreements, construction contracts, insurance certificates and fees.
    c. Construction inspection, surveying and testing shall be performed in accordance with applicable City policies.
    d. Changes to Allocation Plan related construction items shall be allowed during construction, provided the City approves the field change in writing as being substantially in conformance with the approved Allocation Plan.
    e. If the change varies by 10% or more of the original estimated Allocation Plan cost, the Allocation Plan shall be amended and resubmitted by the applicant to the City for reapproval.
    f. Financial guarantees shall be withheld until such time as the Allocation Plan is amended to reflect as-constructed changes and conditions.
7. Temporary or Phased Drainage Facilities
    a. Temporary facilities and phased construction of drainage facilities are only allowed and/or required on a case-by-case basis as determined by the City. The level of protection to be provided by temporary or phased facilities shall be determined by considering:
        1. The likelihood and consequences of a failure.
        2. Length of time until permanent facilities shall be in place.
        3. The acceptance of maintenance responsibilities and legal liabilities.
        4. The provision of substantially complete plans of all required permanent allocation plan infrastructure.
    b. All costs of approved temporary or phased facilities shall be included in the Cost Allocations, as approved by the City, and to the extent that the temporary facilities benefit the area.
    c. Under phased construction of drainage facilities where the developer is not required by the approved Allocation Plan to install an amount of infrastructure equal to or exceeding his ultimate Cost Allocation to support the development of his phase, the developer installing the drainage facilities shall: (1) install infrastructure equal in cost to the developer's required Cost Allocation, as determined by the completed Allocation Plan improvements without phasing, or (2) pay cash or post a suitable financial guarantee acceptable to the City in an amount equal to the difference between the cost of drainage facilities constructed and the developer's required Cost Allocation, as determined under the completed Allocation Plan improvements without phasing.
8. Updating Allocation Plan and Cost Allocations
    a. Allocation Plan and the Cost Allocations shall be updated with each subsequent development or as required by the City.
    b. As determined by the City Engineer, the Allocation Plan shall be reviewed and/or updated to reflect changed conditions within the drainage basin.
9. Appeals; SSCAFCA Executive Committee

a. Any applicant aggrieved by a decision or actions of the City Engineer or absence of such decision, may appeal such decision to the Executive Committee of SSCAFCA. Such appeal shall be made by notice of appeal in writing addressed to the Chairperson of the Executive Committee and delivered to SSCAFCA within 30 days after the date the decision was mailed to the applicant. The Chairperson of the Executive Committee shall notify the applicant and the Executive Committee Members of the date, time, and place of the appeal hearing at least five days prior to the hearing date. Such hearing shall be conducted not earlier than ten days no later than 30 days after the filing of the notice of appeal. At the hearing, the Executive Committee may consider such facts, exhibits , and engineering principles as may be presented by the appellant or the Executive Engineer or his designee, or of which the members may have knowledge or experience, and may affirm, reverse or modify the decision appealed from, and attach as condition to their decision such requirements as in their opinion may be necessary or appropriate in compliance with the policies of §§ 1 et seq. to safeguard persons and property from storm water runoff. Each decision of the Executive Committee shall be in writing and shall state reasons, therefore. A copy of the decision shall be promptly mailed to the applicant and to the Executive Engineer and City Engineer.
b. The Executive Engineer or applicant aggrieved by any decision of the Executive Committee may appeal such decision to the SSCAFCA Board of Directors. Such appeal shall be requested by notice of appeal in writing addressed to the Chairman of the SSCAFCA Board of Directors within 30 days after the date a copy of the decision was mailed to the applicant. Such appeal shall be heard after notice at the first available meeting of the SSCAFCA Board of Directors. The SSCAFCA Board of Directors may affirm, reverse, or modify the decision of the Executive Committee. A copy of the decision shall be promptly mailed to the applicant and to the Executive Engineer and City Engineer.

2.10 Record Drawings

Upon completion of construction, record drawings shall be prepared and submitted for review and approval. They shall reflect all changes from the original, approved construction drawings, including sizes, materials, horizontal locations, and elevations, as applicable.

2.10.A Criteria for Approval

Record drawing criteria is found in *Section 2.8*.

2.10.B Process for Developer Projects

1. "Working Record Drawing" plans shall be submitted, by the Contractor, as redline drawings with correct survey data for review, once a month, to the Developer's New Mexico Licensed Engineer. These drawings will need to be initialed and dated by the reviewer for them to be valid.
2. At the end of the project/subdivision, the Contractor will provide the Developer's New Mexico Licensed Engineer the valid redline drawings with correct survey data. The Developer's New Mexico Licensed Engineer will then make digital changes to the original Construction Plans.
3. A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land Surveyor with the "Record Drawing Certification (2.11.Y)" approval block included will then be submitted to the City. On any sheet where a change to the original construction drawings has been made "Redrawn for Record" shall be placed on that sheet.

2.10.C Process for Capital Projects

1. "Working Record Drawing" plans shall be submitted, by the Contractor, as redline drawings with correct survey data for review, once a month, to the Construction Management Team. If the "Working Record Drawing" plans are not adequate, then that month's progress payment will be denied until the deficiency is corrected. These drawings will need to be initialed and dated by the reviewer for them to be valid.
2. At the end of the project, the Contractor will provide the Construction Management Team the valid redline drawings with correct survey data. The Construction Management Team will be the Firm hired by the City to perform Construction Management Duties unless otherwise specified. The Construction Management Team will then make digital changes to the original Construction Plans unless the City includes these changes in the Contractor's Contract.
3. A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land Surveyor with the "Record Drawing Certification (2.11.Y)" approval block included will then be submitted to the City. On any sheet where a change to the original construction drawings has been made "Redrawn for Record" shall be placed on that sheet.

2.11 Development Procedures Appendices

2.11.A Project/Plan Submittal Letter

Project Manager Name
Department of Public Works – Development Section
3200 Civic Center Circle
Rio Rancho, NM 87144

Date: XXXXXX

PROJECT/SUBDIVISION NAME
LEGAL DESCRIPTION (IF APPLICABLE)

Dear Project Manager's Name:

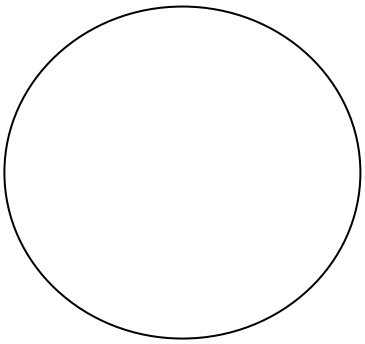
With this Project/Plan Submittal Letter I, the Engineer of Record for the said PROJECT/SUBDIVISION, do hereby certify the following:

1. That all submitted plans, reports, and etc. comply with current City of Rio Rancho Development Process Manual Chapters, City of Rio Rancho Standard Details, and Codes and Ordinances.
2. That all previous redline comments have been included in this submittal or that a valid accepted consensus has been reached where a comment cannot be incorporated (attach documentation).
3. That the submittal is complete and ready for review. If it is found that the submittal is incomplete, the City will return without any review.
4. The submittal requires one of the following (circle one):
    a. No Variances.
    b. Attached Variances.

Certification to the aforementioned by: ENGINEER OF RECORD

Seal and Sign

Using P.E. Stamp



2.11.B Final Project Submittal Checklist

Unless otherwise noted below, submittal documentation should be electronic. One complete copy of the entire submittal package is required. (City should use the checklist previously developed.)

Project Name: _____ **Date:** _____

Documents:

- ☐ Final Drainage Report with all amendments and approved changes
- ☐ Sewer Report with all amendments and approved changes
- ☐ Water Report with all amendments and approved changes
- ☐ Traffic Impact Study with all amendments and approved changes
- ☐ Geotechnical Report
- ☐ Pad Certifications
- ☐ All physical construction test results (compaction, concrete, asphalt, etc.)
- ☐ All construction permits
- ☐ All Operation and Maintenance Manuals (including shop drawings)
- ☐ Detention Basin Capacity Certifications (certified by a registered surveyor or engineer for all detention basins. The certification should reference the volume in acre feet referenced in the drainage report; a sketch of the Record Drawings basin; calculations of the as- built volume in acre feet.

Approval letters from Utilities or Agencies where applicable:

- ☐ Proof of payment of all fees as stipulated in the approval of Final Plat
- ☐ Water Availability Letter issued by the Department of Public Works Utilities Division *
- ☐ Sewer Availability Letter issued by the Department of Public Works Utilities Division *
- ☐ Southern Sandoval County Arroyo Flood Control Authority *
- ☐ Sandoval County Environmental Services Department Approval of Construction

**Letter shall state the agency has approved the construction and the Record Drawings.*

Recorded Plat/Map of Dedication: (Electronic and Hard Copy)

- ☐ 24” by 36” black line
- ☐ Half size (no larger than 11” X 17”) black line
- ☐ Submitted electronically

Record Drawings as Pertains to your Project: (Electronic and Hard Copy- 1 Bond set as listed below)

- ☐ Record Drawings plans – Grading and Drainage
- ☐ Record Drawings plans – Water
- ☐ Record Drawings plans – Sewer
- ☐ Record Drawings plans – Paving
- ☐ Record Drawings plans – Storm Drain

Additional Items:

- ☐ Copy of the Punch List signed off by the inspector (Must accompany the submittal in order to be accepted)
- ☐ Proof of payment for Traffic Signals (if applicable)

NOTE: Required Hard Copy Size Requirements:

- ☐ Record Drawings plans - size 24” X 36” (absolute maximum size) black line bond
- ☐ Record Drawings plans - half-size (no larger than 11” X 17”) black line bond

2.11.C Checklist for Submittal of Preliminary/Bulk Plats

Yes	No	
☐	☐	Letter of authorization from the property owner if application is to be managed by another representative. Letter must include name of subdivision, agent and signature of property owner.

Preliminary Plat

Yes	No	
☐	☐	Title of Plat
☐	☐	Subtitle of Plat
☐	☐	Date of Plat
☐	☐	Location map with major roads labeled
☐	☐	North arrow
☐	☐	Scale of at least 1 inch to 200 feet in standard engineering increments (100 feet is preferable)
☐	☐	Statement noting purpose of plat
☐	☐	Plat boundary (boldest lines on plat) annotated with bearings in degrees, minutes and seconds, with basis for bearings noted or shown and dimensions in feet to the nearest hundredth foot (0.00)
☐	☐	Location and description of all monuments found or set within the plat area and tie to State Plane Coordinate System, Central New Mexico Zone
☐	☐	Easements (existing) including location, dimensions, type and party receiving easement
☐	☐	Easements (proposed) including location, dimensions, type and party receiving easement
☐	☐	Right–of-way (existing along or intersecting plat boundary) including name, location, dimensions and purpose or nature
☐	☐	Right–of-way (proposed) including name, location, dimensions, purpose or nature and ownership (public or private)
☐	☐	Monument Description and Location
☐	☐	Disclosure Statement

☐ ☐ Legal description, County recording information (date of recordation and all applicable volume, folio and document numbers) and City of Rio Rancho book and page number for the subject property and abutting properties

☐ ☐ Signature Blocks for Utilities, City departments, County Treasurer, County Clerk and, if necessary, Southern Sandoval County Flood Control Authority.

☐ ☐ Registered New Mexico Surveyor Certification

☐ ☐ Jurisdictional Affidavit

☐ ☐ Name and address of applicant and agent

☐ ☐ Zoning of subject property

☐ ☐ Area of plat to the nearest ten-thousandth (0.0000) acre

☐ ☐ Area (in acres) and mileage of street right-of way created

☐ ☐ Area (in acres) and mileage of street right-of way vacated

☐ ☐ Lot, tract (land reserved by applicant for future subdivision or development ancillary to the subdivision, e.g. landscaped area, utility corridor) and parcel (land dedicated to the City or other public agency) boundaries

☐ ☐ Numbers or letters to identify each lot and block (contiguous grouping of lots)

☐ ☐ Letters to identify each tract or parcel

☐ ☐ Purpose of tracts and parcels

☐ ☐ Boundaries of vacated right-of-way, easements or lot lines

Preliminary Construction Plans

Yes **No**

☐ ☐ Preliminary construction plans drafted to the standards noted in the Development Process Manual. Preliminary construction plans typically include overall grading, drainage, roadway, utility and landscaping sheets that clearly depict on-site and off-site infrastructure necessary to provide an adequate level service to the subdivision. One hundred percent complete construction plans may also be submitted, but applicant does so at their own risk.

Drainage Report

Yes **No**

☐ ☐ Drainage report drafted to the standards noted in the Development Process Manual.

Soils Analysis

Yes	No	
☐	☐	Soils analysis (geotechnical report) drafted to the standards noted in the Development Process Manual.

Traffic Impact Analysis

Yes	No	
☐	☐	Traffic impact analysis drafted to the standards noted in the Development Process Manual.
☐	☐	Documentation of New Mexico Department of Transportation (NMDOT) approval of access to state highway.

Recreational Facilities Analysis

Yes	No	
☐	☐	Provide a report on what recreational facilities are available within a quarter-mile of proposed platted area.

School Impact Analysis

Yes	No	
☐	☐	Estimate of number of students by formula (dwelling units x .71)
☐	☐	Identify which schools will service this platted area

Water and Wastewater Availability Statement

Yes	No	
☐	☐	Statement of water and wastewater availability issued by the Department of Public Works noting approval by the Utilities Department. NOTE: This should be received prior to submittal of Preliminary Plat.

Infrastructure List

Yes	No	
☐	☐	List of all proposed onsite and offsite infrastructure improvements within public right-of-way or publically-held easements, including, but not limited to roads (street name, description of improvement, point of beginning and end), drainage (proposed legal description, description of improvement, location), and water and wastewater lines (line size, point of beginning and end).

Financial Guarantee Statement

Yes	No	
☐	☐	Statement describing the means of financial guarantee for proposed infrastructure improvements per Chapter 155.27 (not applicable if infrastructure is installed and accepted prior to final plat approval)

Signature

I have reviewed the Preliminary/Bulk Plat Application and find it complete.

Name (Print):_____ ☐ Applicant ☐ Agent

Signature:_____Date:_____

RESERVED FOR CITY STAFF USE:

CHECKED BY _____ DATE _____

☐ ACCEPTABLE

☐ UNACCEPTABLE

☐ ADDITIONAL INFORMATION REQUESTED

2.11.D Checklist for Submittal of Final Plats

Required Documentation

The application will not be accepted for review until the documentation listed below is provided and deemed complete. "Yes" indicates that the information is provided and complete. "No" indicates the information was not provided and is not applicable. All "No" responses shall be clarified in writing by the applicant or agent.

Letter of Authorization – 1 copy

Yes	No	
☐	☐	Letter of authorization from applicant if application is to be managed by another representative. Letter must include name of subdivision, agent and signature of applicant.

Findings of Fact – 7 copies

Yes	No	
☐	☐	Copy of Findings of Fact noting conditions of preliminary plat approval.

Final Plat – 7 copies

Yes	No	
A.		**IDENTIFICATION**
☐	☐	Subdivision name
☐	☐	Date of Plat
☐	☐	Scale (1 inch to 200 feet, preferably 1 inch to 100 feet), Equivalent and Graphic
☐	☐	North Arrow
☐	☐	Location Map, Scale, North Arrow & Reference to Zoning Atlas Page #
☐	☐	Reference To:
		(A) Federal Section
		(B) Projected Section
		(C) Land Grant
		(D) County and City Control Systems
☐	☐	Disclosure Statement
B.		**PERIMETER**
☐	☐	Written Description, Metes & Bounds

☐ ☐ Bearing in Degrees, Minutes & Seconds

☐ ☐ Distances in Feet & Hundredths

☐ ☐ Record Distances & Bearings

☐ ☐ Measured Distances & Bearings

☐ ☐ Basis for Bearings Shall Be Grid or Rotation Factor to Grid

☐ ☐ Total Gross Acreage of Subdivision

☐ ☐ Property Corners Found or Set

☐ ☐ Property Lines Eliminated Shown as Dashed Line

C. BLOCK AND LOT

☐ ☐ Block Identification

☐ ☐ Lot Identification

☐ ☐ Bearing on Non-Radial Lines

☐ ☐ Bearing on Non-Perpendicular Lines

☐ ☐ Distances Lot Perimeter

D. ADJACENT LAND

☐ ☐ The Location and Dimension of Streets that Intersect the Boundary or Boundary Streets of the Subject Subdivision

☐ ☐ Reference to Recorded Subdivision Plats or Adjoining Lands by Recorded Name File, Date and City Book and Page Number

☐ ☐ Graphic Presentation, by Dashes, Lines or Lots Contiguous to Boundary of Subdivision

E. STREET RIGHT-OF-WAY

☐ ☐ Name of Streets (Ensure No Duplication)

☐ ☐ Right-of-Way Width Noted

☐ ☐ Centerline Data, Tangent Distances & Bearings

☐ ☐ Centerline Data, Curves, Radius, Central Angles, Arc

☐ ☐ Mileage of Streets Created: Total, Full-Width, Half-Width

☐ ☐ Street Vacation Application Number

☐ ☐ Private Streets or Access Easements so Designated

☐ ☐ Identify Private Way or Street Documentation Addressing Lots Serviced and Maintenance Responsibility

F. EASEMENTS

☐ ☐ All Easements of Record or Apparent are Shown

☐ ☐ Location by Distance & Bearing

☐ ☐ Dimension

☐ ☐ Purpose

☐ ☐ Proposed Shown in Dashed Lines and Labeled

☐ ☐ Existing Shown in Dashed Lines and Labeled with Recordation Data

☐ ☐ Vacated Shown in Ghost Lines and Labeled

☐ ☐ Apparent Shown and Labeled

☐ ☐ Limitations

G. DRAINAGE RIGHT-OF-WAY

☐ ☐ Location

☐ ☐ Dimension

H. PUBLIC AREAS

☐ ☐ Location

☐ ☐ Dimension

☐ ☐ Purpose

I. FREE CONSENT

☐ ☐ Statement that the subdivision is with free consent and in accordance with the desires of the subdivider

J. CERTIFICATIONS

☐ ☐ Jurisdictional Affidavit

☐ ☐ Certification and seal of surveyor that plat was prepared in accordance with the Minimum Standards for Surveying in New Mexico and the City of Rio Rancho subdivision ordinance

☐ ☐ Jurisdictional affidavit by surveyor stating that the subject property is within the platting jurisdiction of the City of Rio Rancho

☐ ☐ Certification by either the Planning and Zoning Board Chairman (if plat approved at a Planning and Zoning Board hearing) or by the Development Services Department Director (if approved administratively as a summary plat)

☐ ☐ Certification of City Clerk noting date plat was approved by the Planning and Zoning Board or by the Development Services Department Director (whichever is applicable)

☐ ☐ Certification of franchised utility companies (Xfinity, CenturyLink, and Sparklight, PNM) and Department of Public Works

☐ ☐ Certification of County Treasurer that all current and previous property taxes have been paid in full

☐ ☐ Certification of County Clerk noting date, time and recording information

K. DEDICATION

☐ ☐ Signed statement by the subdivider dedicating street and drainage right-of-way and other appropriate lands for public use in fee simple and granting all required easement for public use

☐ ☐ Notary signature

L. ACKNOWLEDGMENT

☐ ☐ Acknowledged in the manner required for the acknowledgment of deeds

☐ ☐ Notary signature

M. SURVEY

☐ ☐ Certification by land surveyor meeting the minimum requirements for monuments and surveys of Chapter II.6 of the City of Rio Rancho Design Process Manual

☐ ☐ Digital submittals are required and must contain a minimum of the following:

(A) Coordinate system

(B) Data shall be ground coordinates tied to the New Mexico State Plane, Central Meridian: Datum, NAD83

(C) The submittal shall disclose the coordinate system and datum

☐ ☐ Content

(A) A single drawing in model space showing only parcel lines, street center lines, and easement lines

(B) Only Final Plat data will be provided

(C) Parcel lines shall be in one separate layer

(D) Street center lines shall be in one separate layer

(D) Access easement lines and all other easements that are 20 feet wide or greater shall be in a second separate layer

(E) All other easement lines shall be in a third separate layer

☐ ☐ File format

(A) DXF files in ASCII format. Other formats directly compatible with Arc/Info GIS may be accepted (i.e. shapefiles, coverage export files)

(B) Files may be transmitted as PDFs

(C) One hard copy of the final plat shall accompany the electronic submittal

☐ ☐ File names

(A) <DSD Project#>.dxf used as a standard naming convention

☐ ☐ Quality assurance

(A) DXF file submitted shall be validated by a Records and GIS Section designee as a condition to final sign-off

(B) Validation review will be performed in a timely manner

Final Construction Plans

Yes No

☐ ☐ Final construction plans (100% complete) drafted to the standards noted in the Development Process Manual and revised to address any comments from preliminary plat review.

Drainage Report

Yes No

☐ ☐ Drainage Report drafted to the standards noted in the Development Process Manual and revised to address any comments from preliminary plat review.

Soils Analysis

Yes No

☐ ☐ oils analysis (geotechnical report) drafted to the standards noted in the Development Process Manual and revised to address any comments from preliminary plat review.

Traffic Impact Analysis

Yes	No	
☐	☐	Traffic impact analysis drafted to the standards noted in the Development Process Manual and revised to address any comments from the preliminary plat review.
☐	☐	Documentation of New Mexico Department of Transportation (NMDOT) approval of access to state highway.

Infrastructure List

Yes	No	
☐	☐	List of all proposed onsite and offsite infrastructure improvements within public right-of-way or publicly-held easements, including, but not limited to roads (street name, description of improvement, point of beginning and end), drainage (proposed legal description, description of improvement, location), and water and wastewater lines (line size, point of beginning and end).

Engineer's Opinion of Probable Cost

Yes	No	
☐	☐	List of costs of proposed infrastructure improvements (onsite and offsite) drafted to the standards noted in the Development Process Manual. This cost estimate will form the basis of the financial guarantee (if applicable).

Development Agreement

Yes	No	
☐	☐	Development Agreement drafted to the standards noted in the Development Process Manual (if applicable).

Covenants

Yes	No	
☐	☐	Draft of covenants that notes private improvements to be maintained by association and dues to be paid by association members if proposing privately owned and maintained infrastructure typically dedicated to and maintained by the City (if applicable)

Signature

I have reviewed the Final Plat Application and find it complete.

Name (Print):_____ ☐ Applicant ☐ Agent

Signature:_____Date:_____

For Office Use Only

I have reviewed the Final Plat Application and find it ☐ complete ☐ incomplete.

Name (Print):_____Title:_____

Signature:_____Date:_____

Case No.:_____

If incomplete, date that application was brought into compliance:_____

2.11.E Zone Map Amendment Checklist

With the submittal of the application & checklist, the applicant attests that all requirements are submitted. Failure to adequately provide requested information or falsifying information may result in a continuance or denial of your case (attach additional sheet(s) if necessary.

The following is a checklist of submittal requirements for obtaining a Zone Map Amendment:

☐ A completed application form signed by the owner or agent.

☐ If the application is being submitted by an agent, a letter of authorization from the property owner must accompany the application.

☐ A justification letter from the applicant must be submitted that addresses §150.07 of the Zoning Code. (See below)

1. The following policies for deciding zone map change applications pursuant to the City Zoning Code are:
    a. A proposed zone change must be found to be consistent with the health, safety, morals, and general welfare of the City.
    b. Stability of land use and zoning is desirable; therefore, the applicant must provide a sound justification for the change. The burden is on the applicant to show why the change should be made, not on the City to show why the change should not be made.
    c. A proposed change shall generally be consistent with adopted elements of the Comprehensive Plan or other City master plans and amendments thereto including privately developed area plans which have been adopted by the City.
    d. The applicant must demonstrate that the existing zoning is inappropriate because:
        i. There was an error, mistake or is necessary to correct an injustice that occurred when the existing zone map pattern was created, including the placement of a R-1 or transitional zone on an antiquated plat filed before the City's incorporation and adoption of its own Zoning Code or on land annexed by the City, or
        ii. Changed neighborhood or community conditions justify the change, or
        iii. A different use category is more advantageous to the community, as articulated in the Comprehensive Plan or other City master plan, even though (1) or (2) above do not apply. Applicant's reliance on this provision requires proof that (a) there is a public need for a change of the kind in question, and (b) that need will be best served by changing the classification of the particular piece of property in question as compared with other available property.

☐ The cost of land or other economic considerations pertaining to the applicant shall not be the determining factor for a change of zone.

☐ Location on a collector or major street is not in itself sufficient justification of apartment, office, or commercial zoning.

☐ A zone change request which would give a zone different from surrounding zoning to one small area, especially when only one premise is involved, is generally called a "spot zone." Such a change of zone may be approved only when:

- The change will clearly facilitate realization of the Comprehensive Plan and any applicable adopted sector development plan or area development plan; or
- The area of the proposed zone change is different from surrounding land because it could function as a transition between adjacent zones: because the site is not suitable for the uses allowed in any adjacent zone due to topography, traffic, or special adverse land uses nearby; or because the nature of structures already on the premises makes the site unsuitable for the uses allowed in any adjacent zone.

☐ Site Plan, Site Plan Checklist, and related drawings only if SU zoning is requested (See Appendix E).

2.11.F Zone Map Amendment for Special Use Zone District Checklist

The following is a checklist of submittal requirements for obtaining a Zone Map Amendment for Special Use Zone District:

☐ Completed application form, supporting documentation and applicable fee.

☐ Owner authorization letter, if applicable.

☐ Site Plan.

☐ A Water and Wastewater Availability Letter, if applicable.

☐ A written statement of justification [Title XV – Land Usage, Chapter 150 – General Provisions].

a. A rezoning must be consistent with the health, safety, morals, and general welfare of the City.
b. The applicant for a rezoning must provide a sound justification for the rezoning, with the burden of proof being on the applicant to show why the rezoning should be made.
c. The proposal shall generally be consistent with the City's Comprehensive Plan.
d. The applicant must demonstrate that the existing zoning is inappropriate because:
    i. There is an error, mistake, or it is necessary to correct an injustice that occurred when the existing zoning map pattern was created.
    ii. Changed neighborhood or community conditions justify a rezoning.
    iii. A different zoning district is more advantageous to the community.
e. The cost of land or other economic conditions shall not be a determining factor for approval of a rezoning.
f. Location of collector and arterial streets isn't sufficient justification for a rezoning.
g. Spot zoning (the rezoning of one parcel) may be approved when:
    i. The rezoning will clearly facilitate the City's Comprehensive Plan.
    ii. The parcel being rezoned is different from surrounding land because it could function as a transition zone.

2.11.G Conditional Use Checklist

The following is a checklist of submittal requirements for obtaining a Conditional Use:

☐ Completed application form, supporting documentation and applicable fee.

☐ Owner authorization letter, if applicable.

☐ Provide a letter detailing the scope of work to include all business activity, hours of operation, number of employees, etc.

☐ A Site Plan must be provided and shall include the following information:
- North arrow.
- Location of building(s) in relation to property lines (provide dimensions).
- Identify adjoining property and abutting streets.
- Graphic illustration to reflect any dimension restrictions (height & setback).
- Additional illustrations to detail specifics related to your request.

2.11.H Zoning Variance Checklist

The following is a checklist of submittal requirements for obtaining a Zoning Variance:

☐ Completed Land Use Application.

☐ As applicable, a building permit.

☐ A letter of authorization from the property owner stating that he/she is aware of the zoning variance being requested and that the applicant may act as his/her agent, if the applicant is other than the property owner.

☐ Justification, including the scope of the request, and addressing criteria for granting a variance:
- There exists a special circumstance(s) applicable to the property, including its exceptionally irregular size, shape, narrowness, Topography shallow or steep.
- Other exceptional physical conditions whereby the strict application of the zoning ordinance requirements would result in a practical difficulty or unnecessary hardship that would deprive the owner of the reasonable use his/her land or building.

☐ An accurate site plan showing:
- The location of any buildings on the property in relation to property lines and other buildings.
- Adjoining property, abutting streets and alleys, and a north directional arrow should be indicated.
- Property dimensions and site conditions.
- Parking spaces.
- Height of the structure.

2.11.I Site Plan Checklist

The following checklist outlines the minimum required elements for a Site Plan submission to the City of Rio Rancho:

☐ Bar scale.

☐ North arrow.

☐ Vicinity map.

☐ Lot boundaries and easements.

☐ Existing and proposed utilities.

☐ Existing and proposed rights-or-way.

☐ Proposed structures with uses, dimensions, and setbacks.

☐ Proposed ingress, egress, parking, and circulation.

☐ Landscaping and landscape buffers.

☐ Elevations.

☐ Adjacent property characteristics.

☐ Preliminary drainage plan.

2.11.J Parks Site Plan Checklist

The following checklist outlines the minimum required elements for a Parks Site Plan submission to the City of Rio Rancho:

☐ Site Plan.

☐ Grading and Drainage if not already included in a Preliminary Plat.

☐ Structures over 120 sf.

☐ Backflow Preventers.

2.11.K Drainage Report Checklist

NOTE: This document is intended as an aid in preparing Drainage Reports located in southern Sandoval County. This checklist was developed by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA). This document is not intended to be all inclusive, and does not limit the extent of the information, calculations, and exhibits that may be necessary to properly evaluate the intended land use.

This checklist must be included with all drainage report submittals.

General Information:

Date: _____File Name or No. _____

Project Name: _____

Proposed Land Use:_____Zoned:_____

Location:_____Acreage:_____ No. of Lots:_____

Legal Description:_____

FIRM Community Panel No: _____ SFHA: ○ Yes ○ No

Engineering Firm:_____

Project Manager:_____

Telephone No: _____ Fax No: _____

Address: _____

Email: _____

Drainage Report Contents General Format

The following items must be included in order to initiate review:

1. Project Name and Legal Description
2. Engineer's Seal, Signature and Date
3. Typed, Bound, Legible Report
4. Pertinent portions of all referenced information/reports
5. Drainage Report Checklist

Engineer's Signature:_____Date:_____

(seal)

Introduction			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Type of approval sought (i.e. zone change, subdivision plat, vacation, site plan, paving or grading permit, variance)			
Complete summary of study intent, resultant Drainage Management Plan for the site. Describe how all off- and on-site flows are dealt with and how they leave the site, with respect to downstream capacity, historic and/or existing and full development condition flows.			
Location and Project Description			
Vicinity Map			
Copy of Preliminary or Final Plat			
Phasing Description			
Discussion of jurisdictions affected			
Watershed Name			

Site investigation Summary (describe if any grading has occurred since topography shown on plan, existing off- and on-site drainage facilities, etc.)			
References and Drainage / Planning History			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Floodplain Information & Map (show property location on copy of effective FEMA Flood Insurance Rate Map (FIRM)			
References - Planning History, Zoning			
SSCAFCA/Master Planning Info. (facility design over 500 cfs or adjacent to SSCAFCA facility will require SSCAFCA approval)			
Drainage Basin Description			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Off-site Flow Description & Map (with topo, flow patterns, and Q100)			
Existing Site Condition and Drainage Facilities Description			
Soils, Geology, Land Treatments			
Existing and proposed zoning and land use			
On-site Flow Description & Map (with topo, flow patterns, Q100 pre and post development, V100 pre and post development at analysis points)			
Hydrology			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Discussion of Hydrologic Model / Methodology (must use. HEC-HMS)			
Modeling Schematic			
Rainfall Distribution 2-yr. / ___hr. or ____day 10-yr. / ___hr. or ____day (req'd for street design)			

100-yr. /___hr. or ____day			
Land Treatment allocations (%) Pre-development / post -development			
Time to Peak Calculations			
Emergency Spillway Design			
Spillway Flood Return Period ___-yr./___hr. or ____day			
Channel Routing (must use Muskingum-Cunge procedure)			
Reservoir Routing			
Elevation-Area-Volume-Discharge data and calculations			
Detention Pond Flood Routing Summary Table A*			
Hydrologic Summary Table B (main analysis points)*			
Sediment Yield/Sediment Transport (aggradation/degradation analysis)			
Input File (paper & digital)			
Output File (paper & digital)			
Existing and Proposed Development Site Plan			
State Engineer's Office Approval (dams in excess of 50-acre feet of storage or 25' of embankment height)			
**Blank Summary Tables are attached to this checklist for inclusion in the consultant's report*			

Hydraulics			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Discussion of Hydraulic Model(s) and Methodology			
Parameters for Model(s) / Methodology			
Storm Sewer Hydraulics and Storm Inlet Capacity Calculations (must be submitted)			
Street Capacity Calculations (10-year and 100-year)			
Arroyo, Channel, Culvert, Bridge Capacity Calculations			
Arroyo / channel stability addressed			

Scour Calculations			
Superelevation Calculations			
Floodplain/Floodway Discussion & Calculations			
Freeboard and levee criteria addressed			
Comparison of historic/existing/fully developed condition peak discharge rates and runoff volumes with respect to existing and proposed drainage infrastructure capacities.			
Verification and discussion of downstream capacity			
Miscellaneous			
Description	Yes (included)	Not Applicable	Reviewer's Notes
Pertinent portions of all referenced information			
Soils investigation			
Structural calculations for retaining walls in excess of 3' in height, sealed by Structural Engineer			
Letter for permission to grade on adjacent parcels from parcel's owner			
Operations / Maintenance requirements ownership/easements and			
All weather access addressed			
Conclusions			
Compliance with local criteria			
Compliance with City of Rio Rancho DPM (Chp.2) and SSCAFCA criteria			

2.11.L Grading and Drainage Plan Checklist

The following checklist is intended as a guide for preparing a Grading and Drainage Plan to accompany a drainage report or plan. Some items may not be applicable to your particular project; some items may require more detail. A Pre-design Conference is recommended to define scope and project specific requirements.

General Information:

1. Professional Engineer's stamp with signature and date.
2. Drafting Standards: (Reference City of Rio Rancho Standards).
    a. North Arrow.
    b. Scales - recommended engineer scales:
        i. 1" = 20' for sites less than 5 acres.
        ii. 1" = 50' for sites 5 acres or more.
    c. Legend - see City of Rio Rancho D.P.M. Manual, Volume 2, for recommended standard symbols.
    d. Plan drawings size: 24" x 36".
    e. Notes defining property line, asphalt paving, sidewalks, planting areas, ponding areas, project limits, and all other areas whose definition would increase clarity.
3. Vicinity Map.
4. Benchmark - location, description and elevation.
    a. Control survey vertical datum.
    b. Permanently marked temporary benchmark located on or very near site.
5. Flood Insurance Rate Map (FIRM).
6. Legal Description.

Existing Conditions

1. On-site:

    a. Existing Contours - vertical intervals for contour maps shall not exceed the following:

        i. One-foot intervals for slopes under 1% with sufficient spot elevations at key points to adequately show the site's topography.
        ii. Two feet for slopes between 1% and 5%.
        iii. Five feet for slopes in excess of 5%.

    b. Spot elevations adequately showing conditions on-site.
    c. Contours and spot elevations extending a minimum of 25' beyond property line.
    d. Identification of all existing structures located on-site or on adjacent property extending a minimum of 25' beyond property line with particular attention to retaining and garden walls.
    e. Identification of all existing drainage facilities located on-site or on adjacent property.
    f. Pertinent elevation(s) of structures and facilities defined in A, B and C should be based on the NAVD 88.
    g. Indication of all existing easements and rights-of-way on or adjacent to the site with dimensions and purpose shown.
    h. Existing top of curb and flow line elevations with NAVD 88 designation.
    i. The location of Special Flood Hazard Area Boundaries from the latest FEMA maps must be overlaid on the existing site map (enlarged to site plan scale), when applicable.

2. Off-site:

    a. Contributing Area - delineation of off-site contributing watersheds and/or drainage basins on ortho-topo area maps or equivalent mapping at a preferable scale of 1" =200' or 1" = 500'. Watershed and Basin designations shall match those used in the hydrology calculations.
    b. Existing easements and rights-of-way including ownership and purpose.

Proposed Conditions

1. On-site:

    a. Proposed improvements superimposed onto the existing conditions.
    b. Proposed Grades.

Proposed grades shall be adequately depicted by contours and/or spot elevations conforming with the following minimum criteria:

1. Contours - vertical intervals for contour maps shall not exceed the following:

    a. One-foot intervals for slopes under 1% (with supplemental spot elevations as appropriate to adequately illustrate the proposed grading of the site).
    b. Two feet for slopes between 1% and 5%.
    c. Five feet for slopes in excess of 5%.

2. Spot Elevations - supply spot elevations at the following:

    a. Key points and grade breaks.
    b. Critical locations.

3. Pad elevations

    a. Indication of all proposed easements and rights-of-way on or adjacent to the site with dimensions and purpose identified.
    b. City Engineer approved street and/or alley grades when site abuts a dedicated unpaved street or alley. In the event that approved grades are not available, provide preliminary street and/or alley grades.
    c. Internal contributory drainage areas, including roof areas, outlined on plan.
    d. Flow lines defined by arrows and spot elevations with NAVD 88 designation, as appropriate for clarity.
    e. Pond(s) 100-year water surface elevation outlined and indicated on plan.
    f. Finish building floor elevation(s) or pad elevation(s) with complete NAVD 88 designations, when applicable.
    g. Elevations along property lines including relationship to adjacent top of curb.
    h. Details of ponds, inverts, rundowns, curb cuts, water blocks, emergency spillways, retaining walls, pond outlets, safety fences, slopes, and all other significant drainage structures with contours, cross-sections and spot elevations. All cross-sections must be drawn to a standard engineering scale and adequately dimensioned.
    i. Phasing.
    j. Proposed construction of private storm drain improvements within public right-of-way and/or easement including identification of the public entity having ownership.

k. Proposed contours superimposed over existing contours adequately demonstrating changes in grade especially at the property line.
l. Identification of any required offsite grading.
m. Specifications for the proposed grading and/or soil compaction.
n. Erosion Control and Stormwater Pollution Prevention Plans. See Erosion Control and Stormwater Pollution Prevention Plans Checklist.

2. Off-site:

a. Definition, location, and configuration of required drainage facilities.
b. Rights-of-way and easements needed to accommodate (a) above.

Grading and Drainage Plan Note Regarding Boundary Surveys:

This is not a boundary survey; data is shown for orientation only. The boundary information depicted by this plan is based upon the (boundary survey, plat, etc.) prepared by _____, NMPS no. _____, dated ___/___/_____. Topographic survey information is based upon a topographic survey prepared by _____ on ___/___/_____, NMPS no. _____.

The following check list must be completed and submitted with the Grading & Drainage Plan.

A grading and drainage plan is required for Building Permits, Site Development Plans, Landscaping Plans and for developments involving less than 5 acres.

Note: This document is intended as an aid in preparing Grading and Drainage Plans for projects located in Southern Sandoval County. This checklist was developed by the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA). This document is not intended to be all inclusive, and does not limit the extent of the information, calculations, and exhibits that may be necessary to properly evaluate the intended land use. ***This checklist must be included with all grading and drainage plan submittals.***

General Information:

Date: _____File Name or No. _____

Project Name: _____

Proposed Land Use:_____Zoned:_____

Location:_____Acreage:_____ No. of Lots: _____

Legal Description: _____

FIRM Community Panel No: _____SFHA: Yes No

Engineering Firm:_____

Project Manager:_____

Telephone No: _____ Fax No: _____

Address: _____

Email: _____

Engineer's Signature:_____Date:_____

(seal)

Grading and Drainage Plan Checklist			
Description	Yes (Included)	Not Applicable	Reviewer's Notes
Signature Block for Approvals			
Sheet Size: 24" x 36"			
Scale: 1" = 20' for sites less than 5 acres 1" = 50' for site greater than 5 acres			
Bar Scale			
North Arrow			
Vicinity Map			
Legend			
Local Drafting Standards			
Project Name			
Professional Engineer's Seal, signature, and date			
Legal Description			
Site Address			
Basis of Bearings			

Grading and Drainage Plan Checklist			
Description	Yes (Included)	Not Applicable	Reviewer's Notes
Benchmark and Datum (above mean sea level)			
Site Benchmark			
Right-of-way lines and dimensions Existing and Proposed			
Easement lines and dimensions Existing and Proposed			
Property Line location, bearings and dimensions existing and proposed			
Limits of existing floodplain based on effective Flood Insurance Rate Map: include a copy of the FIRM and provide reference to Panel number			
Phase lines			
Street Names			
Street dimensions			
Utility Locations Existing and Proposed			
Septic Tank and Leach Field locations			
Retaining and garden wall locations for all walls within 25' of the subject property			
Proposed wall locations and details			
Existing contours encompassing the subject property and 25' beyond boundaries at the following intervals: 1' for slopes less than 1% 2' for slopes between 1% and 5% 5' for slopes greater than 5%			

Grading and Drainage Plan Checklist			
Description	Yes (Included)	Not Applicable	Reviewer's Notes
Existing and proposed spot elevations at critical locations, including: Top of curbs at returns, flow lines, street crowns, lot lines, and all grade breaks. Spot elevations must be provided in sufficient intervals to detail existing and proposed drainage patterns, slopes and transitions			
Daylight proposed contours to existing			
Verify no cross-lot drainage			
Minimum finished floor elevations			
Flow Arrows			

2.11.N Erosion Control and Stormwater Pollution Prevention Plans Checklist

Use this checklist to prepare a plan for the mitigation of damages due to stormwater pollution, soil erosion and deposition. All grading of 1.0 acre or more or 500 cubic yards and any grading within or adjacent to a watercourse defined as a major facility during the months of June, July, August, or September shall provide for erosion control and the safe passage of the 100-year design storm runoff during the construction phase. A Stormwater Pollution Prevention Plan shall be provided for all grading of 1.0 acre or more.

***NOTE:** The following checklist is intended to be used as a guide for preparing the plan to meet any or all drainage requirements. Some items may not be applicable to your particular project; some items may require more detail. A Pre-design Conference is required to define the scope and specific requirements.*

1. Provide the corresponding information for the following phases of development:
    a. Rough grading
    b. Grading plan with limits of soil disturbance outlined.
    c. Erosion protection and stormwater pollution prevention practices indicated.
    d. Supporting data, calculations, references and details drawn to scale or adequately dimensioned.
    e. Erosion control and stormwater pollution prevention notes:
        i. The contractor is to ensure that no soil erodes from the site onto adjacent property or public right-of-way. This should be achieved by implementing Best Management Practices (BMP's) to protect the soil from wind, and water erosion.
        ii. During the months of June, July, August or September, any grading within or adjacent to a watercourse defined as a major facility shall provide for erosion control and safe passage of the 100-year design storm runoff during the construction phase.
        iii. Contractor shall conform to all City, County, State and Federal dust control and stormwater pollution prevention requirements and is responsible for preparing and obtaining all necessary applications, permits and approvals.
        iv. All graded areas which do not receive a final surface treatment will be revegetated in accordance with New Mexico APWA Standard Specification 1012 and the Landscape Specifications.
        v. Contractor shall obtain and abide by a Grading Permit from the City of Rio Rancho. The cost for required construction dust and erosion control measures shall be incidental to the project cost.
    f. Phased development
        i. Grading plan with limits of soil disturbance outlined for each phase of development and numbered in sequential order of events.
        ii. Erosion protection and stormwater pollution prevention procedures indicated for each phase.
        iii. Supporting data, calculations, references and details drawn to scale or adequately dimensioned.
    g. Construction and permanent phase.
    h. Grading plan with limits of soil disturbance outlined.
    i. Erosion protection and stormwater pollution prevention practices indicated.

i. Project owner and the owner's contractor shall complete federal EPA Notice of Intent (NOI) prior to commencement of any construction project disturbing 1.0 or more acres of land area.

ii. Stormwater Pollution Prevention Plans and accompanying federal EPA administrative procedures shall meet the guidelines and procedures outlined in the current edition of the New Mexico Department of Transportation Stormwater Management Guidelines for Construction and Industrial Activities Manual.

j. Supporting data, calculations, references and details drawn to scale or adequately dimensioned.

The following check list must be completed and submitted with the Erosion Control & Storm Water Pollution Prevention Plan.

An erosion control plan is required for all grading of 1 acre or more or 500 cubic yards or more and any grading within or adjacent to a watercourse defined as a major facility during the months of June, July, August or September. The plan shall provide for erosion control and safe passage of the 100-year 6-hour design storm runoff during the construction phase.

Instructions - Fill out all that is applicable and relevant, submit this checklist with the Erosion Control Plan and or the Grading and Drainage Plan.

Date: _____

Erosion Control Plan Name:_____

_____

Consultant / Designers Name:_____

Consultant / Designers Telephone Number:_____

Item and Description	**Consultant**		**Reviewer**	
			put "Y" yes or "NA" not applicable comment or reference a "footnote" for review letter	
	Yes	**NA**	**Yes**	**Comment**
General				
Title Block with Project Title				
Designers Signature and Date	☐	☐	☐	
ROUGH GRADING				
Grading Plan with limits of soil disturbance	☐	☐	☐	

Item and Description	Consultant		Reviewer	
			put "Y" yes or "NA" not applicable comment or reference a "footnote" for review letter	
	Yes	**NA**	**Yes**	**Comment**
Outlined				
Erosion Protection Indicated	☐	☐	☐	
Supporting data, calculations, references and details drawn to scale or adequately dimensioned	☐	☐	☐	
Erosion control notes:				
▪ The contractor is to ensure that no soil erodes from the site onto adjacent property or public right-of-way. This should be achieved by implementing best management practices (BMPs) to protect soil from wind and water erosion.	☐	☐	☐	
▪ At all times, but especially during the months of June, July, August, or September. Any grading within or adjacent to a watercourse defined as a major facility shall provide for erosion control and safe passage of the 100-yr. 6-hour design storm runoff during the construction phase.	☐	☐	☐	
▪ Contractor shall conform to all City, County, State and Federal dust control requirements and is responsible for preparing and obtaining all necessary applications and approvals.	☐	☐	☐	
▪ All graded areas which do not receive a final surface treatment will be vegetated in accordance with New Mexico APWA Standard Specification 1012 and the Landscape Specifications	☐	☐	☐	
▪ Contractor shall obtain and abide by a Topsoil Disturbance Permit from the local jurisdiction. The cost for required construction dust and erosion control measures are incidental to construction.	☐	☐	☐	

Item and Description	Consultant		Reviewer	
			put "Y" yes or "NA" not applicable comment or reference a "footnote" for review letter	
	Yes	**NA**	**Yes**	**Comment**
Phased Development				
Grading Plan with limits of soil disturbance outlined for each phase of development and numbered in sequential order of events	☐	☐	☐	
Erosion protection indicated for each phase.	☐	☐	☐	
Supporting data, calculation, references and detail drain to scale or adequately dimensioned.	☐	☐	☐	
Construction and Permanent Phase				
Grading Plan with limit of soil disturbance outlined.	☐	☐	☐	
Erosion protection indicated.	☐	☐	☐	
Supporting data, calculations, references and detail drawn to scale or adequately dimensioned.	☐	☐	☐	

2.11.O Street Light Layout Checklist

Date: _____

Project Name: _____

Engineering Consulting Firm/Developer: _____

Department of Public Works Job No: _____

The purpose of this checklist is to guide the developers on street light layouts on residential subdivisions, apartments, condominiums, commercial and industrial projects.

This checklist serves to minimize redline comments on the check prints and to maintain consistency of the plan review process for streetlight layouts in the public right-of way. Plan approval and issuing permits depend on the compliance with the comments made on the check prints and this checklist. The engineer of record shall satisfy themselves of the completeness and accuracy of the design.

Please submit this checklist and the check prints with your next submittal.

If construction has not started within (1) year of the date of plan approval, or if there is a halt in construction of more than one (1) year, approval will become void and public streetlight plans shall be resubmitted for updating and re-approval.

General Requirements

☐ The street light plans must be submitted on 24' x 36" sheets.

☐ City of Rio Rancho Standard border with approval block must be used.

☐ The scale must be shown on the plans 1" = 20' or 1" = 40'.

☐ Graphic Scale.

☐ A north arrow is required on each sheet.

☐ A vicinity or site location map is required on the cover sheet.

☐ The developer's name, address and phone number must be shown on the cover sheet.

☐ The Street Light Design Professional name, address and phone number must be shown on the cover sheet.

☐ Project title block filled out with name and location of project.

☐ Project Number, Project Title.

☐ An index of sheets is required.

☐ Show and label all abutting streets.

☐ Show landscape and abutting street(s).

☐ Show setbacks and proposed landscape concept

☐ Show location of detentions basins and retaining walls

☐ Identify location – show site and adjacent parcels

☐ Show dimensions for FOC on all intersection street legs

☐ Show existing and proposed driveway locations

☐ Label adjacent zoning and land use

☐ Show lot lines and dimensions

☐ The current CORR General Notes must be shown on the cover or detail sheet

☐ All plan sheets shall display construction notes pertinent to each sheet

☐ Construction notes indicating all equipment to be installed, removed or relocated

☐ The following information is required for each proposed and existing street within and adjacent to the development:

- Name
- Right-of-way width
- Improved width of street, typically street centerline to back-of-curb dimensions
- Tract " " for private streets

☐ All existing and proposed waterlines and fire hydrants shall be shown

☐ All existing and proposed overhead and underground utilities shall be shown

☐ Locate proposed trees at least 20' from a proposed street light pole location

☐ There should be a minimum six (6') feet of clearance between streetlight poles and fire hydrants, city water facilities, or city sewer facilities. Provide dimensional ties to fire hydrants where potential conflicts may occur (within 10' of street light pole)

☐ All proposed and existing street lights within 300' from the first proposed streetlight should be shown with stationing and dimensional ties to the street centerline

☐ Proposed streetlights in residential areas should be located within 5' of property lines. Lights located in residential areas but not adjacent to homes may be shown by station and offset only

☐ Show all project phasing on the plans

☐ Provide a quantity tabulation of the number of streetlight poles on the cover sheet

☐ Identify utility provider on the plan set

☐ Provide a legend on the plans identifying the following items:

- Luminaire description
    - Local street – 100 watt, 9,500 lumen, high pressure sodium

- Collector street – 150 watt, 16,000 lumen, high pressure sodium
- Arterial street – 250 watt, 30,000 lumen, high pressure sodium

- Luminaire mounting height
- Disconnects
- Pull Box size and type
- Existing luminaire type, pole, and wattage
- Traffic Signal Mounted Luminaire type, pole, and wattage

☐ Coordinate streetlight plan with the engineer preparing other offsite improvement plans

☐ Provide stations at all intersections

☐ Utility provider must be shown with all applicable utility notes

☐ Label specific locations, sizes, and dimension from center line and/or monument line along with the following:

- Existing and proposed underground utilities
- Existing and proposed overhead utilities
- Face of curb
- Width of sidewalk
- Width on any PUE
- Edge of right-of-way
- Edge of pavement

☐ Quantities must be tabulated separately by phase. Private streetlights must be tabulated separately from public streetlights.

☐ Street light General Notes must be shown

☐ On residential, collector and arterial streets, all existing and/or proposed driveways and American Disability Act (ADA) ramps shall be shown on the streetlight plans

2.11.P Right-of-Way Acquisition Area Calculation Form

Project Name: _____

Project Description: _____

_____

County Assessor Parcel No.: _____

Unit, Lot, and Block: _____

Street Address: _____

Area Calculation Table						
Type of Acquisition	Area of Existing Parcel		Area to be Acquired		Area Remaining	
	Sq. Ft.	Acres	Sq. Ft.	Acres	Sq. Ft.	Acres
Existing Parcel						
Fee R/W						
Slope Easement						
Drainage Easement						
Temporary Construction Easement						

Vicinity Map

New Street Data Sheet (To Be Completed on Final Inspection)

Street Name (Plat): _____

Subdivision Name: _____

Number of Unique Street Sections: _____ (Due to: Different Construction Dates, Cross Section Variations, Asphalt Thickness, & etc.)

Section 1:

From: _____

To: _____

Section Width (Asphalt Only): _____

Section Length (Along Centerline): _____

Section Thickness/Treatment: _____

Construction Date: _____

Section Classification (Circle One): Arterial Collector Residential

Section 2:

From: _____

To: _____

Section Width (Asphalt Only): _____

Section Length (Along Centerline): _____

Section Thickness/Treatment: _____

Construction Date: _____

Section Classification (Circle One): Arterial Collector Residential

Section 3:

From: _____

To: _____

Section Width (Asphalt Only): _____

Section Length (Along Centerline): _____

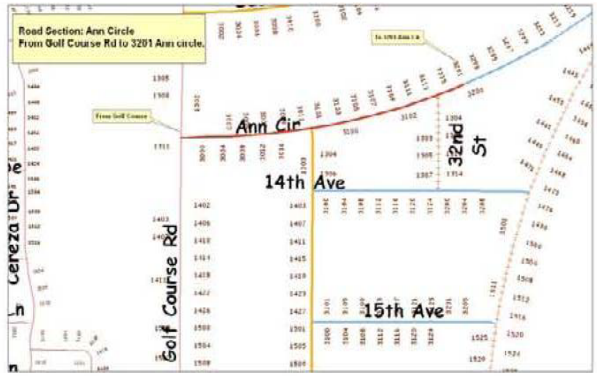
Section Thickness/Treatment: _____

Construction Date: _____

Section Classification (Circle One): Arterial Collector Residential

Note: If more sections are needed, please use another form.

Note: If the road section cannot be taken from street to street, it must be given an address or legal description for where the section ends. See example below.



Completed by Contractor on final walkthrough with City Inspector.

Acceptance that all above data is complete and correct.

Contractor Signature and Date

City Inspector Signature and Date

RR Rio Rancho

2.11.T Engineer's Certification Checklist for Subdivisions

Use this checklist when certifying compliance with an approved drainage report or grading and drainage plan for subdivisions when required for the release of financial guarantees associated with an executed Subdivision Improvement Agreement (SIA). Engineer must revise the approved drawing with the following information, which shall serve as minimum criteria for evaluation. This is merely a guide. The level of detail necessary for presentation and verification is a function of the specific plan being evaluated. The engineer's certification must be approved prior to the release of the SIA and/or financial guarantees.

Completed Information Sheet - see Information Sheet.

1. As-Built Information:
    a. Pad elevations.
    b. Top of Curb Elevations at critical locations.
    c. Property corner elevations at each lot.
    d. Horizontal and vertical data for storm drains (public and private).
    e. Horizontal and vertical data for retaining walls.
2. As-Built Analysis
    a. Statement and verification that all grades inside the subdivision do not deviate by more than 18" of the approved grades within 50 feet of the subdivision's perimeter.
    b. Statement and verification of street, storm drain and channel hydraulic capacities.
    c. Statement and verification of pond capacities.
    d. Statement of as-built elevation tolerances with respect to the feature being analyzed.
3. Other Approvals
    a. When necessary or appropriate, provide documentation of acceptance or construction approval from other affected governmental agencies or property owners.
4. Clearly State the origin and Date(s) of As-Built Data
5. Supplemental Information
    a. Provide details as necessary to illustrate as-built conditions for instances in which the as-constructed work materially deviates from the as approved design.
    b. Provide calculations to demonstrate and/or verify that all deviations satisfy the intent of the approved design.
6. Professional Certification
    a. Engineer's stamp dated and signed accompanied with a statement indicating substantial compliance with the approved drainage report and/or deficiencies with recommended corrections.
    b. The surveying associated with the certification must be performed by a professional engineer and/or surveyor in accordance with the "New Mexico Engineering and Surveying Practice Act" as amended and any standards adopted by the State Board of Registration.

DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR

DRAINAGE CERTIFICATION

I, _____, NMPE ___, OF THE FIRM _____, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED _____. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY _____, NMPS ___, OF THE FIRM _____. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON _____ AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR _____.

(DESCRIBE ANY EXCEPTIONS AND/OR QUALIFICATIONS HERE IN A SEPARATE PARAGRAPH)

(DESCRIBE ANY DEFICIENCIES AND/OR CORRECTIONS REQUIRED HERE IN A SEPARATE PARAGRAPH)

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

_____

XXXXXXXXXXXXXXX, NMPE XXXX

(SEAL)

_____

DATE

DRAINAGE CERTIFICATION WITH VERIFICATION BY ENGINEER OF RECORD

DRAINAGE CERTIFICATION

I, _____, NMPE ___, OF THE FIRM _____, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED _____. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY _____, NMPS _____, OF THE FIRM _____, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR _____.

(DESCRIBE ANY EXCEPTIONS AND/OR QUALIFICATIONS HERE IN A SEPARATE PARAGRAPH)

(DESCRIBE ANY DEFICIENCIES AND/OR CORRECTIONS REQUIRED HERE IN A SEPARATE PARAGRAPH)

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE

RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

_____

XXXXXXXXXXXXXXX, NMPE XXXX

(SEAL)

_____

DATE

2.11.V Engineer's Certification Checklist for Non-Subdivision Development

Use this checklist when certifying compliance with an approved drainage report or drainage plan for public, commercial and multi-residential buildings requiring a Certificate of Occupancy building permit or grading and paving projects. Engineer must revise the original drawing as approved with the following information which shall serve as minimum criteria for evaluation. This is merely a guide. The level of detail necessary for presentation and verification is a function of the specific plan being evaluated. The engineer's certification must be approved prior to the release of the issuance of a Certificate of Occupancy, or acceptance (by the City) of the completed work.

Completed Information Sheet - see Information Sheet.

Provide as-built finished floor and/or pad.

Provide as-built spot elevations on the property line and/or limits of phase development (points of significant grade changes) to demonstrate compliance with the approved drainage report or drainage plan.

Provide copies of construction approval from the appropriate government agencies for construction within their rights-of-way and/or easements.

Outline the as-built drainage basin(s) (including roof areas) supported with sufficient spot elevations and roof drain locations.

1. Provide as-built elevations and dimensions for the following structures:

    a. Pond(s) (include as-built volume calculations).
    b. Pipe inlet(s) and outlet(s) (include as-built capacity calculations).
    c. Rundown(s) (including the required inlet dimensions).
    d. Spillway(s) (including the required outlet dimensions).
    e. Channel(s).
    f. Flowlines.
    g. Erosion control and stormwater pollution prevention structure(s).
    h. Temporary drainage, erosion control and stormwater pollution prevention facilities required for phased development.
    i. Retaining and/or garden wall(s).
    j. Other features critical to the drainage scheme.

2. Professional Certification

    a. Engineer's stamp dated and signed accompanied with a statement indicating substantial compliance with the approved drainage report and/or deficiencies with recommended corrections.
    b. The surveying associated with the certification must be performed by a professional engineer and/or surveyor in accordance with the "New Mexico Engineering and Surveying Practice Act" as amended and any standards adopted by the State Board of Registration.

2.11.W Engineer's Certification Statement for Record Drawings

"Record Drawings" Engineer's Certification

I, (Engineer's Name), a Registered Professional Engineer in the State of New Mexico, have reviewed the Final Plat of (Project's/Subdivision's Name) and related relevant drainage plans, street plans and profiles, design and construction plans, and other improvement plans. I do hereby certify that I have made an inspection of those improvements described herein and find same to be built in accordance with the Preliminary and Final Plat except for the modifications specifically noted. I have attached hereto reasons for the modifications and relevant "Record Drawings" plans detailing the modifications.

_____ _____

Registered Professional Engineer Date

(List below, improvements certified, noting modifications.)

Released for Permitting

This set of plans has been reviewed for compliance with City of Rio Rancho requirements prior to issuance of construction permits. The City neither accepts nor assumes any liability for errors or omissions. This compliance review shall not prevent the City Public Works Director or City Engineer from requiring correction of errors or omissions in plans found to be in violation of any law, ordinance, or standard.

_____ _____

City Engineer Date

2.11.X Grant of Drainage Easement

This easement grant is made and executed this _____ day of _____ 20___, by and between _____, hereinafter called the "Grantor" and the City of Rio Rancho, New Mexico, a municipal corporation, hereinafter called the "City".

1. The Grantor is the owner of the following described real property within the City of Rio Rancho Unit Block Lot.
2. For good and valuable consideration, the receipt of which is hereby acknowledged, Grantor does hereby grant and deliver to the City of Rio Rancho a perpetual easement over and across a portion of Grantor's property for the purpose of permitting the flow, conveyance, and discharge of storm water runoff. [For the purpose of constructing and maintaining a storm water detention facility].
3. The land affected by the grant of this easement and right-of-way is more particularly described as follows:
    a. A perpetual easement on the areas designated on this plat as "drainage easement" ["detention area"] is hereby dedicated to the City of Rio Rancho for the purpose of permitting the conveyance of storm water runoff and for the purpose of constructing, maintaining, operating, removing, and replacing storm water drainage facilities, either above or below ground. No fence, wall, planting, building, or other obstruction may be placed or maintained in said easement area and there shall be no alteration of the grades or contours in said dedicated area without the approval of said City Engineer or his/ her designee of the City of Rio Rancho. No obstructions may be placed in said easement area which would prevent ingress and egress to same by maintenance vehicles or which would prevent said vehicles traveling on said drainage way for maintenance purposes.
4. No fence, wall, planting, building or other obstruction may be placed or maintained in the easement without the written approval of the City Engineer of the City of Rio Rancho, and there shall be no alteration of the grades or contours in said easement after the drainage facilities are constructed without the written approval of the City Engineer or his/ her designee. Any violation of this provision will be promptly corrected upon receipt of notice from the City, or the City shall have the right to remove or otherwise eliminate such violation and assess the cost to the property owner.
5. Said easement is intended to be permanent in nature for the uses end purposes recited above to the City, it successors and assigns, until such time as the City releases said easement in writing.
6. The obligation of the Grantor set forth herein shall be binding upon the Grantor, his heirs, and assigns, and the property of the Grantor as described herein and will run with said property until released by the City.
7. The City shall not be liable for any damages to the Grantor resulting from its construction, modification, or maintenance of said facilities.

Required Indemnification Note:

The Grantor agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Grantor's failure to construct, maintain, or modify the drainage facility under this covenant.

The written notice provided for herein shall be accomplished by mailing same to:

The Grantor may change said address by written notice, certified mail, return receipt requested to the City Engineer, Rio Rancho City Hall, 3200 City Center Circle NE, Rio Rancho, New Mexico 87144.

IN WITNESS WHEREOF, the parties have set their hands and seals this _____day of _____20____,

GRANTOR

By:_____

Title: _____

REVIEWED BY THE CITY OF RIO RANCHO LEGAL DEPARTMENT

_____

City Manager

ACKNOWLEDGMENTS

STATE OF NEW MEXICO)

) SS.

COUNTY OF SANDOVAL)

The foregoing instrument was acknowledged before me this _____ day of _____, 20_____, by _____

(Name of Grantor)

_____

Notary Public

My Commission Expires:_____

2.11.Y Disclosure Statement Format

1. All subdivisions shall be required to file a disclosure statement that substantially complies with the following requirements and formats:
   a. Name of subdivision.
   b. Name and address of subdivider.
   c. Condition of title.
   d. Statement of all restrictions or reservations of record that subject the subdivided land to any conditions effecting its use or occupancy.
   e. Description of utilities being provided by the developer.
      (name of entity providing electricity, if available); and
      (name of entity providing gas service, if applicable); and
      (name of entity providing water, if available); and
      (name of entity providing telephone, if available); and
      (name of entity providing wastewater disposal, if available); and
      (name of entity providing solid waste disposal, if available).
   f. Water and Wastewater availability.
   g. Liquid waste disposal method.
   h. Solid waste disposal method.
   i. A statement of terrain management.
   j. A statement of private access maintenance (describe what measures will be taken to ensure private road maintenance).
2. Disclosure statements for Major subdivisions containing six to 99 lots shall include the following information:

DISCLOSURE STATEMENT

PLEASE REVIEW PRIOR TO THE PURCHASE OF PROPERTY LOCATED WITHIN THE SUBDIVISION

This disclosure statement is intended to provide you with information to make an informed decision on the purchase or lease of the property described in this statement. You should read carefully all the information contained in this statement before you decide to buy or lease the described property. Various public agencies may have issued opinions on both the subdivision proposal and the information contained in this disclosure statement. Summaries of these opinions are contained in this disclosure statement. They may be favorable or unfavorable. You should read them closely.

The City of Rio Rancho has reviewed this disclosure statement to determine whether the subdivider can fulfill the conditions that the subdivider claims in the disclosure statement. However, the City of Rio Rancho does not vouch for the accuracy of what is said in the disclosure statement. In addition, this disclosure statement is not a recommendation or endorsement of the subdivision by either the City or the State. It is informative only.

The City of Rio Rancho recommends that you inspect the property before buying, leasing, or otherwise acquiring it. If you have not inspected the parcel before purchasing, leasing or otherwise acquiring it, you have six (6) months from the time of purchase, lease or other acquisition, to inspect the property in person. After inspecting the parcel within the six (6) month period, you have three (3) days to rescind the transaction and receive all your money back from the subdivider when merchantable title is revested in the subdivider. To rescind the transaction, you must give the subdivider written notice of your intent to rescind within three (3) days after the date of your inspection of the property.

County regulations require that any deed, real estate contract, lease, or other instrument conveying an interest in a parcel in the subdivision, be recorded with the appropriate County Clerk.

Building permits, wastewater permits, or other use permits must be issued by the State or City officials before improvements are constructed. You should investigate the availability of such permits before you purchase, lease, or otherwise acquire an interest in the property. You should also determine whether such permits are required for construction of additional improvements before you occupy the property.

1. NAME OF SUBDIVISION

   (name of subdivision)

2. NAME AND ADDRESS OF SUBDIVIDER

   (name of subdivider)

   (address of subdivider)

3. CONDITION OF TITLE

   Include the following information (where applicable):

   (name of mortgages)

   (name and address of each mortgagee)

   (balance owing on each mortgage)

   (summary of release provisions of each mortgage)

   (number of real estate contracts on the subdivided land for which the subdivider is making payments as a purchaser)

   (name and address of each person holding a real estate contract as owner of the subdivided land for which the subdivider is making payments as a purchaser)

   (balance owing on each real estate contract)

   (summary of default provisions of each real estate contract)

   (summary of release provisions of each real estate contract)

   (statement of any other encumbrances on the land)

   (statement of any other conditions relevant to the state of title)

4. STATEMENT OF ALL RESTRICTIONS OR RESERVATIONS OF RECORD THAT SUBJECT THE SUBDIVIDED LAND TO ANY CONDITIONS AFFECTING ITS USE OR OCCUPANCY

   (statement of all deed and plat restrictions affecting the subdivided land)

5. UTILITIES (estimated cost per lot)

TABLE INSET:

(name of entity providing electricity, if available)	
	(estimated cost)
(name of entity providing gas service, if available)	
	(estimated cost)
(name of entity providing water, if available)	
	(estimated cost)
(name of entity providing telephone, if available)	
	(estimated cost)
(name of entity providing wastewater disposal, if available)	
	(estimated cost)
(name of entity providing solid waste disposal, if available)	
	(estimated cost)

6. INSTALLATION OF UTILITIES

TABLE INSET:

(electricity)	(date)
(gas)	(date)
(water)	(date)
(phone)	(date)
(sewer)	(date)
(solid waste disposal)	(date)

7. UTILITY LOCATION

(if all utilities are to be provided to each parcel in the subdivision, please state here)

(if all utilities are to be provided to some but not all parcels in the subdivision, state which utilities will be provided to each parcel)

(state whether each utility will be above ground or underground)

8. WATER and WASTEWATER AVAILABILITY

(describe the maximum annual water requirements of the subdivision including water for indoor and outdoor domestic uses)

(describe the availability and sources of water to meet the subdivision's maximum annual water requirements)

(describe the means of water delivery within the subdivision)

(describe any limitations and restrictions on water use in the subdivision)

(summarize the provisions of any covenants or other restrictions requiring the use of water saving fixtures and other water conservation measures)

(describe what measures, if any, will be employed to monitor or restrict water use in the subdivision)

9. FOR SUBDIVISIONS WITH COMMUNITY WASTEWATER SYSTEMS

(if applicable)

(name and address of entity providing wastewater disposal)

(statement that individual or clustered wastewater systems are prohibited, if such is the case)

(identify, by lot and block number within the subdivision, which lots will be served by which community wastewater system)

(if the wastewater systems within the subdivision have not been accepted for maintenance by the City, state how the wastewater systems will be maintained and describe the lot owner's responsibilities and obligations with respect to maintenance of the wastewater systems)

10. FOR SUBDIVISIONS WITH INDIVIDUAL OR CLUSTERED WASTEWATER SYSTEMS (if applicable)

    (state whether wastewater will be provided by the subdivider or by the prospective purchaser/lessee/conveyee)

    (if the wastewater systems are provided by purchaser/lessee/conveyee, state the estimated cost of a complete wastewater system, including installation costs)

    (if wastewater systems are provided by the subdivider, state the cost, if any, to the purchaser/lessee/conveyee)

    (identify, by lot and block number within the subdivision, which lots will be served by which cluster wastewater systems)

    (state how the wastewater systems will be maintained and describe the lot owner's responsibilities and obligations with respect to maintenance of the wastewater systems)

11. FOR SUBDIVISIONS WITH COMMUNITY WATER SYSTEMS (if applicable)

    (name and address of entity providing water)

    (source of water and means of delivery)

    (summary of any legal restrictions on either indoor or outdoor usage)

    (statement that individual wells are prohibited, if such is the case)

    (State of New Mexico drinking water permit number)

12. FOR SUBDIVISIONS WITH INDIVIDUAL DOMESTIC WELLS OR MULTIPLE HOUSEHOLD WELLS (if applicable)

    (define whether wells will be provided by the subdivider or by the prospective purchaser/lessee/conveyee)

    (if wells are provided by purchaser/lessee/conveyee, state the estimated cost to complete a domestic well, including drilling, pressure tank, control devices, storage and treatment facilities)

    (if wells are provided by the subdivider, state the cost, if any, to the purchaser/lessee/conveyee)

    (summary of legal restrictions on either indoor or outdoor usage)

    (average depth to groundwater and the minimum and maximum well depths to be reasonably expected)

    (recommend total depth of well)

    (estimated yield in gallons per minute of wells completed to recommended total depth)

13. LIFE EXPECTANCY OF THE WATER SUPPLY

    (state the life expectancy of each source of water supply for the subdivision under full development of the subdivision)

14. WATER QUALITY

(describe the quality of water in the subdivision available for human consumption)

(describe any quality that would make the water unsuitable for use within the subdivision)

(state the name, the contaminant level, the maximum contaminant level, the expected adverse effects of the contaminant for domestic use, and the recommended treatment method to reduce the contaminant level to or below the maximum contaminant level for any contaminants which exceed the maximum contaminant levels listed in the current State of New Mexico Drinking Water Bureau Regulations (Title 20, Chapter 7, Part 1))

15. SEWER SYSTEMS

(describe the performance standards that must be obtained, design flow and any other conditions affecting the wastewater systems that are proposed and that have been approved by the City for use within the subdivision)

NOTE: NO SEWER SYSTEM MAY BE USED IN THIS SUBDIVISION OTHER THAN A SYSTEM THAT MEETS THE PERFORMANCE STANDARDS APPROVED BY CITY OF RIO RANCHO DEPARTMENT OF PUBLIC WORKS.

16. SOLID WASTE DISPOSAL

(describe the means of solid waste disposal that is proposed for use within the subdivision)

17. TERRAIN MANAGEMENT (Also known as a grading and drainage report, or plan)

(describe the suitability for residential use of the soils in the subdivision as defined in the Natural Resource Conservation District's Soil Survey for Sandoval County)

(describe any measures necessary for overcoming soil and topographic limitations, and who will be responsible for implementing these measures) (identify by lot and block numbers all parcels within the subdivision that are subject to flooding)

(identify by lot and block number all parcels within the subdivision located in whole or in part on slopes in excess of 8%)

(describe the surface drainage for all lots in the subdivision)

(describe the subsurface drainage for all lots in the subdivision)

(describe the nature, location and completion dates of all storm drainage systems and structures constructed or required to be constructed in the subdivision, and identify the entity which is responsible for construction)

18. SUBDIVISION ACCESS

(names of town nearest to subdivision)

(distance from nearest town to subdivision and the route over which that distance is computed)

(describe access roads to subdivision)

(state whether the subdivision is accessible by conventional vehicle)

(state whether or not subdivision is ordinarily accessible at all times of the year and under all weather conditions)

(describe the width and surfacing of all roads within the subdivision)

(state whether the roads within the subdivision have been accepted for maintenance by the City)

(if the roads within the subdivision have not been accepted for maintenance by the City, state how the roads will be maintained and describe lot owners responsibilities and obligations with respect to road maintenance)

19. MAINTENANCE

(state whether the roads and other improvements within the subdivision will be maintained by the City, the subdivider or an association of lot owner(s), and what measures have been taken to make sure that maintenance takes place)

20. CONSTRUCTION GUARANTEES (if applicable)

(describe any proposed roads, drainage structures, water or wastewater treatment facilities or other improvements that will not be completed before parcels in the subdivision are offered for sale)

21. ADVERSE OR UNUSUAL CONDITIONS

(state any activities or conditions adjacent to or nearby the subdivision, such as feed lots, dairies, cement plants or airports, which would subject the subdivided land to anything unusual affecting its use or occupancy)

22. FIRE PROTECTION

(distance to nearest fire station from subdivision)

(route over which that distance is computed)

(state whether the fire department is full-time or semi-staffed)

22. POLICE PROTECTION

List the various police units that patrol the subdivision.

(sheriff's department, if applicable)

(municipal police, if applicable)

(state police, if applicable)

23. PUBLIC SCHOOLS

(name of and distance to nearest public elementary school serving the subdivision)

(name of and distance to nearest public junior high or middle school serving the subdivision)

(name of and distance to nearest public high school serving the subdivision)

(3) All Major subdivisions containing one hundred (100) or more lots shall be required to file a disclosure statement that substantially complies with the following requirements and formats for subdivision.

DISCLOSURE STATEMENT

PLEASE REVIEW PRIOR TO THE PURCHASE OF PROPERTY LOCATED WITHIN THE SUBDIVISION

This disclosure statement is intended to provide you with information to make an informed decision on the purchase or lease of the property described in this statement. You should read carefully all the information contained in this statement before you decide to buy or lease the described property.

Various public agencies may have issued opinions on both the subdivision proposal and the information contained in this disclosure statement. Summaries of these opinions are contained in this disclosure statement. They may be favorable or unfavorable. You should read them closely.

The City of Rio Rancho has examined this disclosure statement to determine whether the subdivider can fulfill the conditions that the subdivider claims in the disclosure statement. However, the City of Rio Rancho does not vouch for the accuracy of what is said in the disclosure statement. In addition, the disclosure statement is not a recommendation or endorsement of the subdivision by the City. It is informative only.

The City of Rio Rancho recommends that you inspect the property before buying, leasing or otherwise acquiring it. If you have not inspected the parcel before purchasing, leasing or otherwise acquiring it, you have six (6) months from the time of purchase, lease or other acquisition, to inspect the property in person. After inspecting the parcel within the six (6) month period, you have three (3) days to rescind the transaction and receive all your money back from the subdivider when merchantable title is revested in the subdivider. To rescind the transaction, you must give the subdivider written notice of your intent to rescind within three (3) days after the date of your inspection of the property.

County regulations require that any deed, real estate contract, lease, or other instrument conveying an interest in a parcel in the subdivision, be recorded with the appropriate County Clerk.

Building permits, wastewater permits, or other use permits must be issued by the City officials before improvements are constructed. You should investigate the availability of such permits before you purchase, lease, or otherwise acquire an interest in the property. You should also determine whether such permits are required for construction of additional improvements before you occupy the property.

1. NAME OF SUBDIVISION

   (name of subdivision)

2. NAME AND ADDRESS OF SUBDIVIDER

   (name of subdivider)

   (address of subdivider)

3. NAME AND ADDRESS OF PERSON IN CHARGE OF SALES, LEASING OR

   OTHER CONVEYANCE IN NEW MEXICO (optional)

   (name of person in charge of sales, leasing or other conveyance)

   (address of person in charge of sales, leasing or other conveyance)

(telephone number of person in charge of sales, leasing or other conveyance)

4. SIZE OF SUBDIVISION BOTH PRESENT AND ANTICIPATED

   TABLE INSET:

Present	Anticipated
(number of parcels)	(number of parcels)
(number of acres in subdivision)	(number of acres in subdivision)

5. SIZE OF LARGEST PARCEL OFFERED FOR SALE OR LEASE WITHIN THE SUBDIVISION

   (size of largest parcel in acres)

6. SIZE OF SMALLEST PARCEL OFFERED FOR SALE OR LEASE WITHIN THE SUBDIVISION

   (size of smallest parcel in acres)

7. PROPOSED RANGE OF SELLING OR LEASING PRICES (optional)

   TABLE INSET:

($ = lowest amount)	(size of parcels sold, leased or conveyed)
($ = highest amount)	(size of parcels sold, leased or conveyed)

8. FINANCING TERMS (optional)

   (interest terms)

   (term of loan or contract)

   (minimum down payment)

   (service charges and/or escrow fees)

   (premium for credit life or other insurance if it is a condition for giving credit)

   (closing costs)

9. NAME AND ADDRESS OF HOLDER OF LEGAL TITLE

   (name of person who is recorded as having legal title)

   (address of person who is recorded as having legal title)

   NOTE: IF ANY OF THE HOLDERS OF EQUITABLE TITLE NAMED ABOVE IS A CORPORATION, LIST THE NAMES AND ADDRESSES OF ALL OFFICERS OF THAT CORPORATION.

10. NAME AND ADDRESS OF PERSONS HAVING EQUITABLE TITLE

    (name of person who is recording as having equitable title)

    (address of person who is recording as having equitable title)

NOTE: IF ANY OF THE HOLDERS OF EQUITABLE TITLE NAMED ABOVE IS A CORPORATION, LIST THE NAMES AND ADDRESS OF ALL OFFICERS OF THAT CORPORATION.

11. CONDITION OF TITLE

    Include here the following information (where applicable)

    (number of mortgages)

    (name and address of each mortgage)

    (balance owing on each mortgage)

    (summary of the release provisions of each mortgage)

    (number of all real estate contracts on the subdivided land for which the subdivider is making payments as a purchaser)

    (name and address of each person holding a real estate contract as owner of the subdivided land for which the subdivider is making payments as a purchaser)

    (balance owing on each real estate contract)

    (summary of default provisions of each real estate contract)

    (statement of any other encumbrances on the land)

    (statement of any other conditions relevant to the state of the title)

12. STATEMENT OF ALL RESTRICTIONS OR RESERVATIONS OF RECORD THAT SUBJECT THE SUBDIVIDED LAND TO ANY CONDITIONS AFFECTING ITS USE OR OCCUPANCY

    (state here all deed and plat restrictions affecting the subdivided land)

13. ESCROW AGENT

    (name of escrow agent)

    (address of escrow agent)

    (statement of whether or not the subdivider has any interest in or financial ties to the escrow agent)

14. UTILITIES (estimated cost per lot)

    TABLE INSET:

(name of entity providing electricity, if available)	
	(estimated cost)
(name of entity providing gas service, if available)	
	(estimated cost)
(name of entity providing water, if available)	

	(estimated cost)
(name of entity providing telephone, if available)	
	(estimated cost)
(name of entity providing wastewater disposal, if available)	
	(estimated cost)
(name of entity providing solid waste disposal, if available)	
	(estimated cost)

15. INSTALLATION OF UTILITIES

    TABLE INSET:

(electricity)	(date)
(gas)	(date)
(water)	(date)
(phone)	(date)
(wastewater disposal)	(date)
(solid waste disposal)	(date)

16. UTILITY LOCATION

    (if all utilities are to be provided to each parcel in the subdivision, please state here)

    (if all utilities are to be provided to some but not all parcels in the subdivision, state which utilities will be provided to each parcel)

    (state whether each utility will be above ground or underground)

17. WATER AND WASTEWATER AVAILABILITY

    (describe the maximum annual water requirements of the subdivision including water for indoor and outdoor domestic uses)

    (describe the availability and sources of water to meet the subdivision's maximum annual water requirements

    (describe the means of water delivery within the subdivision)

    (describe any limitations and restrictions on water use in the subdivision)

    (summarize the provisions of any covenants or other restrictions requiring the use of water saving fixtures and other water conservation measures)

(describe what measures, if any, will be employed to monitor or restrict water use in the subdivision)

18. FOR SUBDIVISIONS WITH COMMUNITY WATER SYSTEMS

    (name and address of entity providing water)

    (source of water and means of delivery)

    (summary of any legal restrictions on either indoor or outdoor usage)

    (statement that individual wells are prohibited, if such is the case)

    (State of New Mexico Drinking Water Bureau's number)

19. FOR SUBDIVISIONS WITH INDIVIDUAL DOMESTIC WELLS OR MULTIPLE HOUSEHOLD WELLS

    (define whether wells will be provided by the subdivider or by the prospective purchaser/lessee/conveyee)

    (if wells are provided by purchaser/lessee/conveyee, state the estimated cost to complete a domestic well, including drilling, pressure tank, control devices, storage and treatment facilities)

    (if wells are provided by the subdivider, state the cost, if any, to the purchaser/ lessee/ conveyee)

    (summary of legal restrictions on either indoor or outdoor usage)

    (average depth to groundwater and the minimum and maximum well depths to be reasonably expected)

    (recommend total depth of well)

    (estimated yield in gallons per minute of wells completed to recommended total depth)

    (State of New Mexico wells shall be permitted by the State Engineer's Office.

20. LIFE EXPECTANCY OF THE WATER SUPPLY

    (state the life expectancy of each source of water supply for the subdivision under full development of the subdivision)

21. SURFACE WATER*

    *Not applicable where subdivider intends to provide water for domestic use.

    (provide a detailed statement of the source and yield of the surface water supply and any restrictions to which the surface water supply is subject)

22. NEW MEXICO STATE ENGINEER'S OPINION ON WATER AVAILABILITY

    Include here the approved summary of the opinion received by the City from the New Mexico State Engineer regarding:

    (whether or not the subdivider can furnish water sufficient in quantity to fulfill the maximum annual water requirements of the subdivision, including water for indoor and outdoor domestic uses)

(whether or not the subdivider can fulfill the proposals in this disclosure statement concerning water, excepting water quality)

23. WATER QUALITY

    (describe the quality of water in the subdivision available for human consumption)

    (describe any quality that would make the water unsuitable for use within the subdivision)

    (state the name, the contaminant level, the maximum contaminant level, the expected adverse effects of the contaminant for domestic use, and the recommended treatment method to reduce the contaminant level to or below the maximum contaminant level for any contaminants which exceed the maximum contaminant levels established by the Water Quality Control Commission or the New Mexico Environment Department, Drinking Water Quality Bureau)

24. NEW MEXICO ENVIRONMENT DEPARTMENT'S OPINION ON WATER QUALITY

    Include here the approved summary of the opinion received by the City of Rio Rancho from the New Mexico Environment Department on:

    (whether or not the subdivider can furnish water of an acceptable quality for human consumption and measures to protect the water supply from contamination in conformity with state regulations)

    (whether or not the subdivider can fulfill the water quality proposal made in this disclosure statement)

    (whether or not the subdivider's proposal for water quality conforms to the City water quality regulations)

25. WASTEWATER SYSTEMS

    (describe the performance standards that must be obtained, design flow and any other conditions affecting the wastewater systems that are proposed and that has been approved by the City for use within the subdivision)

26. THE NEW MEXICO ENVIRONMENT DEPARTMENT GROUND WATER QUALITY BUREAU OPINION ON WASTEWATER SYSTEMS

    Include here the approved summary of the New Mexico Environment Department, Ground Water Quality Bureau on:

    (whether there are sufficient wastewater facilities to fulfill the requirements of the subdivision in conformity with state and City ordinance/regulations)

    (whether or not the subdivider can fulfill the wastewater proposals made in this disclosure statement)

    (whether or not the subdivider's proposal for wastewater disposal conforms to the City's wastewater ordinance/regulations)

27. SOLID WASTE DISPOSAL

    (describe the means of solid waste disposal that is proposed for use within the subdivision)

28. NEW MEXICO ENVIRONMENT DEPARTMENT'S OPINION ON SOLID WASTE DISPOSAL

Include here the approved summary of the opinion received by the City from the New Mexico Environment Department on:

(whether or not there are sufficient solid waste disposal facilities to fulfill the needs of the subdivision in conformity with state regulations)

(whether or not the subdivider can fulfill the solid waste proposals made in this disclosure statement)

(whether or not the subdivider's proposal for solid waste disposal conforms to the City's regulations on solid waste disposal)

29. TERRAIN MANAGEMENT

(Also known as grading and drainage plan or report)

(describe the suitability for residential use of the soils in the subdivision (describe any measures necessary for overcoming soil and topographic limitations, and who will be responsible for implementing these measures)

(identify by lot and block numbers all parcels within the subdivision that are subject to flooding)

(identify by lot and block number all parcels within the subdivision located in whole or in part on slopes in excess of 8%)

(describe the surface drainage for all lots in the subdivision)

(describe the subsurface drainage for all lots in the subdivision)

(describe the nature, location and completion dates of all storm drainage systems and structures constructed or required to be constructed in the subdivision, and identify the entity which is responsible for construction)

30. NATURAL RESOURCES CONSERVATION DISTRICT'S OPINION ON TERRAIN MANAGEMENT

Include here the approved summary of the opinion received by the City from the Soil & Water Conservation District on:

(whether or not the subdivider can furnish sufficient terrain management to protect against flooding, inadequate drainage and soil erosion)

(whether or not the subdivider can satisfy the terrain management proposals made in this disclosure statement)

(whether or not the subdivider's terrain management proposals conform to the City regulations on terrain management)

31. SUBDIVISION ACCESS

(state whether or not subdivision is accessible by conventional vehicle)

(state whether or not subdivision is ordinarily accessible at all times of the year and under all weather conditions)

(describe the width and surfacing of all roads within the subdivision)

(state whether the roads within the subdivision have been accepted for maintenance by the City)

(if the roads within the subdivision have not been accepted for maintenance by the City, state how the roads will be maintained and describe lot owners responsibilities and obligations with respect to road maintenance)

32. NEW MEXICO DEPARTMENT OF TRANSPORTATION'S OPINION ON ACCESS

    Include here the approved summary of the opinion received by City Department of Public Works from the New Mexico Department of Transportation on:

    (whether or not the subdivider can fulfill the state-highway access requirements for the subdivision in conformity with state regulations)

    (whether or not the subdivider can satisfy the access proposal made in this disclosure statement)

    (whether or not the subdivider's access proposals conform to the City's regulations on access)

33. CONSTRUCTION GUARANTEES

    (describe any proposed roads, drainage structures, water treatment facilities or other improvements that will not be completed before parcels in the subdivision are offered for sale)

34. ADVERSE OR UNUSUAL CONDITIONS

    (state any activities or conditions adjacent to or nearby the subdivision, such as feed lots, dairies, cement plants or airports, that would subject the subdivided land to anything unusual affecting its use or occupancy)

35. RECREATIONAL FACILITIES

    (describe all recreational facilities, actual and proposed in the subdivision)

    (state the estimated date of completion of each proposed recreational facility)

    (state whether or not there are any bonds, letters of credit or other collateral securing the construction of each proposed recreational facility and describe any such bond, letter of credit or other collateral)

35. HOA PARK FACILITIES

    (describe all parks developed by the Homeowners Association (HOA), both existing and planned. This includes park amenities such as playgrounds, green spaces, walking trails, sports courts, or other recreational features within the HOA-managed areas)

    (state the estimated completion dates for any proposed HOA-developed parks and their amenities)

    (outline the costs that will be incurred by the lot purchaser for the maintenance of HOA-developed parks, including any HOA fees or special assessments for ongoing upkeep and improvements)

36. FIRE PROTECTION

    (distance to nearest fire station from subdivision)

    (route over which that distance is computed)

(state whether the fire department is full-time,semi-staffed, or volunteer)

37. POLICE PROTECTION

    (sheriff's department, if applicable)

    (municipal police, if applicable) (state police, if applicable)

38. PUBLIC SCHOOLS

    (name of and distance to nearest public elementary school serving the subdivision)

    (name of and distance to nearest public junior high or middle school serving the subdivision)

    (Name of and distance to nearest public high school serving the subdivision)

39. HOSPITALS

    (Name of nearest hospital)

40. PUBLIC TRANSPORTATION

        Describe all public transportation that serves the subdivision on a regular basis

2.12 Drawing Appendices

2.12.ASheet Naming Conventions

CAD File Layering Conventions	
Sheet	**Name** Note: (PROJECT #) = City Project Number
COVER SHEET	(PROJECT #)CS
LEGEND & NOTE SHEET	(PROJECT #)LN
KEY MAP	(PROJECT #)KM (If not included on Cover Sheet)
ROADWAY SUMMARY SHEET	(PROJECT #)RS
TYPICAL SECTIONS	(PROJECT #)TY
PAVING PLANS	(PLAN/PROFILE) (PROJECT #)PP1 THRU (PROJECT #)PP
IF PAVING PLANS HAVE SEPARATE PLAN AND PROFILE SHEETS: PLAN SHEETS PROFILE SHEETS	 (PROJECT #)PL1 THRU (PROJECT #)PL (PROJECT #)PRO1 THRU (PROJECT #)PRO
PAVING DETAILS	(PROJECT #)PD1 THRU (PROJECT #)PD
STORM DRAIN QUANTITY SUMMARY SHEET	(PROJECT #)SDQ
HYDRAULIC GRADE LINE SHEET	(PROJECT #)HGL
STORM DRAIN DESIGN SUMMARY SHEET	STORM DRAIN DESIGN SUMMARY SHEET
SOIL BORING LOGS	(PROJECT #)SB1 THRU (PROJECT #)SB
STORM DRAIN PLANS	STORM DRAIN PLANS
CATCH BASIN CONNECTOR PIPE PROFILES	(PROJECT #)CPP1 THRU (PROJECT #)CPP
STORM DRAIN DETAILS	(PROJECT #)SDD1 THRU (PROJECT #)SDD
LANDSCAPE PLANS	(PROJECT #)LS1 THRU (PROJECT #)LS
LANDSCAPE IRRIGATION PLANS	(PROJECT #)LSI1 THRU (PROJECT #)LSI
LANDSCAPE DETAILS	(PROJECT #)LSD1 THRU (PROJECT #)LSD
STREET LIGHT TRENCHING PLANS	(PROJECT #)SL1 THRU (PROJECT #)SL
TRAFFIC SIGNAL PLANS	(PROJECT #)TS1 THRU (PROJECT #)TS
TRAFFIC SIGNAL DETAILS	(PROJECT #)TSD1 THRU (PROJECT #)TSD
BRIDGE PLANS	(PROJECT #)BR1 THRU (PROJECT #)BR
WATERLINE PLANS	(PROJECT #)WP1 THRU (PROJECT #)WP
WATERLINE PROFILES (If separate from Plans)	(PROJECT #)WPP1 THRU (PROJECT #)WPP
WATERLINE TIE-IN DETAILS	WATERLINE TIE-IN DETAILS
WATERLINE DETAILS	(PROJECT #)WD1 THRU (PROJECT #)WD
SANITARY SEWER PLANS	(PROJECT #)SS1 THRU (PROJECT #)SS
SANITARY SEWER DETAILS	(PROJECT #)SSD1 THRU (PROJECT #)SSD

2.12.B CAD File Layering Conventions

CAD File Layering Conventions	
Layer Name	**Layer Description**
0	
C-BLDG	Building
C-BLDG-TEXT	Building Text
C-BRDG	Bridge
C-BRDG-DECK	Bridge Deck
C-BRDG-EXST	Existing Bridge
C-BRDG-SECT	Cross Section Of Bridge
C-ONECALL	One Call Symbol
C-CURB	Curb, Gutter, Sidewalk
C-CURB-DW	Driveway
C-CURB-DW-EXST	Existing Driveway
C-CURB-EXST	Existing Curb, Gutter, Sidewalk
C-ESMT	Easement Lines
C-ESMT-CNTR	Easement Centerlines
C-ESMT-CNTR-DIMS	Easement Centerline Bearing, Distant & Curve Dimensions
C-ESMT-DIMS	Easement Line Bearing, Distant & Curve Dimensions
C-ESMT-TEMP	Temporary Easement
C-ESMT-TYPE	Easement Type Callouts
C-ESMT-WDTH	Easement Width Dimensions
C-FIRE-FHYD-SYM	Water Fire Hydrant Symbol
C-FIRE-UNDR-MAIN	Watermain to Fire Hydrant
C-FIRE-UNDR-MAIN-FLIN	Watermain - Fireline
C-FIRE-VALV-PNT	Fire Hydrant Water Valve Point
C-FIRE-VALV-SYM	Fire Hydrant Water Valve Symbol
C-GOVT-CNTY-BNDY	County Line
C-GOVT-CTLM-BNDY	City Limits
C-GOVT-DIST-BNDY	Council Districts
C-GOVT-PRCT-BNDY	Voting Precinct
C-LOGO	City Logo
C-MISC-CHRT	Miscellaneous Chart
C-MISC-CURB	Miscellaneous Curb
C-MISC-DETL	Miscellaneous Detail
C-MISC-DETL-CNTR	Miscellaneous- Detail- Center
C-MISC-DETL-HIDN	Miscellaneous-Detail-
C-MISC-DIMS	Dimensions

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-MISC-TEXT	Miscellaneous Text
C-PATT-DECO-PVMT	Hatch - Decorative Pavement
C-PATT-DECO-XSEC	Hatch- Decorative - Cross Section
C-PATT-DET	Hatch - Decorative - Detail Sheets
C-PATT-DW	Hatch - Proposed Driveway
C-PATT-PVMT	Hatch - Proposed Pavement
C-PATT-SW	Hatch - Proposed Sidewalk
C-PATT-SW-EXST	Hatch - Existing Sidewalk
C-PROF	Proposed Profile
C-PROF-CNTR	Proposed Profile Centerline
C-PROF-DOTS	Profile - Dots
C-PROF-GRID	Profile - Grid
C-PROF-GRND-EXST	Profile – Ground-Extension
C-PROF-NOTES	Profile Notes
C-PROF-NOTES-HORZ	Profile Notes - Horizontal
C-PROF-NOTES-VERT	Profile Notes - Vertical
C-PROF-TEXT	Proposed Profile Text
C-PROP	A`Property Lines (Parcel Boundaries)
C-PROP-ACRE	Lot & Tract Acreages
C-PROP-ADDR	Street Addresses
C-PROP-BLDG-SBAC	Building Setback
C-PROP-DIMS	Property Line Bearing, Distant & Curve Dimensions
C-PROP-EXST	Old/Existing Property Lines
C-PROP-MON	Property Line Monuments
C-PROP-NUMB	Lot Numbers & Tracts
C-PROP-NUMB-DISP	County Parcel Numbers for display purposes only
C-PROP-SPLT	Property Split Lines
C-PVMT-EDGE	Edge Of Pavement
C-PVMT-EDGE-EXST	Existing-Edge Of Pavement
C-PVMT-SC	Saw Cut Line
C-RCLM-ANNO-TXT	Reclaim Text
C-RCLM-BOOS-PNT	Reclaim Booster Station Point
C-RCLM-BOOS-SYM	Reclaim Booster Station Symbol
C-RCLM-PRVL-PNT	Reclaim Pressure Relief Valve Point
C-RCLM-PRVL-SYM	Reclaim Pressure Relief Valve Symbol
C-RCLM-STOR-PNT	Reclaim Storage Point
C-RCLM-STOR-SYM	Reclaim Storage Symbol

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-RCLM-UNDR-FIT	Reclaim Fittings
C-RCLM-UNDR-MAIN	Reclaim-Water Main
C-RCLM-UNDR-MAIN	Reclaim Water Main - Standard
C-RCLM-UNDR-REDR-P	Reclaim-Water Line Reducer Pipe
C-RCLM-UNDR-REDR-PNT	Reclaim line Reducer Point
C-RCLM-UNDR-REDR-S	Reclaim-Water Line Reducer
C-RCLM-UNDR-REDR-SYM	Reclaim Reducer Symbol
C-RCLM-UNDR-SERV	Reclaim Service Tap
C-RCLM-VAL-PNT	Reclaim Water Valve Point
C-RCLM-VALV-SYM	Reclaim Water Valve Symbol
C-RIV-CNTR	Rivers/Creeks/Streams/Washes Center Lines
C-RIV-EDGE	Rivers/Creeks/Streams/Washes Edge Lines
C-RIV-NAME	Rivers/Creeks/Streams/Washes Names
C-ROW	Street Right-of-Way Lines
C-ROWC	Canal Right-of-Way Lines
C-ROWC-CNTR	Canal Right-of-Way Centerlines
C-ROWC-CNTR-DIMS	Canal Centerline Bearing, Distant & Curve Dimensions
C-ROWC-CNTR-MON	Canal Centerline Monuments
C-ROWC-CNTR-NAME	Canal Names
C-ROWC-CNTR-WDTH	Canal Right-of-Way Width Dimensions
C-ROWC-DIMS	Canal Right-of-Way Line Bearing, Distant & Curve Data
C-ROWC-MON	Canal Right-of-Way Monuments
C-ROW-CNST-CNTR	Construction Center Line
C-ROW-CNTR	Street Right-of-Way Centerlines
C-ROW-CNTR-DIMS	Street Centerline Bearing, Distant & Curve Dimensions
C-ROW-CNTR-MON	Street Centerline Monuments
C-ROW-CNTR-NAME	Street Names
C-ROW-CNTR-WDTH	Street Right-of-Way Width Dimensions
C-ROW-DIMS	Street Right-of-Way Line Bearing, Distant & Curve
C-ROW-EXST	Existing-Street Right-of-Way Lines
C-ROWF	Freeway Right-of-Way Lines
C-ROWF-CNTR	Freeway Right-of-Way Centerlines
C-ROWF-CNTR-DIMS	Freeway Centerline Bearing, Distant & Curve Dimensions
C-ROWF-CNTR-MON	Freeway Centerline Monuments
C-ROWF-CNTR-NAME	Freeway Names
C-ROWF-CNTR-WDTH	Freeway Right-of-Way Width Dimensions
C-ROWF-DIMS	Freeway Right-of-Way Line Bearing, Distant & Curve Data

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-ROWF-MON	Freeway Right-of-Way Monuments
C-ROW-MON	Street Right-of-Way Monuments
C-ROWP	Private Street Right-of-Way Lines
C-ROWP-CNTR	Private Street Right-of-Way Centerlines
C-ROWP-CNTR-DIMS	Private Street Centerline Bearing, Distant & Curve Data
C-ROWP-CNTR-MON	Private Street Centerline Monuments
C-ROWP-CNTR-NAME	Private Street Names
C-ROWP-CNTR-WDTH	Private Street Right-of-Way Width Dimensions
C-ROWP-DIMS	Private Street Right-of-Way Line Bearing, Distant & Curve Data
C-ROWP-MON	Private Street Right-of-Way Monuments
C-ROWR	Railroad Right-of-Way Lines
C-ROWR-CNTR	Railroad Right-of-Way Centerlines
C-ROWR-CNTR-DIMS	Railroad Centerline Bearing, Distant & Curve Dimensions
C-ROWR-CNTR-MON	Railroad Centerline Monuments
C-ROWR-CNTR-NAME	Railroad Names
C-ROWR-CNTR-WDTH	Railroad Right-of-Way Width Dimensions
C-ROWR-DIMS	Railroad Right-of-Way Line Bearing, Distant & Curve Data
C-ROWR-MON	Railroad Right-of-Way Monuments
C-SECT-COR-MON	Section Corner Monuments
C-SECT-COR-TEXT	Section & Quarter Corner Information
C-SECT-LINE	Section Lines
C-SECT-LINE-DIMS	Section Line Bearing & Distant Dimensions
C-SHBD	Sheet Border
C-SHBD-MTCH	Match Line
C-SHBD-MTCH-TEXT	Match Line Text
C-SHBD-TEXT	General Text
C-SHBD-TEXT-BLD	Bold Size Text
C-SHBD-TEXT-MED	Medium Size Text
C-SHBD-TTLB Title	Title Block & North Arrow
C-SHBD-TTLB-TEXT	Title Block Text
C-SSWR-ANNO-TXT	Sewer Text
C-SSWR-CLNO-PNT	Cleanout Point
C-SSWR-CLNO-SYM	Cleanout Symbol
C-SSWR-HEAD-PNT	Sewer Headwork Point
C-SSWR-HEAD-SYM	Sewer Headwork Symbol
C-SSWR-LSTA-PNT	Sewer Lift Station Point
C-SSWR-LSTA-SYM	Sewer Lift Station Symbol

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-SSWR-MAHN-PNT	Sewer Manhole Point
C-SSWR-MAH-SYM	Sewer Manhole System
C-SSWR-MANH-PNT	Manhole Point
C-SSWR-MANH-SYML	Manhole Symbol
C-SSWR-MSTA-PNT	Sewer Metering Station Point
C-SSWR-MSTA-SYM	Sewer Metering Station Symbol
C-SSWR-UNDR-MAIN-STAN	Sewermain - Standard
C-SSWR-UNDR-SERV	Sewer Service
C-SSWR-VALV-PNT	Sewer Valve Point
C-SSWR-VALV-SYM	Sewer Valve Symbol
C-SSWR-WEIR-SYM	Sewer Weir Box Symbol
C-SSWR-WIER-PNT	Sewer Weir Box Point
C-SSWR-WIER-SYM	Sewer Weir System
C-STRM-AREA-CTCH	Catchment Area, Area that Flows to an Outfall
C-STRM-AREA-DET	Detention Area
C-STRM-AREA-STOR	Storage Pond
C-STRM-CB	Catch Basin
C-STRM-MNMD-CANL	Canal, Large Water Conveyance that Interacts w/Storm Drains
C-STRM-MNMD-CHAN	Channel, Concrete Lined Conveyance
C-STRM-MNMD-CNTR	Centerline, Carries the Attributes for the Items Listed Above
C-STRM-MNMD-DTCH	Ditch, Unlined Conveyance
C-STRM-MNMD-IRRG	Irrigation, Small Water Conveyance that Interacts
C-STRM-MNMD-SPWY	Spillway, Allows Surface Flow to Channels/Ditches
C-STRM-NTRL-CNTR	Centerline, Carries the Attributes for the Items Listed Above
C-STRM-NTRL-CREK	Creek
C-STRM-NTRL-RIV	River
C-STRM-NTRL-WASH	Wash
C-STRM-STRC-DIVR	Diversion Structure, Diverts Canal Water to Storm Drain System
C-STRM-STRC-FLGT	Flapgate, Restricts Flow to one Direction
C-STRM-STRC-HDWL	Headwall, Transition from Openflow to Pipe & Visa Versa
C-STRM-STRC-INLT	Inlet, Collects Surface Flow
C-STRM-STRC-JBOX	Junction Box Irrigation Control
C-STRM-STRC-MH	Manhole, Point of Entry to the Storm Drain System
C-STRM-STRC-ORFC	Orifice, Restricts Flow
C-STRM-STRC-OUTF	Outfall, Structures that Release Storm Water to Receiving Water
C-STRM-STRC-PMP	Pump, Moves Water Between Different Elements of the System
C-STRM-STRC-STAN	Stand Pipe, Irrigation Device

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-STRM-STRC-STAN-EXST	Existing Stand Pipe, Irrigation Device
C-STRM-STRC-VAL	Valve, Controls Rate or Direction of Flow
C-STRM-STRC-WIER	Weir, Restricts or Changes Direction of Flow
C-STRM-UNDR	Storm Drain Lines-Underground
C-STRM-UNDR-BDET	Bleed Off, Detention, Flow from Detention Area to Pipe System
C-STRM-UNDR-BPMP	Bleed Off, Pump, Flow from Pump to Pipe Systems
C-STRM-UNDR-CLVT	Culvert, Structure to Allow Flow Under Roads, etc.
C-STRM-UNDR-CONR	Connector, Pipe Connects Inlets to Majors/Laterals
C-STRM-UNDR-EXST	Existing-Storm Drain Lines-Underground
C-STRM-UNDR-IRRG	Irrigation, Part of Irrigation System that Interacts w/Storm Drain
C-STRM-UNDR-LATR	Lateral, Pipe Usually Smaller, Feeds to Majors
C-STRM-UNDR-MAJR	Major, Pipe Backbone, Ends at Outfall
C-STRM-UNDR-OTHR	Other
C-STRM-UNDR-SPHN	Siphon, Allows Flow Under Obstructions
C-SUB-BND	Subdivision Boundary
C-SUB-BND-DIMS	Subdivision Boundary Bearing, Distant & Curve Dimensions
C-SUB-BND-MON	Subdivision Boundary Monuments
C-SUB-NAME	Subdivision Name
C-SWR	Sanitary Sewer-At Grade
C-SWR-EXST	Existing-Sanitary Sewer-At Grade
C-SWR-UNDR	Sanitary Sewer Lines-Underground
C-SWR-UNDR-EXST	Existing-Sanitary Sewer
C-TOPO	Results Of Survey
C-TOPO-BORE	Bore Hole Locations
C-TOPO-FENC	Fence
C-TOPO-FENC-EXST	Fence Extension
C-TOPO-MISC	Miscellaneous Items
C-TOPO-MISC-EXST	Miscellaneous Extension
C-TOPO-RTWL	Retaining Wall
C-TOPO-STLT-EXST	Streetlight Pole - Existing
C-TOPO-TEXT	Topo Text
C-TOPO-TRAF-POLE-EXST	Existing Traffic Signal Pole
C-TOPO-WALL	Freestanding Wall
C-TRAF-EQPT	Traffic Signal Equipment
C-TRAF-EQPT-EXST	Existing-Traffic Signal Equipment
C-TRAF-EQPT-MISC	Traffic Signal Equipment-Miscellaneous
C-TRAF-EQPT-TEXT	Traffic Signal Equipment Notes/Text

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-TRAF-FNDN-COND	Traffic Signal Conduit
C-TRAF-FNDN-COND-EXST	Existing-Traffic Signal Conduit
C-TRAF-FNDN-JB	Traffic Signal Junction Boxes
C-TRAF-FNDN-JB-EXST	Existing-Traffic Signal Junction Boxes
C-TRAF-FNDN-MISC	Traffic Signal Foundation-Miscellaneous
C-TRAF-FNDN-TEXT	Traffic Signal Foundation Notes/Text
C-TRAF-MISC	Street Names / Miscellaneous Text
C-TRAF-PM-SKW	Traffic-Skip White Paint
C-TRAF-PM-SKW-EXST	Existing-Traffic-Skip White Paint
C-TRAF-PM-SKY	Traffic-Skip Yellow Paint
C-TRAF-PM-SKY-EXST	Existing-Traffic-Skip Yellow Paint
C-TRAF-PM-SOW	Traffic-Solid White Paint
C-TRAF-PM-SOW-EXST	Existing-Traffic-Solid White Paint
C-TRAF-PM-SOY	Traffic-Solid Yellow Paint
C-TRAF-PM-SOY-EXST	Existing-Traffic-Solid Yellow Paint
C-TRAF-POLE	Traffic Signal Poles/Foundations
C-TRAF-POLE-EXST	Existing-Traffic Signal Poles/Foundations
C-TRAF-POLE-EXST-R	Existing-Traffic Signal Poles/
C-TRAF-POLE-EXST-RMVL	Existing-Traffic Signal Poles/Foundations-to be Removed
C-TRAF-SIGN	Traffic Signs
C-TRAF-SIGN-EXST	Existing Traffic Signs
C-TRAF-STLT	Traffic
C-UTIL-CABL	Cable-At Grade
C-UTIL-CABL-EXST	Existing-Cable-At Grade
C-UTIL-CABL-OVHD	Cable Lines-Overhead
C-UTIL-CABL-UNDR	Cable Lines-Underground
C-UTIL-CABL-UNDR-EXST	Existing-Cable Lines-Underground
C-UTIL-CWTR-UNDR	Chiller Water Lines-Underground
C-UTIL-CWTR-UNDR-EXST	Existing-Chiller Water Lines-Underground
C-UTIL-FIBR	Fiber Optic-At Grade
C-UTIL-FIBR-	Existing-Fiber Optic-At Grade
C-UTIL-FIBR-OVHD	Fiber Optic Lines-Overhead
C-UTIL-FIBR-OVHD-EXST	Existing-Fiber Optic Lines-Overhead
C-UTIL-FIBR-UNDR	Fiber Optic Lines-Underground
C-UTIL-FIBR-UNDR-	Existing-Fiber Optic Lines-Underground
C-UTIL-FUEL-UNDR	Liquid Fuel Lines-Underground
C-UTIL-FUEL-UNDR-EXST	Existing-Liquid Fuel Lines-Underground

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-UTIL-IRRG	Irrigation line w\Headwalls
C-UTIL-IRRG-ABVG	Irrigation Structures
C-UTIL-IRRG-ABVG-EXST	Existing Irrigation Structures
C-UTIL-IRRG-EXST	Existing-Open Irrigation line w\Headwalls
C-UTIL-IRRG-UNDR	Open Irrigation Lines-Underground
C-UTIL-MGAS-UNDR	Medical Gas Lines-Underground
C-UTIL-MGAS-UNDR-EXST	Existing-Medical Gas Lines-Underground
C-UTIL-NGAS	Natural Gas-At Grade
C-UTIL-NGAS-EXST	Existing-Natural Gas-At Grade
C-UTIL-NGAS-UNDR	Natural Gas Lines-Underground
C-UTIL-NGAS-UNDR-	Existing-Natural Gas Lines-Underground
C-UTIL-POWR	Electrical Power-At Grade
C-UTIL-POWR-EXST	Existing-Electrical Power-At Grade
C-UTIL-POWR-OVHD	Electrical Power Lines-Overhead
C-UTIL-POWR-OVHD-EXST	Existing-Electrical Power Lines-Overhead
C-UTIL-POWR-UNDR	Electrical Power Lines-Underground
C-UTIL-POWR-UNDR-EXST	Existing-Electrical Power Lines-Underground
C-UTIL-SSWR-UNDR-EXST	Existing-Sanitary Sewer Lines-Underground
C-UTIL-STRM-EXST	Existing-Storm Drain / All Structures and Facilities
C-UTIL-TELE-ABVG	Telephone - Aboveground
C-UTIL-TELE-UNDR	Telephone - Underground
C-UTIL-TELE-UNDR-EXST	Existing Telephone-Underground
C-UTIL-WATR-UNDR-EXST	Existing-Domestic Water Lines-Underground
C-WALK	Walkways - Independent of Street
C-WALK-EXST	Existing-Walkways - Independent of Street
C-WATR	Domestic Water - At Grade
C-WATR-ANNO-TXT	Water Text
C-WATR-BOOS-PNT	Water Booster Station Point
C-WATR-BOOS-SYM	Water Booster Station Symbol
C-WATR-DET	Water Detail Sheet - Line Work
C-WATR-DET-CNTR	Water Detail Sheet - Center Line
C-WATR-DET-DASH	Water Detail Sheet- Dashed
C-WATR-DET-DDOT	Water Detail Sheet- Dotted
C-WATR-DET-HIDN	Water Detail Sheet-Hidden
C-WATR-EXST	Existing-Domestic Water - At Grade
C-WATR-MANH-PNT	Water Manhole Point
C-WATR-MANH-SYM	Water Manhole Symbol

CAD File Layering Conventions	
Layer Name	**Layer Description**
C-WATR-MSTA-PNT	Water Metering Station Point
C-WATR-MSTA-SYM	Water Metering Station Symbol
C-WATR-PRVL-PNT	Water Pressure Relief Valve Point
C-WATR-PRVL-SYM	Water Pressure Relief Valve Symbol
C-WATR-PZON	Water Pressure Zone
C-WATR-REDR-PNT	Waterline Reducer Point
C-WATR-REDR-SYM	Waterline Reducer Symbol
C-WATR-STOR-PNT	Water Storage Point
C-WATR-STOR-SYM	Water Storage Symbol
C-WATR-UNDR	Domestic Water Lines-Underground
C-WATR-UNDR-EXST	Existing-Domestic Water Lines-Underground
C-WATR-UNDR-FIT	Water Fitting
C-WATR-UNDR-MAIN	Watermain
C-WATR-UNDR-SERV	Water Service
C-WATR-VALV-SYM	Water Valve Symbol
C-WATR-WELL-PNT	Water Well Point
C-WATR-WELL-SYM	Water Well Symbol
DEFPOINTS	Definition Points
L-IRRG-EQPT	Valves, Meters, Etc.
L-IRRG-EQPT-DET	Irrigation Detail Sheet - line Work
L-IRRG-EQPT-DET-CN	Irrigation Detail Sheet-
L-IRRG-EQPT-DET-CNTR	Irrigation Detail Sheet - Center Line
L-IRRG-LTRL	Irrigation - Lateral Line
L-IRRG-MAIN	Irrigation - Main Line
L-IRRG-MISC	Wire, Pull Box, Etc.
L-IRRG-PIPE	Irrigation Pipe
L-IRRG-PRIV	Private Irrigation
L-IRRG-SIZE	Irrigation Pipe Size
L-IRRG-SLEV	Irrigation Sleeves
L-IRRG-SYMB	Irrigation Tags
L-IRRG-TEXT	Annotations
L-IRRG-WATR	Irrigation with Water
L-PLNT	Plants
L-PLNT-BLDR	Site Boulders
L-PLNT-CACT	Desert Plants
L-PLNT-DEMO	Demolish / Removal
L-PLNT-EXST	Existing Plants

CAD File Layering Conventions	
Layer Name	**Layer Description**
L-PLNT-FURN	Site Furniture
L-PLNT-HEAD	Landscape Headers
L-PLNT-SAVG	Plant Salvage
L-PLNT-SHRB	Plant - Shrub
L-PLNT-TEXT	Landscape Text
L-PLNT-TREE	Trees
Z-BLDG	Major Existing Building Outlines
Z-BLDG-DIMS	Major Building Dimensions
Z-BLDG-FUTR	Future Buildings and Additions
Z-SITE	Building Setback Lines
Z-SITE-DIMS	Building Dimensions
Z-SITE-DRVW	Driveways
Z-SITE-FENC	Fences/Walls
Z-ZONE	Existing Zoning Lines
Z-ZONE-DIMS	Zoning Dimensions
Z-ZONE-FUTR	Rezoning Proposals
Z-ZONE-FUTR-TEXT	Rezoning Proposals Text
Z-ZONE-TEXT	Zoning Identification Text

*Any existing layer not listed should be named with the layer name and “-EXST”

EXAMPLE: C-BLDG-EXST

2.12.C CAD Standards and Naming Conventions for Digital Plan & Plat Submittals

All drawing entities must reside on their own respective layers with specified layer names, colors, line types and text styles (if applicable) assigned to each entity BY LAYER. All symbols and line types must follow City of Rio Rancho design standards specifications where applicable. All digital plans submitted shall be referenced to at least two known existing section monuments with the basis of bearing clearly stated including bearings and distances. This will assist us in projecting the data to the City of Rio Rancho control grid standard (New Mexico State Plane Coordinate System, NAD 83, US Feet).

CAD Standards and Naming Conventions for Digital Plan & Plat Submittals				
LAYER GROUP	**LAYER NAME**	**COLOR**	**LINETYPE TEXTSTYLE**	**LAYER DESCRIPTION**
ROADWAY R-O-W	C-ROW	CYAN	CONTINUOUS	ROADWAY RIGHT-OF-WAY LINES
	C-RW-ABND	8(GRAY)	DOT2	ABANDONED RIGHT OF-WAY
	C-RW-DIM	135(DRK CYAN)	CONTINUOUS	R.O.W. WIDTH, DISTANCE, etc. - DIMENSIONS
	33(LT BROWN)	33(LT BROWN)	DOT2	FUTURE/PROPOSED RIGHT-OF-WAY
	C-RW-PTS	WHITE	CONTINUOUS	POINTS OF CURVATURE & TANGENCY (TIC MARKS)
ROADWAY CENTERLINES	C-RW-CL	YELLOW	CENTER2	ROADWAY CENTERLINES
	C-RW-CL-DIM	53(DRK YELLOW)	PHANTOM2 (ROW2)	CENTERLINE BEARING, DISTANCE, & CURVE DIM.'S
	C-RW-CL-MON	RED	DIVIDE	UNPAVED ROADWAY CENTERLINE
	C-RW-CL-NMS	BLUE	CONTINUOUS	ROADWAY NAMES
	C-RW-CL-PTS	WHITE	CONTINUOUS	POINTS OF CURVATURE & TANGENCY (TIC MARKS)
	C-RW-CL-UNP	33(LT BROWN)	DASHED	UNPAVED STREET CENTERLINE
ARROYO & RAILROAD R.O.W. & C.L	C-RWAR	150(BLUE)	PHANTOM2 (ROW2)	ARROYO RIGHT-OF-WAY
	C-RWRR	12(DRK RED)	PHANTOM2	RAILROAD RIGHT-OF-WAY
	C-RWAR-CL	141	DIVIDE	ARROYO CENTERLINE
	C-RWRR-CL	YELLOW	TRACKS	RAILROAD CENTERLINE
	C-RWAR/RR-DIM	135	CONTINUOUS	ARROYO OR RAILROAD R.O.W. WIDTH DIMENSIONS

CAD Standards and Naming Conventions for Digital Plan & Plat Submittals				
LAYER GROUP	**LAYER NAME**	**COLOR**	**LINETYPE TEXTSTYLE**	**LAYER DESCRIPTION**
	C-RWAR/RR-CL-DIM	MAGENTA	CONTINUOUS	BEARING, DISTANCE, & CURVE DIM.'S
	C-RWAR/RR-CL-MON	RED	DASHED	CENTERLINE MONUMENTS
	C-RWAR/RR-CL-NMS	130(CYAN)	CONTINUOUS	ARROYO OR RAILROAD NAMES
PRIVATE STREET R.O.W.	C-ROWP	WHITE	PHANTOM2	PRIVATE RIGHT-OF-WAY LINES
	C-RWPV-ABND	8(GRAY)	DOT2	ABANDONED PRIVATE RIGHT-OF-WAY
	C-RWPV-DIM	252(GRAY)	CONTINUOUS	PRIV. R.O.W. WIDTH, DISTANCE, etc. - DIMENSIONS
	C-RWPV-FUTR	YELLOW	DOT2	FUTURE/PROPOSED PRIVATE RIGHT-OF-WAY
	C-RWPV-PTS	RED	CONTINUOUS	CURVATURE & TANGENCY POINTS (TIC MARKS)
PRIVATE STREET CENTERLINES	C-RWPV-CL	YELLOW	CENTER2	PRIVATE STREET CENTERLINES
	C-RWPV-CL-DIM	MAGENTA	CONTINUOUS	BEARING, DISTANCE, WIDTH, & CURVE DIM.'S
	C-RWPV-CL-MON	RED	DASHED	PRIVATE CENTERLINE MONUMENTS
	C-RWPV-CL-NMS	BLUE	CONTINUOUS	PRIVATE STREET NAMES
	C-RWPV-CL-PTS	WHITE	CONTINUOUS	CURVATURE & TANGENCY POINTS (TIC MARKS)
PARCELS	C-PL	WHITE	CONTINUOUS	PROPERTY LINES (& PARCEL BOUNDARIES)
	C-PL-AC	MAGENTA	CONTINUOUS	PROPERTY ACREAGES (LOTS & TRACTS)
	C-PL-DTL	143	CONTINUOUS	PROPERTY LINE DETAILS & ATTRIBUTES
	C-PL-DIM	254(LT GRAY)	CONTINUOUS	PROPRTY LINE BEARINGS & CURVE DIM.'S
	C-PL-NUM	201(LT MGNTA)	SIMPLEX	LOT NUMBERS & TRACTS
	C-PL-PTS	WHITE	CONTINUOUS	POINTS OF CURVATURE & TANGENCY (TIC MARKS)
SECTIONS	C-SEC	254	CONTINUOUS	SECTION LINES

CAD Standards and Naming Conventions for Digital Plan & Plat Submittals				
LAYER GROUP	**LAYER NAME**	**COLOR**	**LINETYPE TEXTSTYLE**	**LAYER DESCRIPTION**
	C-SEC-DIM	252(GRAY)	CONTINUOUS	SECTION LINE BEARINGS, DISTANCES, etc.
	C-SEC-MID	50(YELLOW)	DASHED	SECTION MID-LINES
	C-SEC-MON	RED	CONTINUOUS	SECTION (SURVEY) MONUMENTS
CITY LIMIT BOUNDARIES	C-BOUN-CITY	30(ORANGE)	PHANTOM	CITY LIMIT LINES
SUBDIVISION BOUNDARIES	C-BOUN-SUB	204(DRK MGNTA)	CONTINUOUS	SUBDIVSION BOUNDARY
	C-BOUN-SUB-DIM	RED	CONTINUOUS	SUBDIVISION BOUNDARY BEARINGS, DIM'S, etc.
	C-BOUN-SUB-MON	RED	CONTINUOUS	SUBDIVISION BOUNDARY MONUMENTS
	C-BOUN-SUB-NMS	9(GRAY)	CONTINUOUS	SUBDIVISION PHASE/UNIT/PARCEL NAMES/NO.'s
	C-BOUN-SUB-PTS	204(DRK MGNTA)	CONTINUOUS	SUBDIVISION SURVEY POINT MARKERS
SITE/PROPERTY BOUNDARIES	C-BOUN-SITE	204(DRK MGNTA)	CONTINUOUS	SITE BOUNDARY
	C-BOUN-SITE-DIM	RED	CONTINUOUS	SITE BOUNDARY BEARINGS, DIM'S, etc
	C-BOUN-SITE-MON	RED	CONTINUOUS	SITE BOUNDARY MONUMENTS
	C-BOUN-SITE-PTS	204(DRK MGNTA)	CONTINUOUS	SITE BOUNDARY TIC MARKS

DEVELOPMENT PROCESS MANUAL

Chapter 3: Drainage, Flood Control and Erosion



RRioRancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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3. DRAINAGE, FLOOD CONTROL AND EROSION CONTROL

3.1 Introduction

The standards, guidelines and criteria presented herein are provided to facilitate the planning, design, construction and operation of both public and private drainage control, flood control, and erosion control facilities within the community. The criteria are not intended as a substitute for good engineering judgment; imagination and ingenuity are encouraged. The purpose of these criteria is to provide guidance for a majority of design circumstances, however it should be understood that situations will arise in which these criteria are not appropriate or require modification due to unique conditions. Where necessary, coordination between the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) and the City of Rio Rancho staff is expected and as such, may, in specific cases, require more stringent criteria or allow relaxation of these criteria based on sound engineering practice.

The administration of these standards including interpretation, enforcement, revision, waiver, and variance is hereby delegated to the appropriate representatives from the City of Rio Rancho in conjunction with SSCAFCA.

3.2 References

A. City of Rio Rancho Ordinances and Policies
   i. Rio Rancho Municipal Code, Chapter 152, Flood Hazard Prevention.
   ii. Rio Rancho Municipal Code, Chapter 153, Erosion Control; Storm Drainage.
   iii. Rio Rancho Municipal Code, Chapter 154, Planning and Zoning.
   iv. Rio Rancho Municipal Code, Chapter 155, Subdivision Ordinance.

B. SSCAFCA Manuals and Policies
   i. All SSCAFCA related reference materials can be found at the following link: https://www.sscafca.org/resources/.

3.3 Hydrology

For the purposes of this chapter, all hydrologic modeling completed for the purposes of determining requirements related to drainage, flood control and erosion control for developments larger than 40 acres in the City of Rio Rancho shall follow the guidelines as required by SSCAFCA. Again, consultation with the City of Rio Rancho and SSCAFCA representatives is required to ensure expectations are set at the onset of modeling and analysis pertaining to any development.

3.3.A Considerations

The SSCAFCA Hydrology Criteria Manual sets forth criteria for the design of SSCAFCA constructed facilities and facilities that will ultimately be owned by SSCAFCA but constructed by others. This also includes facilities that require the use of SSCAFCA right-of-way. The City of Rio Rancho leverages this criterion to set forth consistent requirements and policy, however, there may be situations where the City implements additional or altered requirements based on implementation characteristics.

3.3.B Storm Drainage Release Rate

Unless further restricted by downstream or specific infrastructure limitations, the peak discharge permitted from a developed property in the event of a 100-year, 24-hour storm shall be the amount of the historic or pre-developed peak discharge in all watersheds of the City of Rio Rancho. Drainage infrastructure capacity downstream of any given development may govern the allowable discharge. To determine additional constraints on discharge rates, if any, due to downstream infrastructure constraints, coordination with the owner of the downstream infrastructure is required.

3.3.B.I. SYMBOLS AND DEFINITIONS

A_A	area in land treatment A
A_B	area in land treatment B
A_C	area in land treatment C
A_D	area in land treatment D
A_T	total area in sub-basin
Ac Ft	acre feet
C	Rational Method coefficient
C_A	Rational Method coefficient for treatment A
C_B	Rational Method coefficient for treatment B
C_C	Rational Method coefficient for treatment C
C_D	Rational Method coefficient for treatment D
cfs	cubic feet per second
Elev	elevation (feet)
Ft	feet
hr	hour
I	Rational Method intensity (inches/hour)
K	conveyance factor for SCS Upland Method
mi^2	square mile(s)
n	Manning's roughness coefficient

PMF Probable Maximum Flood

1/2PMF one-half of the Probable Maximum Flood

PMP_{15} 15-minute Probable Maximum Precipitation

PMP_{60} 60-minute Probable Maximum Precipitation

PMP_{360} 360-minute Probable Maximum Precipitation

PMP_T Probable Maximum Precipitation at anytime, t

Q_P peak discharge (cfs)

Q_{PA} peak discharge rate (cfs/acre) for treatment A

Q_{PB} peak discharge rate (cfs/acre) for treatment B

Q_{PC} peak discharge rate (cfs/acre) for treatment C

Q_{PD} peak discharge rate (cfs/acre) for treatment D

s slope of subreach in foot per foot

t time in minutes

t_B base time for small watershed hydrograph

T_C time of concentration (hours)

R storage coefficient (hours)

t_p time to peak (hours)

v velocity of flow in watershed (feet/sec)

v_x velocity of flow in watershed subreach

V_{360} runoff volume for 360-minute storm

V_{1440} runoff volume for 1440-minute storm

V_{4days} runoff volume for 4-day storm

V_{10days} runoff volume for 10-day storm

y^x y to the x power

+ addition operator

- subtraction operator

* multiplication operator

/ division operator

√ square root operator

3.3.B.II. DEFINITIONS

100-year Design Storm - means a storm as defined by the Drainage Ordinance and DPM.

ADA – Americans with Disabilities Act.

Amendment - Change to an effective FEMA map resulting in the exclusion of an individual structure or a legally described parcel of undeveloped land that was inadvertently included in the SFHA.

Amenities – Improvements that may enhance the citizens' enjoyment of the outdoors including, but not limited to, trails, viewpoints with benches, wildlife and plant habitat, educational/informational signage, and trailheads.

Applicant - means any Developer seeking to construct drainage facilities under this Procedure.

Base Flood Elevation (BFE) - Elevation of the 100-year (1-percent annual chance) flood, in feet, referenced to the National Geodetic Vertical Datum.

Benefit - means, for the purpose of this Procedure, the provision of a drainage outfall or flood control facility that serves the property.

Benefited Area - means the tracts or parcels of land within a drainage basin benefited by the proposed drainage or flood control facilities.

BMP - Best Management Practice.

Certificate of Completion and Acceptance - means a document issued by the City in a format prescribed in the Development Process Manual which certifies that the public infrastructure improvements required for a development have been satisfactorily completed by the developer and are accepted by the City, for maintenance and public use.

City/County Floodplain Administrator - Public official who is designated by the community to coordinate the community's participation in the National Flood Insurance Program.

Consulting Engineer - means a professional engineer competent in surface water hydrology and hydraulics duly licensed under the laws of the State of New Mexico who is under contract with an Applicant or the City to design drainage facilities.

Cost Allocation - means a cost allocated to new development in order to fund and/or recoup the costs of drainage facilities necessitated by and attributable to the new development.

Cost Allocation Table - means the list or roll of all tracts or parcels of property within the benefited area and the amount to be allocated against each tract or parcel as determined in accordance with this Procedure.

Critical Depth – The depth at which the specific energy of the flow is at a minimum and the Froude number is one.

Critical Facility – Essential infrastructure or buildings whose disruption or damage could cause significant harm, disruption or loss of life and shall include hospitals, schools and other buildings used for emergency shelter, support facilities/utilities for aforementioned facilities, and access routes to the aforementioned facilities.

Critical Slope – The slope at which the normal depth equals the critical depth.

Dams – Storm water retention/detention structures approved and controlled by the Office of the State Engineer.

Depth of Bury – the vertical distance between the top of the utility line and the bottom of the arroyo, whether the utility is in the arroyo or adjacent to the arroyo, at the time of consideration.

Detention Pond – A ponding structure designed with a physical means by which water is released in a controlled manner.

Developer - means any individual, estate, trust, receiver, cooperative association, club, corporation, company, firm, partnership, joint venture, syndicate, political subdivision or other public or private entity engaging in the platting, subdivision, filling, grading, excavating, or construction of structures.

DPM – Development Process Manual.

Drainage Basin - means the land area from which storm water shall drain to an acceptable outfall.

Drainage Facilities - means public facilities used for conducting storm waters to, through and from a drainage basin to the point of final destination, and any related improvements, as defined in the Allocation Plan including, but not limited to, any or all of the following: bridges, pipes, conduits, culverts, crossing structures, arroyos, waterways, inlets, swales, ditches, gulches, channels, temporary or permanent retention and detention areas, water quality features, lateral erosion line and stability measures removal and/or replacement of existing facilities, as well as easements and rights-of-way necessary, to accommodate the same.

Easement Curve – A curve whose degree of curvature is varied either uniformly or according to a definite pattern to give a gradual transition between a tangent and a simple curve which it connects or between two simple curves.

Encroachment - Construction, placement of fill, or similar alteration of topography in the flood plain that reduces the area available to convey flood waters.

Federal Emergency Management Agency (FEMA) - Government Agency that regulates FIRM maps.

Floodway - Channel of a stream or other watercourse, plus any adjacent flood plain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without cumulatively increasing the elevation of the 100-year flood more than zero feet.

Floodway Fringe - Portion of the 100-year flood plain that is not within the floodway and in which development and other forms of encroachment are allowed.

Flood Boundary and Floodway Map (FBFM) - Flood plain management map issued by FEMA that depicts, based on detailed analyses, the boundaries of the 100- and 500-year floods and the limits of the 100-year floodway. Replaced by FIRM.

Flood Insurance Rate Map (FIRM) - Insurance and flood plain management map issued by FEMA that, based on detailed analyses, identifies areas of 100-year flood hazard in a community. Also shown are BFEs, actuarial insurance rate zones, delineations of the 100- and 500-year flood boundaries, and, on some FIRMS, the 100-year floodway. The Flood Insurance Rate Map enables the community to enter the Regulatory Phase of the National Flood Insurance Program.

Floodplain - Any land area susceptible to being inundated by water from any source, or areas adjacent to a watercourse or other body of water that are subject to inundation by flood waters.

Floodplain Development – Any earthwork, storage, or construction activity (permanent or temporary).

Gross Pollutants - litter, vegetation, coarse sediment and floatable debris. For the local Municipal Separate Storm Sewer System (MS4), the gross pollutant treatment size is defined as 1-3/4" and larger.

HDPE – High Density Polyethylene.

High Hazard Structure – A structure whose failure or mis-operation would likely cause loss of human life.

Infrastructure Allocation Drainage Management Plan* or *Allocation Plan - means a comprehensive analysis of the discharge rate volume, frequency, and course of stormwaters within one or more drainage basins or watershed resulting from a new development and used to identify required drainage facilities so that an equitable cost distribution for drainage facilities may be allocated against benefited properties. The Allocation Plan shall be prepared in accordance with this Procedure.

LEE – Lateral Erosion Envelope.

Letter of Map Amendment (LOMA) - Official determination by FEMA that a specific structure or portion of a property is not within a 100-year flood zone; amends the effective FIRM map.

Letter of Map Revision (LOMR) - Official determination by FEMA that revises Base Flood Elevations, flood insurance rate zones, flood boundaries, or floodways as shown on an effective FIRM map.

Mild Slope – The channel slope is less than the critical slope. The normal depth is greater than the critical depth. Flow is subcritical (Froude number less than one) downstream conditions can influence upstream flow.

National Flood Insurance Program (NFIP) - Federal regulatory program under which flood-prone areas are identified and flood insurance is provided to the owners of property in flood-prone areas.

New Development - means the proposed subdivision of land, reconstruction, redevelopment, conversion, structural alteration, relocation or enlargement of any structure; or any proposed use or extension of the use of land affecting drainage within the benefited area, including but not limited to proposed buildings or other structures, site plan requests, grading, paving, filling, or excavation.

Normal Depth – The depth of flow under uniform flow conditions.

NPDES - National Pollutant Discharge Elimination System.

Open Space - means publicly owned or controlled lands set aside for Open Space purposes.

Ponds – Smaller storm water retention/detention structures not approved or controlled by the Office the State Engineer (i.e., containing a storage volume less than 50 acre feet and/or a berm height of less than 25'.

Retention Pond – A ponding structure without a physical means by which water is released in a controlled manner. This includes ponds whose evacuation is dependent upon infiltration and/or evaporation.

Revision - Change to any of the information that is depicted on an effective NFIP map, which is accomplished by a LOMR or by a Physical map revision.

SAS ECZ – Sanitary Sewer Line Erosion Control Zone, the Depth of Scour for the 100-year DEVEX event.

Scour Depth – Cumulative scour depth including consideration of contraction scour and local scour as defined in Sections 3.4 and 3.5 of the Sediment and Erosion Design Guide.

Special Flood Hazard Area (SFHA) - Area inundated by the base (100-year) flood, which carries any of several A or V zone designations.

SSCAFCA – Southern Sandoval County Arroyo Flood Control Authority.

Steep Slope - The channel slope is greater than the critical slope. The normal depth is less than the critical depth. Flow is supercritical (Froude number greater than one) upstream conditions are not affected by downstream conditions.

Stormwater Quality Constituents - dissolved and suspended nutrients, metals, oils, greases, biological agents, etc.

Stormwater Quality Treatment Rate (SWQR) - the peak rate of flow from the water quality storm event.

Stormwater Quality Treatment Volume (SWQV) - the treatment volume from the water quality storm event.

Temporary Drainage Facility - means a nonpermanent drainage control, flood control or erosion control facility constructed as part of a phased project or to serve until such time as a permanent facility is in

place, including, but not limited to, desilting ponds, berms, diversions, channels, detention ponds, bank protection and channel stabilization measures.

Water Quality Storm Event - The ninetieth percentile storm event for new development and the eightieth percentile storm for redevelopment using the methodologies specified in EPA publication number 832-R-14-007, or developed for site-specific application using methodology described therein, or based on a site-specific predevelopment hydrology and associated storm event discharge volume specified therein.

Watershed Park – A comprehensive, connected system of joint use amenities along the arroyos in Southern Sandoval County.

Witness Post – A post identifying the location and depth of the utility that will remain in its location through a storm event.

WMP's – Watershed Management Plans.

3.3.C Rational Method

The Rational Method formula is a commonly used, simplified method of estimating peak discharge for small uniform drainage areas. This method is typically used to size drainage structures for the peak discharge of a given return period. Extensions of this method can be used to estimate runoff volume and the shape of the runoff hydrograph to design drainage facilities and / or design a drainage structure that requires routing of the hydrograph through the structure.

The Rational Equation is expressed as follows:

$$Q = CiA \qquad \text{(D-1)}$$

Where:

Q = maximum rate of runoff, in cfs
C = runoff coefficient
i = average rainfall intensity, in inches / hour
A = drainage area, in acres

Assumptions

The following assumptions are inherent when using the Rational Equation:

1. The peak flow occurs when the entire watershed is contributing to the flow.
2. The rainfall intensity is the same over the entire watershed.
3. The rainfall intensity is uniform over a duration equal to the time of concentration.
4. The frequency of the computed peak flow is the same as that of the rainfall intensity (e.g. the 25-year rainfall intensity is assumed to produce the 25-year peak flow).

3.3.C.I. LIMITATIONS

The following limitations shall apply to the Rational Method for use in the City. Drainage areas that do not meet the following conditions will require the use of an appropriate rainfall-runoff method as outlined in Section 3.3.D.

1. The total drainage area cannot exceed 40 acres in size.
2. The land treatment within the contributing watershed must be fairly consistent over the entire drainage area and uniformly distributed throughout the area.
3. The contributing drainage area cannot have drainage structures or other facilities upstream of the point of interest that require flood routing.

3.3.C.II. RUNOFF COEFFICIENTS

Perhaps the most important variable in the Rational Method equation is the runoff coefficient. The runoff coefficient represents the fraction of rainfall that appears as surface runoff from a watershed. Thus, the runoff coefficient is, by default, also a measure of the fraction of rainfall lost to depression storage, infiltration and evaporation with infiltration being the primary loss component. This fraction is largely independent of rainfall intensity or volume from impervious areas. However, for pervious areas, the fraction of runoff varies with rainfall intensity and the accumulated volume of runoff. Therefore, the selection of a runoff coefficient that is appropriate for the storm, soil type, land cover and land use conditions is critical.

Runoff coefficients are based on a characterization of the watershed area into land treatment classifications. Runoff coefficients may be determined following the procedure outlined in the current version of the New Mexico Department of Transportation Drainage Design Manual (NMDOT DDM, Section 403.3).

For watersheds with multiple land treatment types, an area averaged runoff coefficient should be used as input to Equation D-1. The area average can be a simple arithmetic average, as seen in the equation below.

(D-2)

$$C = \frac{A_A C_A + A_B C_B + A_C C_C + A_D C_D}{A_A + A_B + A_C + A_D}$$

3.3.C.III. TIME OF CONCENTRATION

Time of concentration is defined as the time it takes for runoff to travel from the hydraulically most distant part of the watershed to the basin outlet or point of analysis (concentration point). The units for time of concentration are time, in hours. This implies that the time of concentration flow path may not be the longest physical length, but the length that results in the longest time.

Time of concentration is calculated using the SCS Upland Method. The Upland Method is the summation of flow travel time for the series of unique flow characteristics that occur along the overall basin flow path length. The Upland Method travel time equation is:

(D-3)

$$T_C = \sum_{i=1}^{n} \left(\frac{L_i}{36{,}000 \cdot K_i \cdot \sqrt{S_i}} \right)$$

Where:

T_c = Time of concentration, in hours
L_i = Length of each unique surface flow conveyance condition, in feet
K_i = Conveyance factor from Table 1
S_i = Slope of the flow path, in feet per foot

Table 3.1: Conveyance Factors	
K	**Conveyance Condition**
0.7	Turf, landscaped areas and undisturbed natural areas (sheet flow* only)
1	Bare or disturbed soil areas and paved areas (sheet flow* only)
2	Shallow concentrated flow (paved or unpaved)
3	Street flow, storm sewers and natural channels, and that portion of subbasins (without constructed channels) below the upper 2000 feet for subbasins longer than 2000 feet
4	Constructed channels (for example: riprap, soil, cement, or concrete lined channels)
* Sheet flow is flow over lane surfaces, with flow depths up to 0.1 feet. Sheet flow applies only to the upper 400 feet (maximum) of a subbasin.	

3.3.C.IV. INTENSITY

Rainfall intensity, i, in Equation D-1 is estimated in inches/hour for the specified recurrence interval. The rainfall intensity is uniform over a duration equal to the time of concentration for the drainage area.

For most drainage areas less than or equal to 40 acres in size, it can be assumed that the time of concentration for drainage areas up to 40 acres in size will not exceed 15-minutes. Rainfall intensities corresponding to a 15-minute time of concentration can be found in NOAA Atlas (latest edition), Precipitation - Frequency Atlas of the United States, Volume 1: Semiarid Southwest (Arizona, Southeast California, Nevada, New Mexico, Utah).

3.3.C.V. RUNOFF VOLUME

$$V = C \frac{P}{12} A$$

Runoff volumes for drainage areas less than or equal to 40 acres in size can be estimated using a modified form of the Rational Method Equation. That equation is as follows:

(D-4)

Where:

V = runoff volume, in acre-feet
C = weighted runoff coefficient derived from Equation D-2
P = rainfall depth, in inches from Table 3
A = drainage area, in acres

Rainfall depths for Equation D-3 can be found in NOAA Atlas (latest edition), Precipitation - Frequency Atlas of the United States, Volume 1: Semiarid Southwest (Arizona, Southeast California, Nevada, New Mexico, Utah). For all other recurrence intervals and / or storm durations, point precipitation depths are to be obtained directly from the National Weather Service through the NOAA 14 Precipitation Frequency Data Server Precipitation values for frequencies up to 1,000 years and duration up to 60 days can be obtained by entering the latitude and longitude of the watershed of interest.

3.3.C.VI. RUNOFF HYDROGRAPH

A runoff hydrograph can be synthesized for drainage areas less than or equal to 40 acres based on the Rational Method. This procedure is to be used where routing of the storm inflow through a drainage structure is desired, such as for the design of a detention basin. The procedure is based on an idealized hydrograph shape, drainage area time of concentration and the Rational Method peak discharge. The shape of the hydrograph is shown in Figure D-1. Equations for deriving the runoff hydrograph shape are as follows:

(D-5)

$$t_B = \left(2.017 \frac{C \cdot P \cdot A_T}{Q_P}\right) - \left(0.25 \frac{A_D}{A_T}\right)$$

Where:

t_B = time base, in hours
C = runoff coefficient from Equation D-2
P = rainfall depth, in inches from Table 3
Q_P = Rational Method peak discharge, in cfs
A_D = area in land treatment type D, in acres
A_T = drainage area, in acres

$$t_P = 0.7 \cdot T_C + \frac{1.6 - A_D/A_T}{12}$$

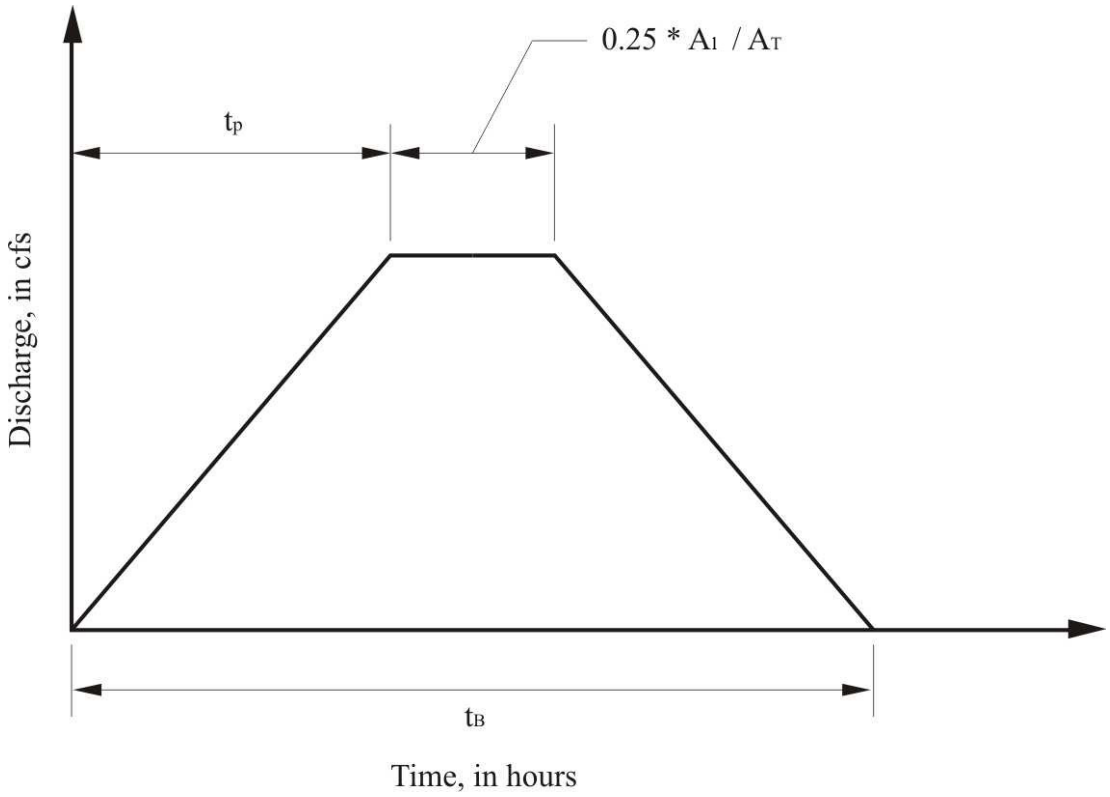
(D-5)

Where:

t_p = time to peak in hours
T_c = time of concentration from Equation D-2, in hours

A_D = area in land treatment type D, in acres
A_T = drainage area, in acres

FIGURE 1. RATIONAL METHOD RUNOFF HYDROGRAPH SHAPE



3.3.D Rainfall-Runoff Modeling: HEC-HMS

Rainfall-runoff modeling for drainage areas greater than 40 acres in size is to be conducted using the U.S. Army Corps of Engineers HEC-HMS software following the procedures outlined in SSCAFCA's Criterial Manual http://www.sscafca.org/resources.

3.3.E Procedure For Probable Maximum Flood

Computation of the Probable Maximum Flood (PMF), or one-half Probable Maximum Flood (½ PMF), is typically required for design of dam spillways in high hazard areas. For flood control dams, the PMF is typically used for design of the emergency spillway. The Office of the State Engineer (OSE) should be contacted regarding specific requirements on the use of the PMF.

- New Mexico Office of the State Engineer/Interstate Stream Commission
  https://www.ose.state.nm.us/dams/CONMreps/VOLUME%20II/Volume%20II%20Appendix%20G.pdf
- GIS Probable Maximum Precipitation (PMP) Tool Documentation
  https://www.ose.state.nm.us/dams/CONMreps/VOLUME%20II/Volume%20II%20Appendix%20G.pdf

3.3.E.I. JURISDICTION OF THE OFFICE OF THE STATE ENGINEER (OSE)

The OSE has jurisdiction over the design and construction of non-federal dams that meet OSE's jurisdictional criteria. This authority for the safety of dams is contained primarily within Chapter 72, NMSA 1978. All dams must conform to the OSE criteria as demonstrated by correspondence issued by the OSE and provided to the City Engineer before proceeding to design any project requiring a permit for a dam, the OSE should be contacted to obtain guidance on applicable regulations and design criteria. City review must occur before submittal to OSE to obtain concurrence on determination of PMP. This includes dams intended for sediment, erosion and flood control.

The Manual of Rules and Regulations Governing the Appropriation and Use of the Surface Waters of the State of New Mexico (29.25.12 NMAC) and the Summary of New Mexico State Engineer Office Procedure on Design Criteria and Safety of Dams are available from the OSE (as linked above). Included in the summary is information on the classification of dams, hydrologic evaluation guidelines, probable maximum precipitation (PMP) criteria, and the "Engineering Review Project Check List". Special engineering requirements are required for project design and construction supervision.

The procedures for determination of the PMF must be consistent with the OSE's rules, regulations, procedures and design criteria. The OSE shall make the final determination on the design criteria, safety requirements, alternate specifications/procedures and/or additional requirements.

3.4 Hydraulic Design

3.4 A Weirs and Orifices

3.4.A.I. WEIRS

A weir is a barrier in an open channel, over which water flows. A weir with a sharp upstream corner or edge such that the water springs clear of the crest is a "sharp crested weir". All other weirs are classified as "weirs not sharp crested". Weirs are to be evaluated using the following equation:

$Q = CLH^{3/2}$

Where:

Q = Discharge in cfs
C = Discharge coefficient from Handbook of Hydraulics, King and Brater, 5th Edition (or comparable)
L = Effective length of crest in feet
H = Depth of flow above elevation of crest in feet (approach velocity shall be disregarded in most applications)

Applications

Weirs are generally used as measuring and hydraulic control devices. Emergency spillways in which critical depth occurs and overflow-type roadway crossings of channels are the most common applications of weirs. Channel drop structures and certain storm drain inlets may also be analyzed as weirs. Detail justifying coefficients used must be outlined when selecting weir coefficients in the following cases:

a. Submerged weirs.
b. Broad crested weirs.

c. Weirs with obstructions (i.e., guardrails, piers, etc.).

3.4.A.II. ORIFICES

An orifice is a submerged opening with a closed perimeter through which water flows. Orifices are analyzed using the following equation:

$$Q = CA\sqrt{2gH}$$

Where:
Q = Discharge in cfs
C = Discharge coefficient from Handbook of Hydraulics, King and Brater, 5th Edition (or comparable)
A = Area of opening in square feet
g = 32.2 ft/sec
H = Depth of water measured from the center of the opening

(Approach velocity shall be disregarded in most applications).

Applications

Orifices are generally used as measuring and hydraulic control devices. Orifice hydraulics control the function of many "submerged inlet - free outlet" culverts, primary spillways in detention facilities, manholes in conduit flow, and in storm drain inlets.

3.4.B Criteria for Hydraulic Design: Closed Conduits

3.4.B.I. GENERAL HYDRAULIC CRITERIA

Closed conduit sections (pipe, box or arch sections) will be designed as flowing full and, whenever possible, under pressure except when the following conditions exist:

1. In some areas of high sediment potential, there is a possibility of stoppage occurring in drains. In situations where sediment may be expected, the City Engineer will use 18% sediment bulking factor for undeveloped conditions and 6% for developed conditions (listed in the SSCAFCA Criteria Manual).

2. In certain situations, open channel sections upstream of the proposed closed conduit may be adversely affected by backwater.

If the proposed conduit is to be designed for pressure conditions, the hydraulic grade line shall not be higher than the ground or street surface or encroach on the same in a reach where interception of surface flow is necessary. However, in those reaches where no surface flow will be intercepted, a hydraulic grade line which encroaches on or is slightly higher than the ground or street surface may be acceptable provided that pressure manholes exist or will be constructed.

3.4.B.II. WATER SURFACE PROFILE CALCULATIONS

3.4.B.II.a. Determination of Control Water Surface Elevation

A conduit to be designed for pressure conditions may discharge into one of the following:

1. A body of water such as a detention reservoir.
2. A natural watercourse or arroyo.
3. An open channel, either improved or unimproved.
4. Another closed conduit.

The controlling water surface elevation at the point of discharge is commonly referred to as the control and, for pressure flow, is generally located at the downstream end of the conduit.

Two general types of controls are possible for a conduit on a mild slope, which is a physical requirement for pressure flow in discharging conduits.

A. Control elevation above the soffit elevation. In such situations, the control must conform to the following criteria:

   1. In the case of a conduit discharging into a detention facility, the control is the 100 -year water surface reservoir elevation.

   2. In the case of a conduit discharging into an open channel, the control is the 100-year design water surface elevation of the channel.

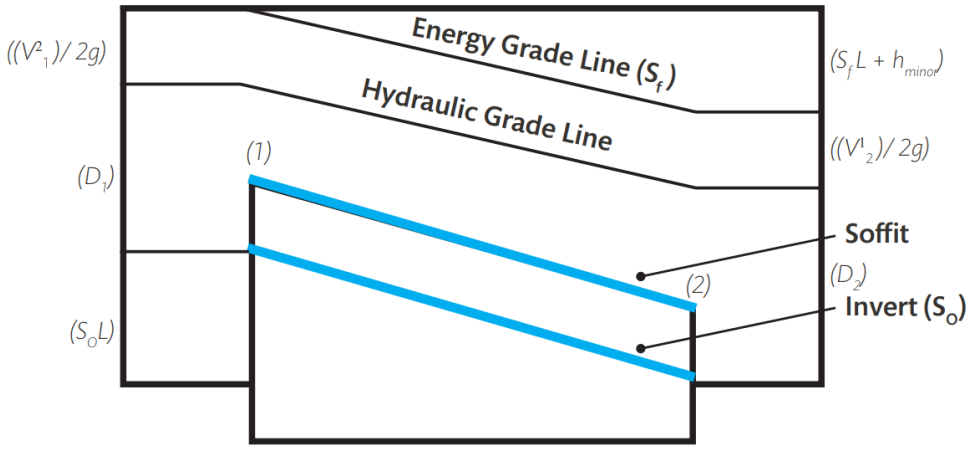
   3. In the case of a conduit discharging into another conduit, the control is the design hydraulic grade line elevation of the outlet conduit immediately upstream of the confluence.

Whenever case (1) or (2) above is used, the possibility of having flow out of manholes or inlets due to discharge elevations at the 100-year level must be investigated and appropriate steps taken to prevent its occurrence.

A. Control elevation at or below the soffit elevation. The control is the soffit elevation at the point of discharge. This condition may occur in any one of the four situations described above in 2a.

B. Instructions for Hydraulic Calculations. Most procedures for calculating hydraulic grade line profiles are based on the Bernoulli equation. This equation can be expressed as follows:

$$\frac{V_1^2}{2g} + D_1 + S_O L = \frac{V_2^1}{2g} + D_2 + S_f L + h_{minor}$$



In which:

D = Vertical distance from invert to H.G.L
So = Invert slope
L = Horizontal projected length of conduit
S_f = Average friction slope between Sections 1 and 2
V = Average velocity (g/A)
h_{minor} = Minor head losses

Minor losses have been included in the Bernoulli equation because of their importance in calculating hydraulic grade line profiles and are assumed to be uniformly distributed in the above figure.

When specific energy (E) is substituted for the quantity $\frac{V^2}{2g} + D$ in the above equation and minor losses are ignored and the result rearranged,

$$L = \frac{E_2 - E_1}{S_O - S_f}$$

The above is a simplification of a more complex equation and is convenient for locating the approximate point where pressure flow may become unsealed.

3.4.B.III. HEAD LOSSES

3.4.B.III.a. Friction Loss

Friction losses for closed conduits carrying storm water, including pump station discharge lines, will be calculated from the Manning equation or a derivation thereof. The Manning equation is commonly expressed as follows:

$$Q = \frac{1.486\, AR^{\frac{2}{3}} S_f^{\frac{1}{2}}}{n}$$

Where:
Q = Discharge, in c.f.s.
n = Roughness coefficient
A = Area of water normal to flow in ft.2
R = Hydraulic radius
S_f = Friction slope

When rearranged into a more useful form:

$$S_f = \left[Q_n / 1.486 AR^{\frac{2}{3}}\right]^2 = [Q/K]^2$$

Where:

$$K = \frac{1.486\, AR^{\frac{2}{3}}}{n}$$

The loss of head due to friction throughout the length of reach (L) is calculated as follows:

$$h_r = S_r L = [Q/K]^2 L$$

The value of K is dependent upon only two factors: the geometrical shape of the flow cross section as expressed by the quantity ($AR^{2/3}$), and the roughness coefficient (n). The values of n can be found in SSCAFCA's Sediment and Erosion Design Guide. For materials not listed, contact the City Engineer prior to use.

3.4.B.III.b. Transition Loss

Transition losses will be calculated from the equations shown below.

For a Contraction (increasing velocity):

$$H_f = K_e/2(V_2 - V_1)^2/2g$$

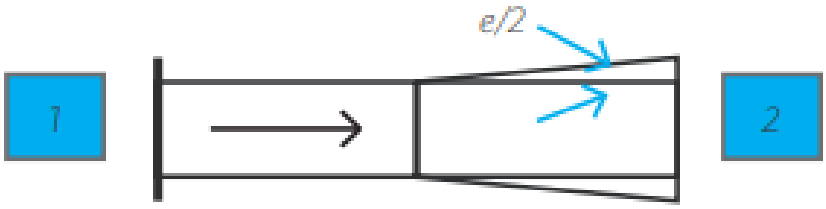
For an Expansion (decreasing velocity):

$$H_f = K_e/2(V_2 - V_1)^2/2g$$

Where:

$$K_e = 3.50(\tan \quad \emptyset/2)^{1.22}$$

These equations are applicable when no change in Q occurs and where the horizontal angle of divergence or convergence (θ /2) between the two sections does not exceed 5 degrees 45 minutes.



Deviations from the above criteria must be approved by the City Engineer. When such situations occur, the angle of divergence or convergence (θ/2) may be greater than 5 degrees 45 minutes. However, when it is increased beyond 5 degrees 45 minutes, the above equation will give results for h_t that are too small, and the use of more accurate methods, such as the Gibson method shown Plate 22.3 B-2, will be acceptable.

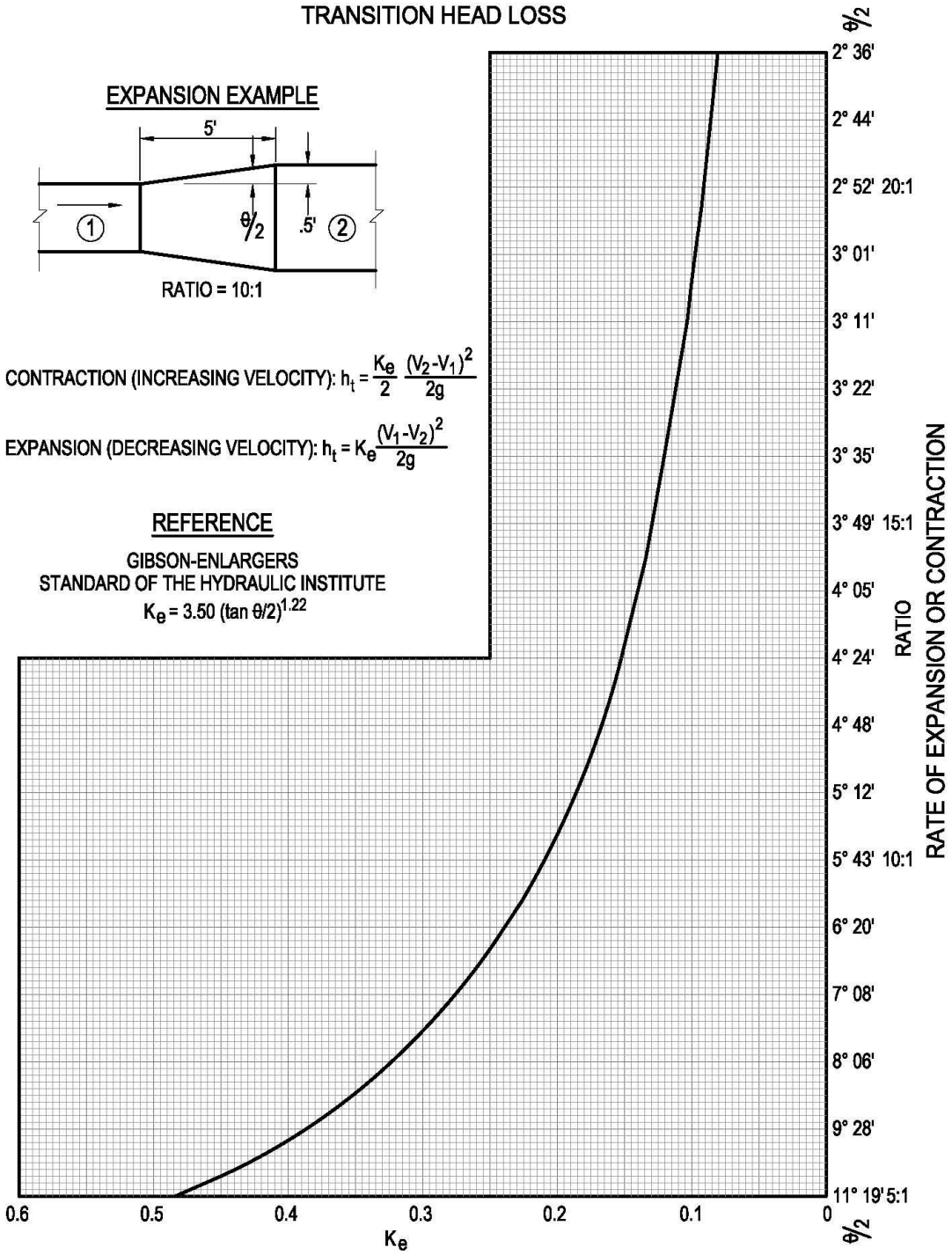
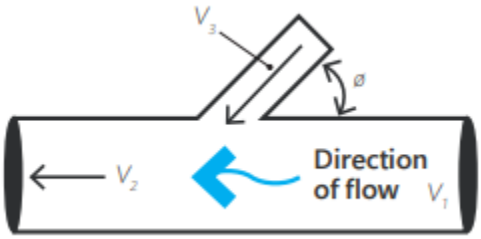


PLATE 22.3 B-2

3.4.B.III.c. Junction Losses

In general, junction losses are calculated by equating pressure plus momentum through the confluences under consideration. This can be done by using either the P + M method or the Thompson equation, both of which are shown in Section 3.4.g. Both methods are applicable in all cases for pressure flow and will give the same results.

For the special case of pressure flow with $A_1 = A_2$ and friction neglected,



Manhole losses will be calculated from the equation shown below. Where a change in pipe size and/or change in Q occurs, the head loss will be calculated in accordance with the preceding equation.

$$H_{mh} = 0.05(V^2/2g)$$

3.4.B.III.d. Bend Loss

Bend losses should be included for all closed conduits, those flowing partially full as well as those flowing full. Bend losses will be calculated from the following equations:

$$H_b = K_b(V^2/2g)$$

Where:

$$K_b = 0.2(\theta/90°)^{0.5}$$

here:

Θ = central angle of bend in degrees

3.4.B.III.e. Exit Loss

Exit loss is the loss when storm drains daylight into a pond or channel, which can be calculated using the following equation:

$$H_{exit} = 0.25(V_2/2g)$$

Angle point losses shall be calculated from the following equation:

$$h_{a\,pt.} = 0.0033\,\theta\left[\frac{V^2}{2_g}\right]$$

In which θ = Deflection angle in degrees, not to exceed 6 degrees without prior approval.

3.4.B.III.f. Special Cases

3.4.B.III.f.i. Transition From Large to Small Conduit

As a general rule, storm drains will be designed with sizes increasing in the downstream direction. However, when studies indicate it may be advisable to decrease the size of a downstream section, the conduit may be decreased in size in accordance with the following limitations:

1. For slopes of .0025 (.25 percent) or less, conduit sizes may be decreased to a minimum diameter of 72 inches. Each reduction is limited to a maximum of 6 inches.
2. For slopes of more than .0025, conduit sizes may be decreased to a minimum diameter of 30 inches. Each reduction is limited to a maximum of 3 inches for pipe 48 inches in diameter or smaller, and to a maximum of 6 inches for pipe larger than 48 inches in diameter. Reductions exceeding the above criteria must have prior City Engineer approval.

In any case the reduction in size must result in a more economical system.

3.4.B.IV. DESIGN REQUIREMENTS FOR MAINTENANCE AND ACCESS

3.4.B.IV.a. Manholes

1. Spacing
    a. Where the proposed conduit is 60” and larger, manholes should be spaced at intervals of approximately 800 feet to 1000 feet. Where the proposed conduit is less than 60 inches in diameter and the horizontal alignment has numerous bends or angle points, the manhole spacing should be reduced to approximately 500 feet.
    b. The spacing requirements shown above apply regardless of design velocities. Deviations from the above criteria are subject to City Engineer approval.
2. Location
    a. Manholes should be located outside of street intersections wherever possible, especially when one or more streets are heavily traveled.
    b. In situations where the proposed conduit is to be aligned both in easement and in street right-of-way, manholes should be located in street right-of-way, wherever possible.
    c. Manholes should be located as close to changes in grade as feasible when the following conditions exist:
        i. When the upstream conduit has a steeper slope than the downstream conduit and the change in grade is greater than 10 percent, sediment tends to deposit at the point where the change in grade occurs.
        ii. When transitioning to a smaller downstream conduit due to an abruptly steeper slope downstream, sediment tends to accumulate at the point of transition.

3. Design

    a. When the design flow in a pipe flowing full has a velocity of 20 f.p.s. or greater, or is supercritical in a partially full pipe, the total horizontal angle of divergence or convergence between the walls of the manhole and its center line should not exceed 5º45'.

3.4.B.IV.b. Pressure Manholes

Pressure manholes should be avoided whenever possible. When unavoidable a pressure manhole shaft and a pressure frame and cover will be installed in a pipe or box storm drain whenever the design water surface is at the ground surface.

3.4.B.IV.c. Special Manholes

Special 36-inch diameter manholes or vehicular access structures will be provided when required. The need for access structures will be determined by the City Engineer during the review of preliminary plans.

3.4.B.IV.d. Deep Manholes

A manhole shaft safety ledge or other structural designs should be considered when the manhole shaft is 20 feet or greater in depth. Installation will be in accordance with City Engineer requirements.

3.4.B.IV.e. Inlets into Main Line Drains

Lateral pipe entering a main line pipe storm drain generally will be connected radially. Lateral pipe entering a main line structure will conform to the following:

1. The invert of lateral pipe 24 inches or less in diameter will be no more than five feet above the invert.
2. The invert of lateral pipe 27 inches or larger in diameter will be no more than 18 inches above the invert, with the exception that storm inlet connector pipe less than 50 feet in length may be no more than five feet above the invert.

Exceptions to the above requirements may be permitted where it can be shown that the cost of bringing laterals into a main line conduit in conformance with the above requirements would be excessive.

3.4.B.IV.f. Minimum Pipe Size

In cases where the conduit may carry significant amounts of sediment, the minimum diameter of main line conduit will be 24 inches.

3.4.B.IV.g. Minimum Slope

The minimum slope for main line conduit will be 0.003 (0.30 percent), unless otherwise approved by the City Engineer. Minimum flow velocity for ¼ full pipe will be 2 f.p.s.

3.4.B.IV.h. Inlet Structures

An inlet structure will be provided for storm drains located in natural channels. The structure should generally consist of a headwall, wingwalls to protect the adjacent banks from erosion, and a paved inlet

apron. The apron slope should be limited to a maximum of 2:1. Wall heights should conform to the height of the water upstream of the inlet and be adequate to protect both the fill over the drain and the embankments. Headwall and wingwall fencing and a protection barrier to prevent public entry will be provided.

If trash and debris are prevalent, barriers consisting of vertical 3-inch or 4-inch diameter steel pipe at 24 inches to 36 inches on centers should be embedded in concrete immediately upstream of the inlet apron. Trash rack designs must have City Engineer approval.

3.4.B.IV.i. Outlet Structures

For discharge into SSCAFCA ROW/facilities that will be dedicated to SSCAFCA, please refer to SSCAFCA Criteria Manual and coordinate directly with SSCAFCA staff. For outlet into City maintained channels/ponds, follow the following guidance.

1. Where a storm drain discharges into a detention reservoir, the designer should check with the City Engineer for up-to-date criteria as to location and type of structure to be used.
2. When a storm drain outlets into a natural channel, an outlet structure will be provided which prevents erosion and property damage. Additionally, downstream grade control maybe required to retain channel stability and velocity of flow at the outlet should match as closely as possible with the existing channel velocity. Fencing and a protection barrier will be provided where deemed necessary by the City Engineer.
    a. When the discharge velocity is low, or subcritical, the outlet structure will consist of a headwall, wingwalls, and an apron. The apron may consist of a concrete slab, grouted rock, or well-designed dumped riprap depending on conditions.
    b. When the discharge velocity is high, or supercritical, the designer will, in addition, design bank protection in the vicinity of the outlet and an energy dissipater structure. The City Engineer will furnish, upon request, guidance on types of energy dissipators appropriate for each application.

3.4.B.IV.j. Protection Barriers

A protection barrier is a means of preventing people from entering storm drains. Protection barriers will be provided wherever necessary to prevent unauthorized access to storm drains. In some cases, the barrier may be one of the breakaway types. In other cases, the barrier may be a special design. It will be the designer's responsibility to provide a protection barrier appropriate to each situation and to provide details of such on the construction drawings.

3.4.B.IV.k. Debris Barriers

A debris barrier or deflector is a means of preventing large debris or trash, such as tree limbs, logs, boulders, weeds, and refuse, from entering a storm drain and possibly plugging the conduit. The debris barrier should have openings wide enough to allow as much small debris as possible to pass through and yet narrow enough to protect the smallest conduit in the system downstream of the barrier. One type that has been used effectively in the past is the debris rack. This type of debris barrier is usually formed by a line of posts, such as steel pipe filled with concrete or steel rails, across the line of flow to the inlet. Other examples of barriers are presented in Hydraulic Engineering Circular No. 9, "Debris-Control Structures," published by the United States Department of Commerce, Bureau of Public Roads, which is

available upon request from its Office of Engineering and Operations. It will be the designer's responsibility to provide a debris barrier or deflector appropriate to the situation.

3.4.B.IV.I. Debris Basins

Debris basins, check dams and similar structures are a means of preventing mud, boulders and debris held in suspension and carried along by storm runoff from depositing in storm drains. Debris basins constructed upstream of storm drain conduits, usually in canyons, trap such material before it reaches the conduit.

3.4.B.V. OTHER CLOSED CONDUIT CRITERIA

3.4.B.V.a. Angle of Confluence

In general, the angle of confluence between main line and lateral must not exceed 45 degrees and, as an additional requirement, must not exceed 30 degrees under any of the following conditions:

1. Where the peak flow (Q) in the proposed lateral exceeds 10 percent of the main line peak flow.
2. Where the velocity of the peak flow in the proposed lateral is 20 f.p.s. or greater.
3. Where the size of the proposed lateral is 60 inches or greater.
4. Where hydraulic calculations indicate excessive head losses may occur in the main line due to the confluence.

Connector pipe may be joined to main line pipe at angles greater than 45 degrees up to a maximum of 90 degrees provided none of the above conditions exist. If, in any specific situation, one or more of the above conditions does apply, the angle of confluence for connector pipes may not exceed 30 degrees. Connections must not be made to main line pipe which may create conditions of adverse flow in the connector pipes without prior approval from the City Engineer.

The above requirements may be waived only if calculations are submitted to the City Engineer showing that the use of a confluence angle larger than 30 degrees will not unduly increase head losses in the main line.

3.4.B.V.b. Flapgates

Flapgates are discouraged and will only be used on a case by case basis and with approval from the City Engineer.

A flapgate must be installed in all laterals outletting into a main line storm drain whenever the potential water surface level of the main line is higher than the surrounding area drained by the lateral.

The flapgate must be set back from the main line drain so that it will open freely and not interfere with the main line flow. A junction structure will be constructed for this purpose in accordance with City Engineer standards.

3.4.B.V.c. Rubber-Gasketed Pipe

Rubber-gasketed pipe will be used in all storm drain construction unless otherwise approved by the City Engineer.

3.4.B.V.d. Non-Reinforced Concrete Pipe

Non-reinforced concrete pipe may not be used for storm drain applications.

3.4.B.V.e. Junctions

Junctions will only be permitted on mains storm drain lines that are ≥42 inches. Junction locations cannot be more that 24' from the downstream manhole. An exception to this requirement may be laterals with slopes of 5% or greater. The City Engineer approval will be required for this exception and all other variances.

PLATE 22.3 B-5 FACTORS FOR CLOSED CONDUITS FLOWING FULL

Manning's Formula:

$$Q = \frac{1.486}{n} A R^{\frac{2}{3}} S^{\frac{1}{2}}$$

$$K = \frac{Q}{S^{\frac{1}{2}}} = \frac{1.486\ AR^{\frac{2}{3}}}{0.013}$$

For pipe $K = 35.6259 d^{\frac{8}{3}}$

For box $K = 114.3077\ \frac{A^{\frac{5}{3}}}{p^{\frac{2}{3}}}$

$$Q = K s^{\frac{1}{2}}$$

$$s = \frac{Q^2}{K}$$

Where:

Q	= discharge in cfs
S	= friction slope
A	= area of conduit
R	= hydraulic radius of conduit
n	= 0.013
d	= diameter of pipe
"	= height of equivalent box
w	= width of equivalent box
p	= wetted perimeter

PLATE 22.3 B-5							
PIPE & BOX		PIPE		EQUIVALENT BOX			
d		A	K	w		A	K
ft.	in.	sq.ft.		ft.-in.	ft.	sq. ft.	
1.25	15	1.227	64.6				
0.5	18	1.767	105				
0.75	21	2.405	158.4				
2	24	3.142	226.2				
0.25	27	3.976	309.7				
0.5	30	4.909	410.1				
0.75	33	5.939	528.7				
3	36	7.068	666.9				
0.25	39	8.295	825.8				
0.5	42	9.621	1,006				
0.75	45	11.044	1,209				
4	48	12.566	1,436				
0.25	51	14.186	1,688				
0.5	54	15.904	1,967				
0.75	57	17.721	2,272				
5	60	19.635	2,604				
0.25	63	21.648	2,966				
0.5	66	23.758	3,358				
0.75	69	25.967	3,780				
6	72	28.274	4,236				
0.25	75	30.68	4,720				
0.5	78	33.183	5,244				
0.75	81	35.785	5,796				
7	84	38.485	6,388	5'-10"	5.83	40.3	6,357
0.25	87	41.283	7,015				
0.5	90	44.179	7,677	6'-4"	6.33	47	7,780
0.75	93	47.173	8,379				
8	96	50.266	9,120	6'-9"	6.75	53.5	9,256
0.5	102	56.745	10,720	7'-1"	7.08	59.7	10,685
9	108	63.617	12,487	7'-6"	7.5	67	12,452
0.5	114	70.882	14,421	8'-0"	8	75.4	14,598
10	120	78.54	16,538	8'-5"	8.42	83.6	16,726
0.5	126	86.59	18,835	8'-10"	8.83	92.1	19,026
11	132	95.033	21,322	9'-2"	9.17	100.3	21,303
0.5	138	103.879	24,005	9'-7"	9.58	109.5	23,954
12	144	113.098	26,890	10'-0"	10	119.4	26,849

PLATE 22.3 B-6 PARTIALLY FILLED CIRCULAR CONDUIT SECTIONS							
D d	area d^2	wet. per d	hyd.rad d	D d	area d^2	wet. per d	hyd. rad d
0.01	0.0013	0.2003	0.0066	0.51	0.4027	1.5908	0.2531
0.02	0.0037	0.2838	0.0132	0.52	0.4127	1.6108	0.2561
0.03	0.0069	0.3482	0.0197	0.53	0.4227	1.6308	0.2591
0.04	0.0105	0.4027	0.0262	0.54	0.4327	1.6509	0.2620
0.05	0.0147	0.4510	0.0326	0.55	0.4426	1.6710	0.2649
0.06	0.0192	0.4949	0.0389	0.56	0.4526	1.6911	0.2676
0.07	0.0242	0.5355	0.0451	0.57	0.4625	1.7113	0.2703
0.08	0.0294	0.5735	0.0513	0.58	0.4723	1.7315	0.2728
0.09	0.0350	0.6094	0.0574	0.59	0.4822	1.7518	0.2753
0.10	0.0409	0.6435	0.0635	0.60	0.4920	1.7722	0.2776
0.11	0.0470	0.6761	0.0695	0.61	0.5018	1.7926	0.2797
0.12	0.0534	0.7075	0.0754	0.62	0.5115	1.8132	0.2818
0.13	0.0600	0.7377	0.0813	0.63	0.5212	1.8338	0.2839
0.14	0.0668	0.7670	0.0871	0.64	0.5308	1.8546	0.2860
0.15	0.0739	0.7954	0.0929	0.65	0.5404	1.8755	0.2881
0.16	0.0811	0.8230	0.0986	0.66	0.5499	1.8965	0.2899
0.17	0.0885	0.8500	0.1042	0.67	0.5594	1.9177	0.2917
0.18	0.0961	0.8763	0.1097	0.68	0.5687	1.9391	0.2935
0.19	0.1039	0.9020	0.1152	0.69	0.5780	1.9606	0.2950
0.20	0.1118	0.9273	0.1206	0.70	0.5872	1.9823	0.2962
0.21	0.1199	0.9521	0.1259	0.71	0.5964	2.0042	0.2973
0.22	0.1281	0.9764	0.1312	0.72	0.6054	2.0264	0.2984
0.23	0.1365	1.0003	0.1364	0.73	0.6143	2.0488	0.2995
0.24	0.1449	1.0239	0.1416	0.74	0.6231	2.0714	0.3006
0.25	0.1535	1.0472	0.1466	0.75	0.6318	2.0944	0.3017
0.26	0.1623	1.0701	0.1516	0.76	0.6404	2.1176	0.3025
0.27	0.1711	1.0928	0.1566	0.77	0.6489	2.1412	0.3032
0.28	0.1800	1.1152	0.1614	0.78	0.6573	2.1652	0.3037
0.29	0.1890	1.1373	0.1662	0.79	0.6655	2.1895	0.3040
0.30	0.1982	1.1593	0.1709	0.80	0.6736	2.2143	0.3042
0.31	0.2074	1.1810	0.1755	0.81	0.6815	2.2395	0.3044
0.32	0.2167	1.2025	0.1801	0.82	0.6893	2.2653	0.3043
0.33	0.2260	1.2239	0.1848	0.83	0.6969	2.2916	0.3041
0.34	0.2355	1.2451	0.1891	0.84	0.7043	2.3186	.03038
0.35	0.2450	1.2661	0.1935	0.85	0.7115	2.3462	0.3033
0.36	0.2546	1.2870	0.1978	0.86	0.7186	2.3746	0.3026
0.37	0.2642	1.3078	0.2020	0.87	0.7254	2.4038	0.3017
0.38	0.2739	1.3284	0.2061	0.88	0.7320	2.4341	0.3008
0.39	0.2836	1.3490	0.2102	0.89	0.7384	2.4655	0.2996
0.40	0.2934	1.3694	0.2142	0.90	0.7445	2.4981	0.2980
0.41	0.3032	1.3898	0.2181	0.91	0.7504	2.5322	0.2963
0.42	0.3130	1.4101	0.2220	0.92	0.7560	2.5681	0.2944
0.43	0.3229	1.4303	0.2257	0.93	0.7642	2.6061	0.2922
0.44	0.3328	1.4505	0.2294	0.94	0.7662	2.6467	0.2896

PLATE 22.3 B-6 PARTIALLY FILLED CIRCULAR CONDUIT SECTIONS							
D/d	area/d^2	wet. per/d	hyd.rad/d	D/d	area/d^2	wet. per/d	hyd. rad/d
0.45	0.3428	1.4706	0.2331	0.95	0.7707	2.6906	0.2864
0.46	0.3527	1.4907	0.2366	0.96	0.7749	2.7389	0.2830
0.47	0.3627	1.5108	0.2400	0.97	0.7785	2.7934	0.2787
0.48	0.3727	1.5308	0.2434	0.98	0.7816	2.8578	0.2735
0.49	0.3827	1.5508	0.2467	0.99	0.7841	2.9412	0.2665
0.50	0.3927	1.5708	0.2500	1.00	0.7854	3.1416	0.2500

PLATE 22.3 B-7 FACTORS FOR CIRCULAR CONDUITS FLOWING PARTLY FULL

D = depth of water, d = diameter of conduit, K = momentum, C = pressure, F = Velocity Head

Tabulated Values

$(Q/d)^2$ d^3 $(Q/d^2)^2$

D/d	K	C	F	D/d	K	C	F	D/d	K	C	F	D/d	K	C	F
.00	00	.0000	00	.25	.2026	.0157	0.659	.50	.0792	.0833	.1007	.75	.0492	.2121	.0389
.01	23.919	.0000	9188.	.26	.1916	.0173	0.589	.51	.0773	.0873	.0958	.76	.0485	.2185	.0379
.02	8.403	.0000	1134.	.27	.1817	.0190	0.530	.52	.0753	.0914	.0912	.77	.0479	.2249	.0369
.03	4.507	.0001	326.	.28	.1727	.0207	0.479	.53	.0736	.0956	.0869	.78	.0473	.2314	.0359
.04	2.961	.0002	140.9	.29	.1645	.0226	0.435	.54	.0719	.0998	.0829	.79	.0467	.2380	.0351
.05	2.115	.0003	71.9	.30	.1569	.0255	0.395	.55	.0703	.4042	.0793	.80	.0462	.2447	.0342
.06	1.620	.0005	42.1	.31	.1493	.0266	0.361	.56	.0687	.1087	.0758	.81	.0456	.2515	.0334
.07	1.285	.0007	26.5	.32	.1435	.0287	0.331	.57	.0672	.1133	.0726	.82	.0451	.2584	.0327
.08	1.058	.0010	17.97	.33	.1376	.0309	0.304	.58	.0658	.1179	.0696	.83	.0446	.2653	.0320
.09	0.888	.0013	12.68	.34	.1320	.0332	0.280	.59	.0645	.1227	.0668	.84	.0441	.2723	.0313
.10	0.760	.0017	9.28	.35	.1269	.0356	0.259	.60	.0632	.1276	.0641	.85	.0437	.2794	.0.07
.11	0.662	.0021	7.03	.36	.1221	.0381	0.240	.61	.0620	.1326	.0617	.86	.0433	.2865	.0301
.12	0.582	.0026	5.45	.37	.1177	.0407	0.222	.62	.0608	.1376	.0594	.87	.0429	.238	.0295
.13	0.518	.0032	4.31	.38	.1135	.0434	0.207	.63	.0597	.1428	.0572	.88	.0425	.3011	.0290
.14	0.466	.0038	3.48	.39	.1096	.0462	.1931	.64	.0586	.1481	.0551	.89	.0421	.3084	.0285
.15	0.421	.0045	2.84	.40	.1060	. 0491	.1804	.65	.0575	.1534	.0532	.90	.0418	.3158	.0280
.16	0.383	.0053	2.36	.41	.1026	.0520	.1689	.66	.0565	.1589	.0514	.91	.0414	.3222	.0276
.17	0.351	.0064	1.982	.42	.0993	.0551	.1585	.67	.0559	.1644	.0496	.92	.0411	.3308	.0272
.18	0.325	.0070	1.681	.43	.0963	.0583	.1489	.68	.0547	.1700	.0480	.93	.0408	.3384	.0266
.19	0.299	.0080	1.438	.44	.0934	.0616	.1402	.69	.0538	.1758	.0465	.94	.0406	.3460	.0265
.20	0.278	.0091	1.242	.45	.0907	.0650	.1321	.70	.0530	.1816	.0450	.95	.0403	.3537	.0261
.21	0.259	.0103	1.080	.46	.0882	.0684	.1248	.71	.0521	.1875	.0437	.96	.0401	.3615	.0259
.22	0.243	.0115	0.946	.47	.0857	.0720	.1180	.72	.0514	.1935	.0424	.97	.0399	.3692	.0256
.23	0.228	.0128	0.833	.48	.0834	.0757	.1118	.73	.0506	.1996	.0411	.98	.0398	.3770	.0254
.24	0.215	.0143	0.740	.49	.0813	.0795	.1060	.74	.0499	.2058	.0400	.99	.0397	.3848	.0253
												1.00	.0396	.3927	.0252

3.4.C Criteria for Hydraulic Design: Open Channels

For SSCAFCA maintained channels, the designer shall refer to SSCAFCA Criteria Manual, and coordinate review and approval with SSCAFCA staff.

3.4.C.I. GENERAL HYDRAULIC CRITERIA

In general, all open channels should be designed with the tops of the walls or levees at or below the adjacent ground to allow for interception of surface flows. If it is unavoidable to construct the channel without creating a pocket, a means of draining the pocket must be provided on the drawings. All local drainage should be completely controlled. External flows must enter the channel at designated locations and through designated inlets unless specifically authorized by the City Engineer.

In making preliminary layouts for the routing of proposed channels, it is desirable to avoid sharp curvatures, reversed curvatures, and closely-spaced series of curves. If this is unavoidable, the design considerations in Section 3.4.C.V.d below must be followed to reduce super elevations and to eliminate initial and compounded wave disturbances.

It is generally desirable to design a channel for a Froude number of just under 2.0. In areas within the City of Rio Rancho jurisdiction this is not always possible because of steep terrain. If the Froude number exceeds 2.0, any small disturbance to the water surface is amplified in the course of time and the flow tends to proceed as a series of "roll waves". Reference is made to Section 3.4.C.V.d. for criteria when designing a channel with a Froude number that exceeds 2.0.

In the design of a channel, if the depth is found to produce a Froude number between 0.7 and 1.3 for any significant length of reach, the shape or slope of the channel should be altered to secure a stable flow condition. All analyses should be performed for the 10-year and 100-year design discharges.

3.4.C.II. WATER SURFACE PROFILE CALCULATIONS

3.4.C.II.a. General

Water surface profile calculations must be calculated using the Bernoulli energy equation (see Section 3.4.B.II) combined with the momentum equation for analyzing confluences and functions. For use in expediting such calculations, computer programs are available from many sources, such as the U.S. Army Corps of Engineers and from industry accepted commercial software.

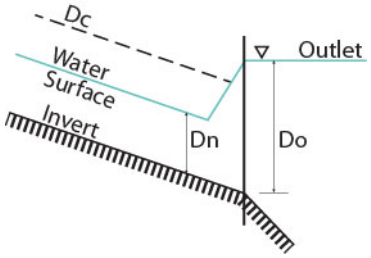
3.4.C.II.b. Determination of Controlling Water Surface Elevation

The following are general control points for the calculation of the water surface profile:

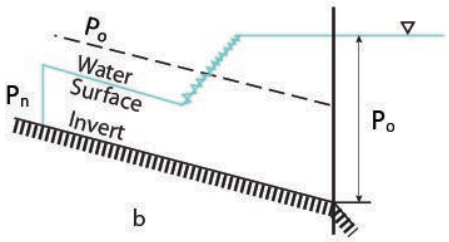
1. Where the channel slope changes from mild to steep or critical, the depth at the grade break is critical depth. We are defining mild slope as less than critical. Steep slope produces supercritical flow.
2. Where the channel slope changes from critical to steep, the depth at the grade break is critical depth.
3. Where a discharging or outletting channel or conduit is on a mild slope, the water surface is generally controlled by the outlet.

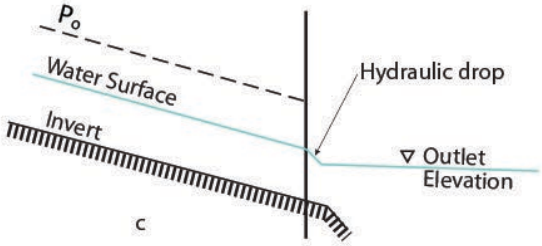
4. When a channel on a steep slope discharges into a facility that has a water surface depth greater than the normal depth of the channel, calculate pressure plus momentum for normal depth and compare it to the pressure plus momentum for the water surface depth at the outlet according to the equation, $P_n + M_n \sim P_o + M_o$.

   a. If $P_n+M_n > P_o+M_o$, this indicates upstream control with a hydraulic jump at the outlet.



   b. If Pn + Mn < Po + Mo, this indicates outlet control with a hydraulic jump probably occurring upstream.





   c. Where the water surface of the outlet is below the water surface in the channel or conduit, control is upstream and the outflow will have the form of a hydraulic drop.

When there is a series of control points, the one located farthest upstream is used as a starting point for water surface calculation.

3.4.C.II.c. Direction of Calculation

Calculations proceed upstream when the depth of flow is greater than critical depth and proceed downstream when the depth of flow is less than critical depth.

3.4.C.III. HEAD LOSSES

3.4.C.III.a. Friction Loss

Friction losses or open channels shall be calculated by an accepted form of the Manning equation. The Manning equation is commonly expressed as follows:

$$Q = \frac{1.486}{n} A R^{\frac{2}{3}} S_f^{\frac{1}{2}}$$

In which:
Q = flow rate, in cfs
n = roughness coefficient
A = area of water normal to flow, in ft.
R = Hydraulic radius
Sf = Friction slope

When arranged into a more useful form,

$$S_f = \frac{2gn^2}{2.21}\left[\frac{V^2}{2_g}/R^{\frac{4}{3}}\right]$$

The loss of head due to friction throughout the length of reach involved (L) is calculated by:

$$h_f = S_f\, L$$

Refer to the appendix for values of "n" for different materials and corresponding values of

$$\frac{2gn^2}{2.21}$$

3.4.C.III.b. Junction Loss

Junction losses will be evaluated by the pressure plus momentum equation and must conform to closed conduit angle of confluence criteria, Section 3.4.B.V.

3.4.C.IV. CHANNEL INLETS

3.4.C.IV.a. Side Channels

Flow rates of 25% or more of the main channel flow must be introduced to the main channel by a side channel hydraulically similar to the main channel. Piping systems can be used to introduce side flows, if justification is provided satisfactory to the City. The centerline radius of the side channel may not be less than the quantity (QV/l00) in feet.

Velocity and depth of the flows in the side channel when introduced into the main channel must be matched to within 1 foot of velocity head and to within 20% of the flow depth for both the 10-year and l00-year design discharges and the four combinations of side inlet and main channel flows which result. Energy and momentum balance type calculations must be provided to support all designs involving side channels.

3.4.C.IV.b. Surface Inlets

When the main channel is relatively narrow and when the peak discharge of side inflow is in the range between 3 and 6 percent of the main channel discharge, high waves are usually produced by the side inflow and are reflected downstream for a long distance, thus requiring additional wall height to preclude overtopping of the channel walls. This condition is amplified when the side inflow is at a greater velocity than the main channel. To eliminate these wave disturbances, the Los Angeles District of the Corps of Engineers has developed a side channel spillway inlet. The City may require this type of structure when outletting into

one of their facilities, and its use should be considered for city channels if high waves above the normal water surface cannot be tolerated. See Subsection 3.4.C.IV.d below titled "Transitions" for the Corp's procedure and criteria.

Surface-type inlets shall be constructed of concrete having a minimum thickness of 7 inches and shall be reinforced with the same steel as 7" concrete lining. The upstream end of the surface inlet shall be provided with a concrete cutoff wall having a minimum depth of three feet and the downstream end of the inlet shall be connected to the channel lining by an isolation joint. Side slopes of a surface inlet shall be constructed at slopes no greater than l vertical to 10 horizontal to allow vehicular passage across the inlet where a service road is required.

Drainage ditches or swales immediately upstream of a surface inlet shall be provided with erosion protection consisting of concrete lining, rock riprap or other non-erosive material as directed by City Engineer.

Surface inlets shall enter the channel at a maximum of 90° to the channel centerline, i.e., they may not point upstream.

3.4.C.IV.c. Direct Pipe to Channel

Additionally, pipe and box culvert inlets to channels shall be isolated by expansion joints. Continuously reinforced channels shall be designed to accommodate any extra stress resulting from these discontinuities. Corps of Engineers EM 1110-2-1061. Section 4-4. Open Channel Junction, h. Box and Pipe Culvert Inlets, has additional design criteria.

3.4.C.IV.d. Transitions

3.4.C.IV.d.i. Subcritical Flow

For subcritical velocities less than 12 f.p.s., the angle of convergence or divergence between the center line of the channel and the wall must not exceed 12° 30'. The length of the transition (L) is determined from the following equation:

$$L > 2.5 \Delta B$$

For subcritical velocities equal to or greater than 12 f.p.s., the angle of convergence or divergence between the center line of the channel and the wall must not exceed 5° 45'. The length (L) is determined from the following equation:

$$L > 5.0 \Delta B$$

Head losses for transitions with converging walls in subcritical flow conditions can be determined by using either the P + M method or the Thompson equation, both of which are shown in Section 3.4.G.IV. For transitions, both methods are applicable in all cases and will give the same results.

3.4.C.IV.d.ii. Supercritical Flow

3.4.C.IV.d.ii.1. Divergent Walls

The angle of divergence between the center line of the channel and the wall must not exceed 5° 45' or $\tan^{-1}$ F/3 whichever is smaller. The length of the transition (L) is the longest length determined from the following equations:

$$L \geq 5.0 \Delta B$$

$$L \geq 1.5 \Delta BF$$

Where:

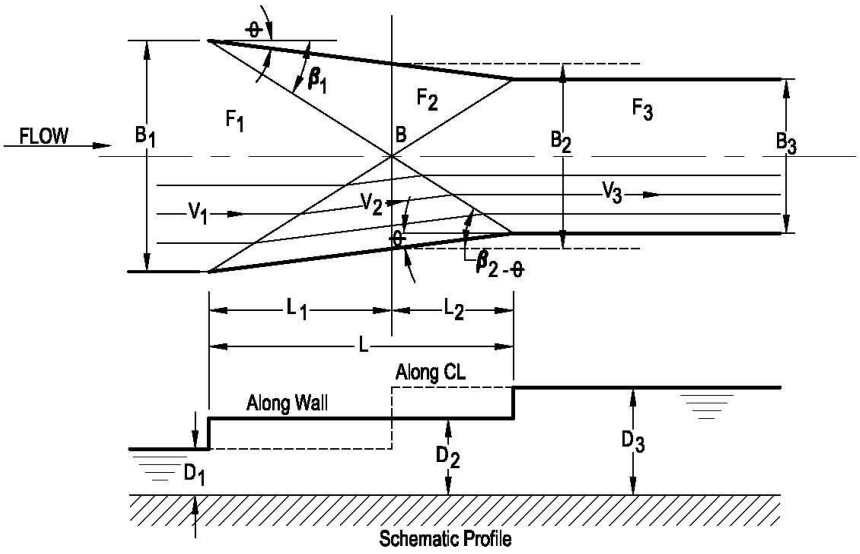
F = Upstream Fourde number based on depth of flow

ΔB = The difference in channel width at the water surface

Convergent Walls

Convergent walls > 5 degrees - 45 degrees shall only be used at the discretion of the City and based on an approved oblique wave analysis.

Converging walls should be avoided when designing channels in supercritical flow; however, if this is impractical, the converging transition will be designed to minimize wave action. The walls of the transition should be straight lines.



$$L = \frac{B_1 - B_3}{2 \tan \theta}$$

$$\frac{B_1}{B_3} = \left(\frac{D_3}{D_1}\right)^{3/2} * \left(\frac{F_3}{F_1}\right)$$

CONVERGENT WALL SCHEMATIC

With the initial Froude number and the contraction ratio fixed, and with the continuity equation giving trial curves can produce the geometry of the construction suggested above. The curves represent the equation:

$$\frac{B_1}{B_3} = \left(\frac{D_3}{D^1}\right)^{\frac{3}{2}} = \frac{F_3}{F^1}$$

Refer to Plate 22.3 C-1.

3.4.C.IV.d.iii. Transitions Between Channel Treatment Types

3.4.C.IV.d.iii.1. Earth Channel to Concrete Lining Transition

The mouth of the transition should match the earth channel section as closely as practicable. Wing dikes and/or other structures must be provided to positively direct all flows to the transition entrance and protect the channel entrance from being flanked.

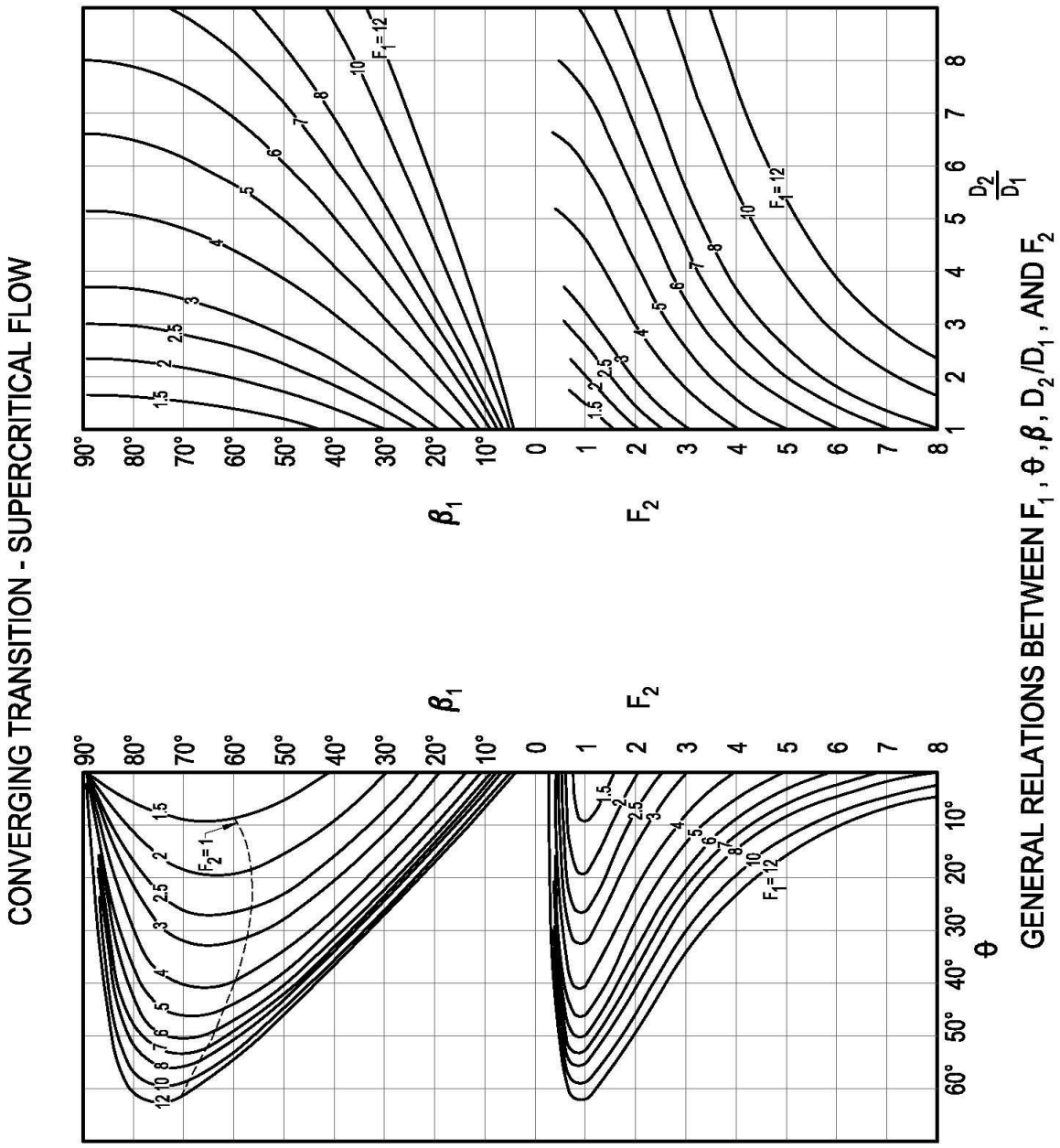

CONVERGING TRANSITION - SUPERCRITICAL FLOW
GENERAL RELATIONS BETWEEN F_1, θ, β, D_2/D_1, AND F_2
β_1
F_2
θ
$\frac{D_2}{D_1}$
$F_2=1$
$F_1=12$

PLATE 22.3 C-1

The upstream end of the concrete lined transition will be provided with a cutoff wall having a depth of 1.5 times the design flow depth but at least 3.0 feet and extending the full width of the concrete section. Erosion protection directly upstream of the concrete transition consisting of grouted or dumped rock riprap at least 12 feet in length and extending full width of the channel section must be provided. Grouted riprap must be at least 12 inches thick. Dumped riprap must be properly sized, graded and protected with gravel filter blankets.

The maximum allowable rate of bottom width transition is 1 to 7.5. Grout, dumped, or wire-tied material may also be used if approved on a case-by-case basis by the City Engineer. Grouted and wire-tied material require gravel filters as well.

3.4.C.IV.d.iii.2. Concrete Lining to Earth Channel Transition

The transition from concrete lined channels to earth channels will include an energy dissipator as necessary to release the designed flows to the earth channel at a relatively non-erosive condition and downstream grade control in the natural channel, as needed to prevent channel instability.

Since energy dissipator structures are dependent on individual site and hydraulic conditions, detailed criteria for their design has been purposely excluded and only minimum requirements are included herein for the concrete to earth channel transition.

On this basis, the following minimum standards govern the design of concrete to earth channel transitions:

► Maximum rate of bottom width transitions:

Water Velocity	
0-15 f.p.s.	1:10
16-30 f.p.s.	1:15
31-40 f.p.s.	1:20

► The downstream end of the concrete transition structure will be provided with a cutoff wall having a minimum depth of 6 feet and extending the full width of the concrete section or as recommended by the engineer and accepted by the City Engineer.

► Directly downstream of the concrete transition structure erosion protection consisting of rough, exposed surface, grouted rock riprap and extending full width of the channel section shall be provided. The grouted rock riprap should be a minimum of 12 inches thick. Grout, dumped, or wire-tied material may also be used if approved on a case-by-case basis by the City Engineer. Grouted and wire-tied material require gravel filters as well. The length of riprap shall be determined by engineering analysis.

3.4.C.V. PIERS

3.4.C.V.a. General

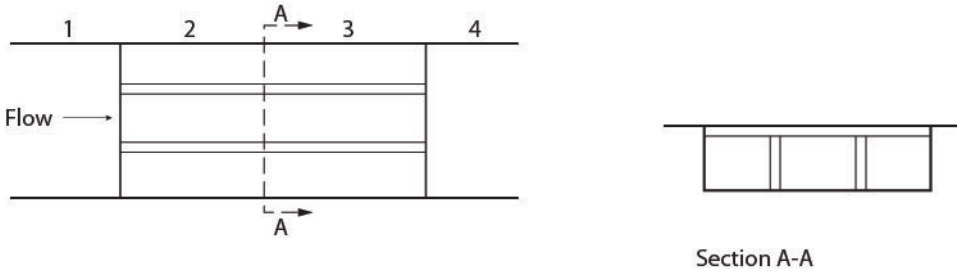
The effect of piers on open channel design must be considered at bridge crossings and where an open channel or box conduit not flowing full discharges into a length of multi-barreled box. This effect is especially important when flow is supercritical and when transported debris impinges on the piers.

The total pier width includes an added width for design purposes to account for debris. Inasmuch as the debris width to be used in design will vary with each particular situation, the City Engineer will be contacted

during the preliminary design stages of a project for a determination of the appropriate width. Streamline piers should be used when heavy debris flow is anticipated.

The water surface elevations at the upstream end of the piers is determined by equating pressure plus momentum. The water surface profile within the pier reach is determined by the Bernoulli equation. The water surface elevations at the downstream end of the piers may be determined by applying either the pressure plus momentum equation or the Bernoulli equation.

3.4.C.V.a.i. Pressure plus Momentum (P + M) Equation as Applied to Bridge Piers



$$P_1 = M_1 \frac{A_g}{A_1} - P_p = P_2 + M_g$$

Where:
P_1 = Hydrostatic pressure in unobstructed channel
M_1 = Kinetic momentum in unobstructed channel

Where:
A_1 = Area of unobstructed channel
A_2 = A1 - Kp Ap = Area of water within bridge
P_2 = Hydrostatic pressure within bridge based on net flow area
M_2 = Kinetic momentum within bridge based on net flow area
P_p = Kp Ap Yp = Hydrostatic pressure of bridge pier
A_p = Area of piers
Y_p = Centroidal moment arm of A_p about the hydraulic grade at the section
K_p = Pier factor
K_p = 1.0 for square-nosed piers
K_p = 2/3 for round-nosed piers

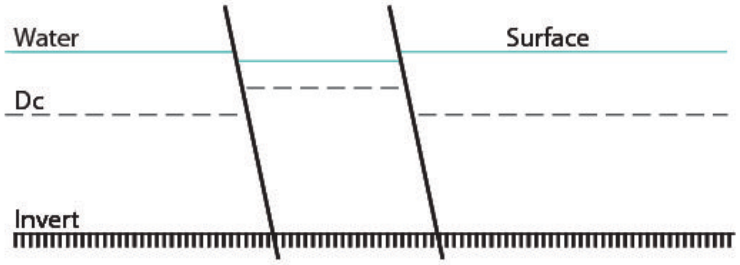
(Subscripts indicate the applicable section)

Plate 22.3 C-2 is a graphical representation of the method presented above. Plate 22.3 C-3 and 22.3 C-4 are a graphical solution of the above P + M equation.

3.4.C.V.b. Analysis

For subcritical or critical flow, the following cases, numbers 1 or 2, generally apply.

1. If the depth which balances the P + M equation at the downstream end is equal to or above D_C within the piers, continue the water surface calculations to the upstream face of the bridge piers. Calculate the depth upstream of the piers by equating pressure plus momentum.



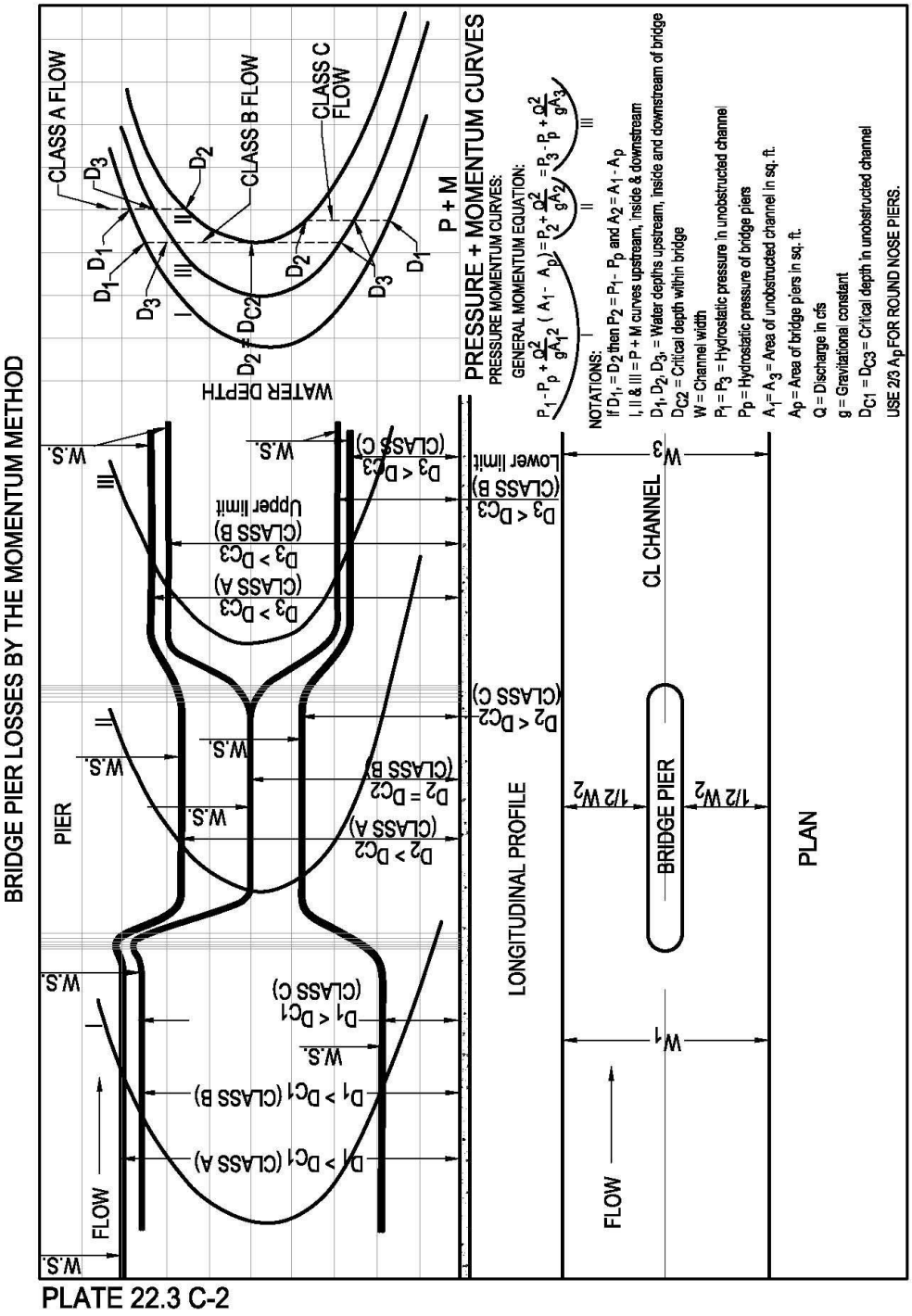

BRIDGE PIER LOSSES BY THE MOMENTUM METHOD
CLASS A FLOW
CLASS B FLOW
CLASS C FLOW
WATER DEPTH
P + M
PRESSURE + MOMENTUM CURVES
PRESSURE MOMENTUM CURVES:
GENERAL MOMENTUM EQUATION:
NOTATIONS:
If D1, = D2 then P2 = P1 - Pp and A2 = A1 - Ap
I, II & III = P + M curves upstream, inside & downstream
D1, D2, D3, = Water depths upstream, inside and downstream of bridge
DC2 = Critical depth within bridge
W = Channel width
P1 = P3 = Hydrostatic pressure in unobstructed channel
Pp = Hydrostatic pressure of bridge piers
A1 = A3 = Area of unobstructed channel in sq. ft.
Ap = Area of bridge piers in sq. ft.
Q = Discharge in cfs
g = Gravitational constant
DC1 = DC3 = Critical depth in unobstructed channel
USE 2/3 Ap FOR ROUND NOSE PIERS.
PIER
FLOW
W.S.
Upper limit
(CLASS B)
(CLASS A)
(CLASS C)
Lower limit
LONGITUDINAL PROFILE
CL CHANNEL
BRIDGE PIER
1/2 W2
PLAN

PLATE 22.3 C-2

APPROXIMATE BRIDGE PIER LOSSES BY MOMENTUM METHOD

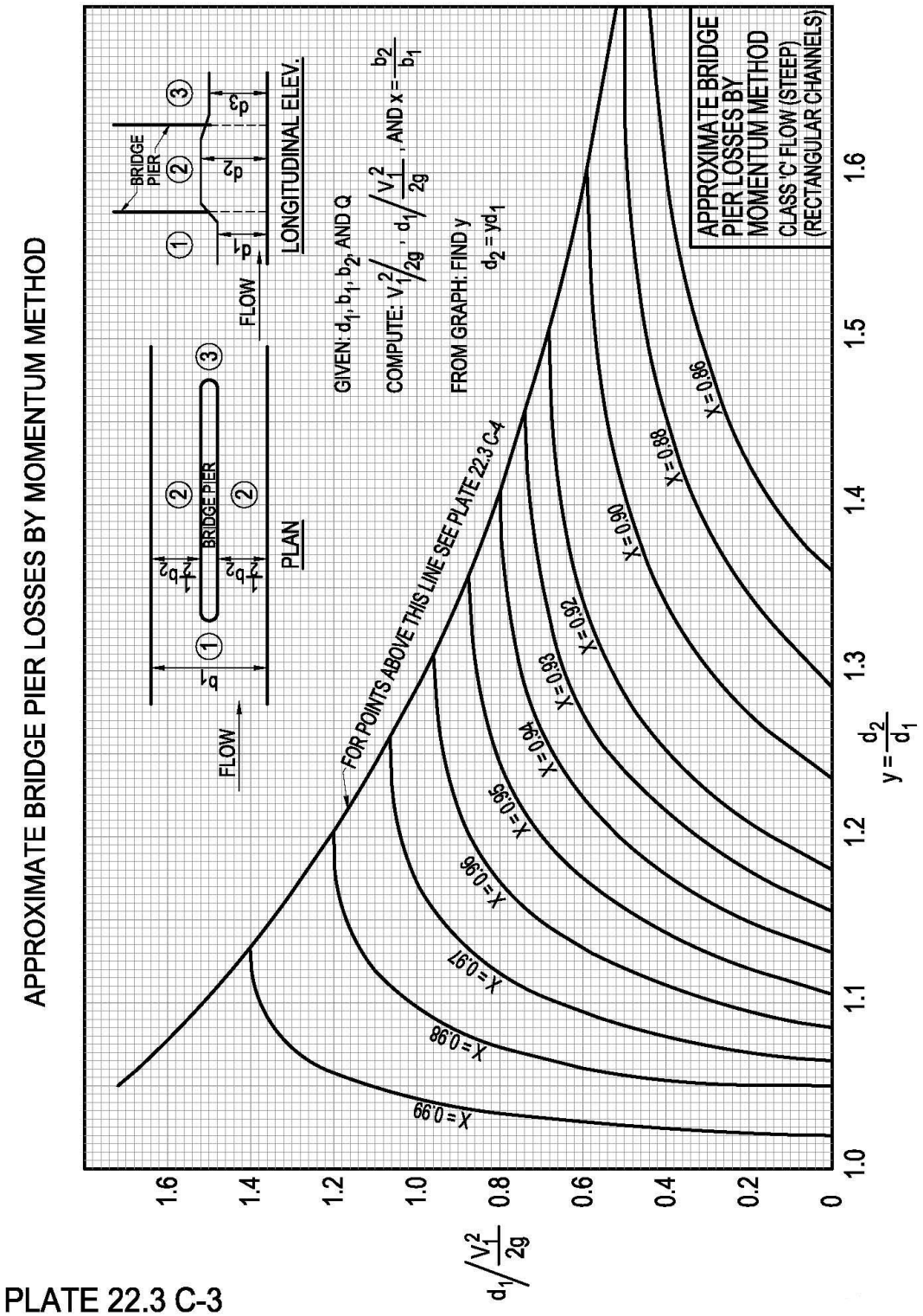


PLATE 22.3 C-3

APPROXIMATE BRIDGE PIER LOSSES BY MOMENTUM METHOD

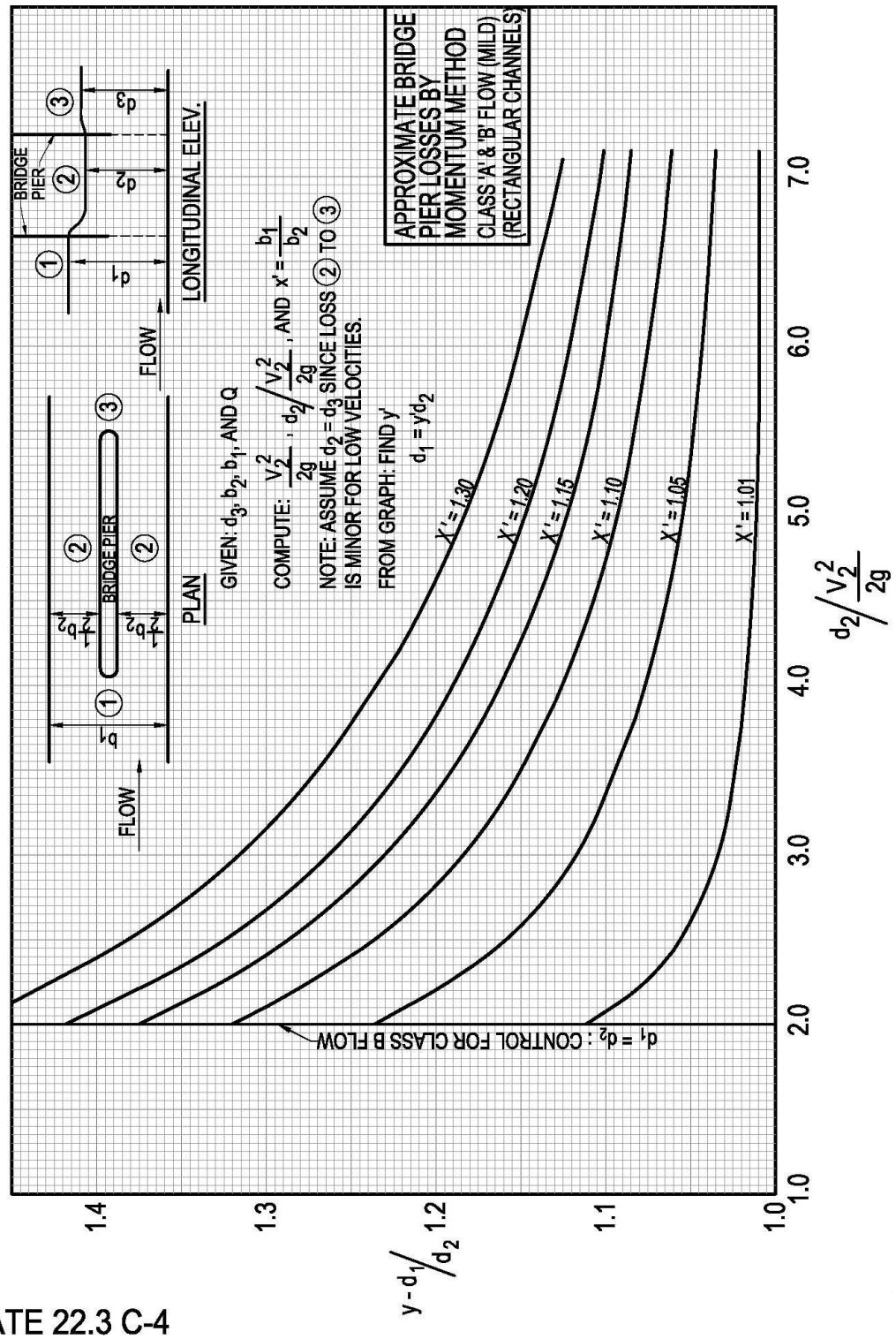
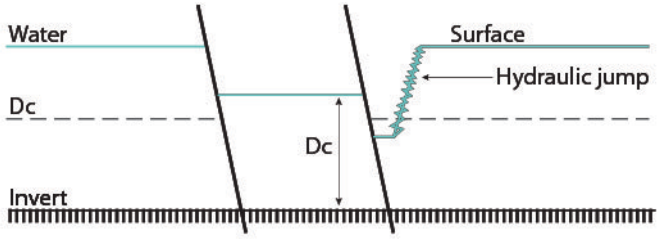


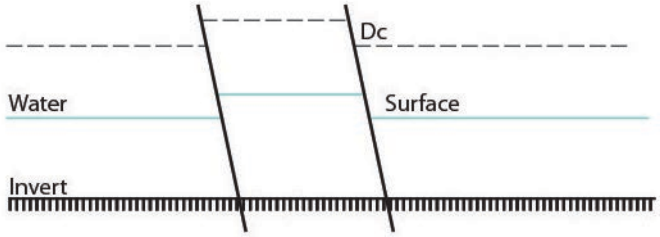
PLATE 22.3 C-4

2. If at the downstream end of the piers no depth can be found to balance the P + M equation, assume critical depth within the pier and calculate the water surface just downstream from the end of the pier. Calculate P + M for this depth and its sequence depth. If the upper sequence depth provides a greater sum (P + M), a hydraulic jump occurs at the downstream end of the pier. If the lower sequent depth results in a greater sum (P + M) the hydraulic jump occurs some distance downstream from the pier. Within the pier, calculate the water surface to the upstream face and then calculate the depth just upstream of the face of the pier using the P + M equation.

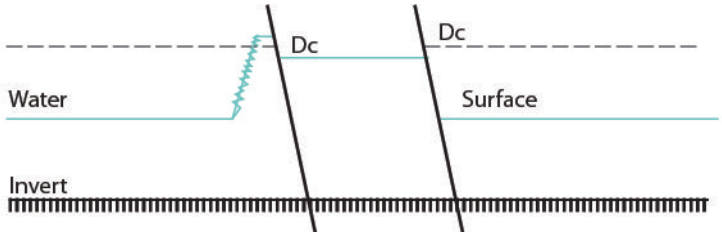


For supercritical flow the following cases, numbers 3 or 4, generally apply.

3. If the depth calculated by the P + M equation just inside the upstream face of the pier is equal to or below critical depth continue the water surface to the downstream end of the pier and then calculate the depth just outside the pier by either the P + M equation or the Bernoulli equation.



4. If, at the upstream end of the pier, no depth can be found to balance the P + M equation, calculate P + M for the depth of flow just outside the upstream end of the pier and its sequent depth. If the lower stage results in the greater sum (P + M), this indicates a hydraulic jump at the upstream face of the pier. If the upper stage results in the greater sum (P + M), this indicates a hydraulic jump some distance upstream from the pier. Assume critical depth just inside the upstream pier face and continue the water surface to the downstream end of the pier, and then calculate the depth just outside the pier by either the P + M equation or the Bernoulli equation.



3.4.C.V.c. Curving Alignments

3.4.C.V.c.i. Superelevation

Superelevation is the maximum rise in water surface at the outer wall above the mean depth of flow in an equivalent straight reach, caused by centrifugal force in a curving alignment.

1. Rectangular Channels

For subcritical velocity, or for supercritical velocity where a stable transverse slope has been attained by an upstream easement curve, the superelevation (s) can be calculated from the following equation:

$$S = \frac{V^2 b}{2gr}$$

For supercritical velocity in the absence of an upstream easement curve, the superelevation (S) is given by the following equation:

$$S = \frac{V^2 b}{gr}$$

Where:

V = Velocity of the flow cross section, in f.p.s.
b = Width of the channel, in ft.
g = Acceleration due to gravity
r = Radius of channel center line curve, in ft.
X = Distance from the start of the circular curve to the point of the first S in ft.
D = Depth of flow for an equivalent straight reach
B = Wave front angle

$$x = \frac{3.14bV}{\sqrt{12gD}} = \frac{.16bV}{\sqrt{D}} = \frac{0.908b}{\sin B}$$

$$\sin B = \frac{\sqrt{g^D}}{V} = \frac{1}{F}$$

"S" will not be uniform around the bend but will have maximum and minimum zones which persist for a considerable distance into the downstream tangent.

2. Trapezoidal Channels

For subcritical velocity, the superelevation (S) can be calculated from the following equation:

$$S = \frac{1.15V^2(b + 2zD)}{2gr}$$

Where:
z = Cotangent of bank slope
b = Channel bottom width, in ft.

For supercritical velocity, curving alignments shall have easement curves with a superelevation (S) given by the following equation:

$$S = \frac{1.13V^2(b + 2zD)}{2gr}$$

3. Unlined Channels

Unlined channels will be considered trapezoidal insofar as superelevation calculations are concerned. However, this does not apply to calculations of stream or channel cross-sectional areas.

3.4.C.V.d. Freeboard:

Freeboard is the additional wall height applied to a calculated water surface. This criteria can be superseded by other government regulations/requirements.

1. Rectangular Channels will not be used except with City Engineer's approval

2. Trapezoidal Channels and Associated Types

   Adequate channel freeboard above the designed water surface must be provided and will not be less than the amount determined by the following:

   a. For flow rates of less than 100 c.f.s. and average flow velocity of less than 35 f.p.s.:

$$Freeboard(Feet) = 1.0 + 0.025\,Vd^{\frac{1}{3}}$$

   b. For flow rates of 100 c.f.s. or greater and average flow velocity of 35 f.p.s. or greater:

$$Freeboard(Feet) = 0.7\left(2.0 + 0.025\,Vd^{\frac{1}{3}}\right)$$

Freeboard will be in addition to any superelevation of the water surface, standing waves and/or other water surface disturbances. When the total expected height of disturbances is less than 0.5 feet, disregard their contribution.

Unlined portions of the drainage way may not be considered as freeboard unless specifically approved by the City Engineer.

For supercritical flow where the specific energy is equal to or less than 1.2 of the specific energy at D_c, the wall height will be equal to the sequent depth, but not less than-the heights required above. This condition should be avoided.

3. Roll Waves

Roll waves are intermittent surges on steep slopes that will occur when the Froude Number (F) is greater than 2.0 and the channel invert slope (S_0) is greater than the quotient, twelve divided by the Reynolds Number. When they do occur, it is important to know the maximum wave height at all points along the channel so that appropriate wall heights may be determined based on the experimental results of roll waves as identified by Richard R. Brock, so that the maximum wave height can be estimated.

For details, see "Development of Roll Waves in Open Channels", Report No. KH-R-16, California Institute of Technology, July 1967. Refer also to Plates 22.3 C-5, 22.3 C-6, 22.3 C-7.

3.4.C.V.e. Criteria

3.4.C.V.e.i. Unlined Channels

After full consideration has been given to the soil type, velocity of flow, desired life of the channel, economics, availability of materials, maintenance and any other pertinent factors, an unlined earth channel may be approved for use.

Generally, its use is acceptable where erosion is not a factor and where mean velocity does not exceed 3 f.p.s. Old and well-seasoned channels will stand higher velocities than new ones; and with other conditions the same, deeper channels will convey water at a higher non-erodible velocity than shallower ones.

Maximum side slopes are determined pursuant to an analysis of soil reports. However, in general, slopes should be 6:1 or flatter with erosion protection measures. Provide a buffer for the LEE.

3.4.C.V.e.ii. Composite Linings

In case part of the channel cross section is unlined or the linings are composed of different materials, a weighted coefficient must be determined using the roughness factors for the materials as given in SSCAFCA's Sediment and Erosion Design Guide. If the lining materials are represented by the subscripts "a", "b" and "c", and the wetted perimeters by "P", the weighted value of "n" for the composite section is given by the following equation:

$$n = \frac{\left[P_a n_a^{\frac{3}{2}} + P_b n_b^{\frac{3}{2}} + P_c n_c^{\frac{3}{2}}\right]^{\frac{2}{3}}}{P}$$

ROLL WAVES

Maximum Wave Height

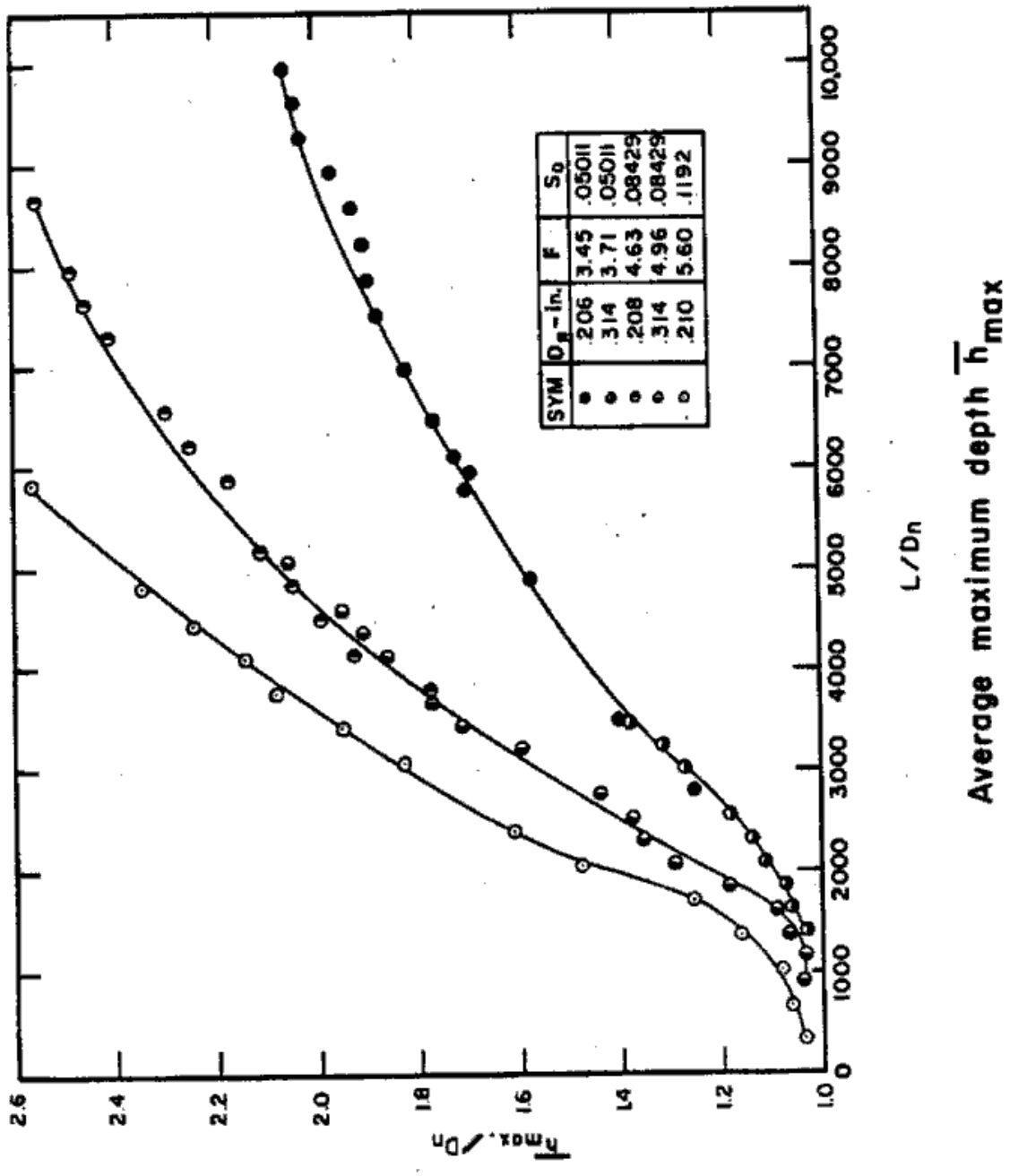
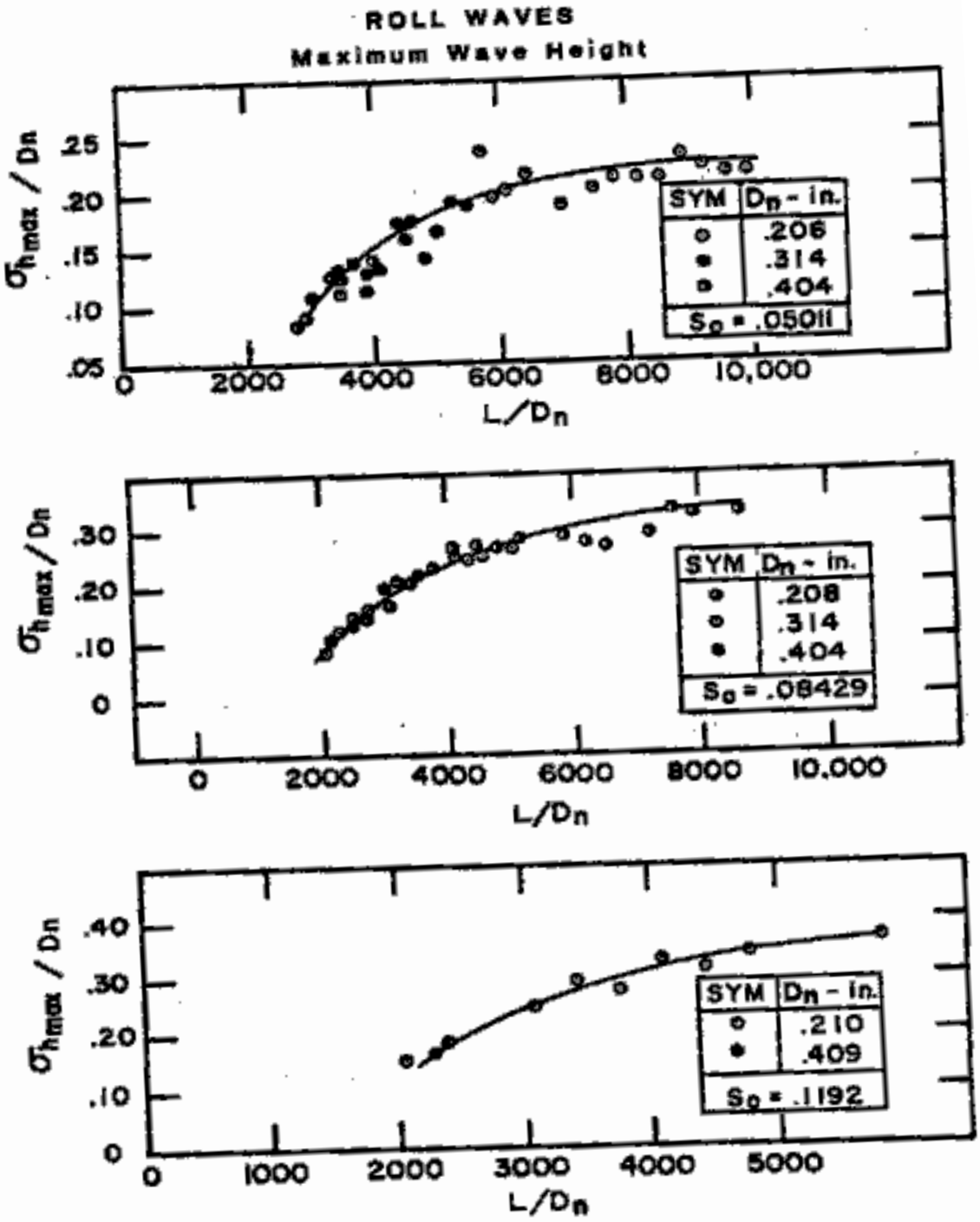


PLATE 22.3 C-5



Standard deviation of the maximum depth, $\sigma_{h_{max}}$.

PLATE 22.3 C-6

ROLL WAVES

Maximum Wave Height

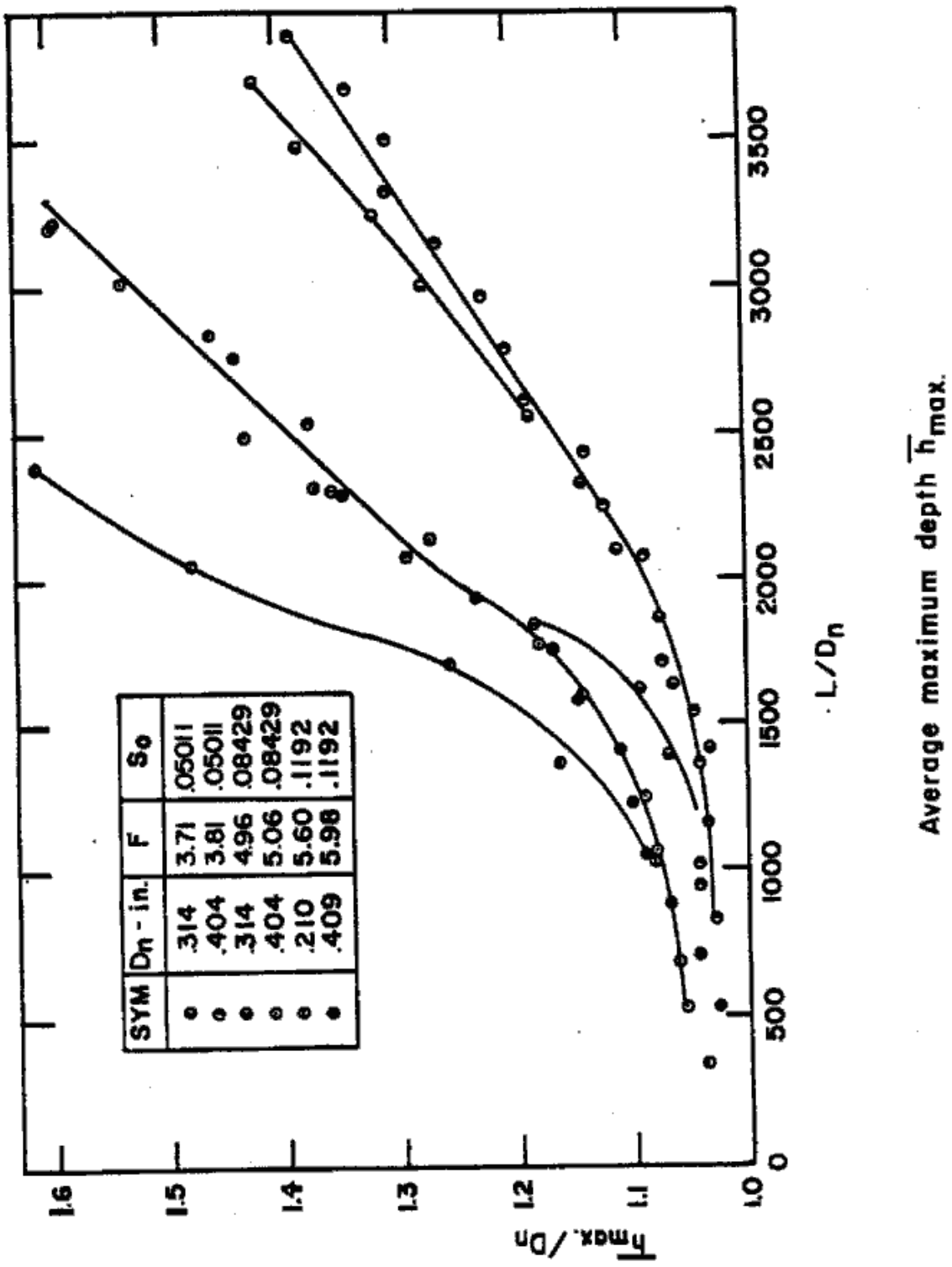


PLATE 22.3 C-7

3.4.C.V.e.iii. Maximum Sidewall Slopes (Freeboard Area)

The following sidewall slopes are generally the maximum values used for channels on at least one side of the concrete lined channel.

Lining Material	Maximum Slope
Soil Cement	2:1
Portland Cement Concrete	Vertical (Trapezoidal 2:1)
Grouted Rock Rip-Rap	2:1
Dumped Rock Rip-Rap	2:1
Earth Lined	6:1
Grass Lined (sodded)	6:1
Gravel Mulch	6:1

3.4.C.V.e.iv. Channel Maintenance and Access Road

A maintenance and access road having a minimum of 12 feet top width shall be provided on both sides of improved channels. The roads should be sloped away from the channel, and roadway runoff carried in a controlled manner to the channel. In some cases the City Engineer may require additional width. Channel maintenance and access roads shall be surfaced with gravel base course. The thickness of said base course shall be 6 inches. Maintenance access roads may also be paved if they are to be included as a quality of life feature for usage by the general public.

Turnouts will be provided at no more than ½ mile intervals and turnarounds must be provided at all access road dead ends.

Ingress and egress from public right-of-way and/or easements to the channel maintenance and access roads must be provided.

3.4.C.V.e.v. Channel Access Ramps

Channel access ramps for vehicular use will be provided as necessary for complete access to the channel throughout its entire length with the maximum length of channel between ramps being one-half mile.

Ramps shall be constructed of 8" thick reinforced concrete and will not have slopes greater than 10% and ramps shall not enter the channel at angles greater than 15% from a line parallel to the channel centerline.

Ramps may be constructed on one side of the channel and must be approved by the City. The maintenance and access road on the “ramp” side shall be offset around the ramp to provide for continuity of the road full length of the channel.

The downhill direction of the ramp should be oriented downstream.

3.4.C.V.e.vi. Street Crossings

Street crossing or other drainage structures over the concrete lined channel should be of the all weather type, i.e., bridges or concrete box culverts. Crossing structures should conform to the channel shape in order that they disturb the flow as little as possible.

It is preferred that the channel section be continuous through crossing structures. However, when this is not practicable, hydraulic disturbance shall be minimized, and crossing structures should be suitably isolated from the channel lining with appropriate joints.

Street crossing structures shall be capable of passing the l00 year frequency design storm flow.

Channel lining transitions at bridges and box culverts should conform to the provisions for transitions hereinafter provided. Drainage structures having a minimum clear height of 8 feet and being of sufficient width to pass maintenance vehicles may result in minimizing the number of required channel access ramps. Unless otherwise specifically authorized by the City Engineer, all crossing structures must have at least 8.0 feet of clear height.

3.4.C.V.e.vii. Subdrainage

Concrete lined channels to be constructed in areas where the ground water table is greater than two feet below the channel invert, weep holes or other subdrainage systems are not required.

Areas where the ground water table is within two feet or less of the channel bottom, there shall be provided, special subdrainage systems as necessary to relieve water pressures from behind the channel lining.

3.4.D Storm Inlets

3.4.D.I. DESIGN FLOW (Q)

The Design Q for storm inlet design should be determined based on the following procedures.

1. Outline the drainage basin on a map with an appropriate scale.
2. Outline the drainage area contribution to each proposed storm inlet, designating this area with the corresponding subarea number and with a letter (2A, 2B, 2C, etc.). Drainage areas should be differentiated by color or line type.
3. Calculate the tributary area in acres for each storm inlet or battery of storm inlets.
4. Assuming satisfactory drainage area relationships, the storm inlet design Q will be calculated as follows:

(a) $$Q_{DES} = \frac{Q_P A}{A_T}$$

Where:

A = Area in acres tributary to storm inlet

A_T = Total area in acres of the appropriate subarea

Q_P = Peak Q from appropriate subarea, in c.f.s.

In cases where the main line design Q's are reduced because of a restricted outlet, the storm inlet design Q's must be reduced by the same percentage.

If, during the design of a project, it is determined that the proposed storm inlet interception points will change the interception points assumed in the main line hydrology, then the main line Q's should be adjusted accordingly.

3.4.D.II. REQUIRED DATA AND CALCULATIONS

3.4.D.II.a. Street Flow Carrying Capacity

Submitted data should include complete cross sections between property lines of streets at the proposed storm inlet and of any streets which control the flow of water to the pertinent locations. Street cross sections should indicate the following:

1. Dimensions from the street center line to the top of curb and property line.
2. Gutter slope upstream of each storm inlet.
3. Elevations for the top of curb, flow line, property line and street crown at each storm inlet center line.
4. Curb batter.

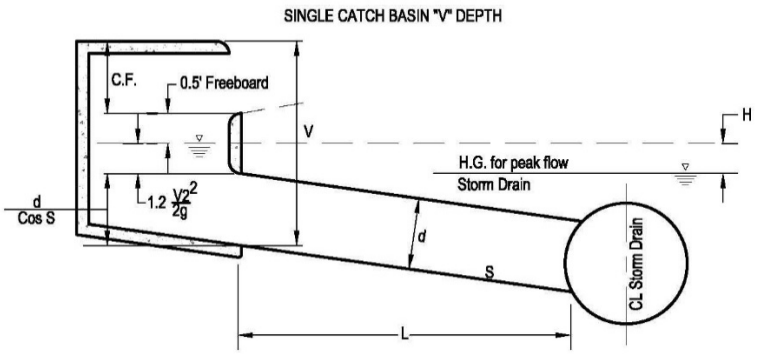
Please refer to Plates 22.3 D-1 to 22.3 D-4 inclusive, for nomographs giving street capacities for some typical street sections.

3.4.D.II.b. Storm Inlet Size and Type

Size and type of storm inlet should be determined by physical requirements and by inlet flow capacities given in Plates 22.3 D-5 to 22.3 D-7, inclusive. Criteria used, if other than those recommended in this section, must be cited and accompanied by appropriate calculations.

3.4.D.II.c. Connector Pipe and "V" Depth Calculation

(1) Single Storm Inlet



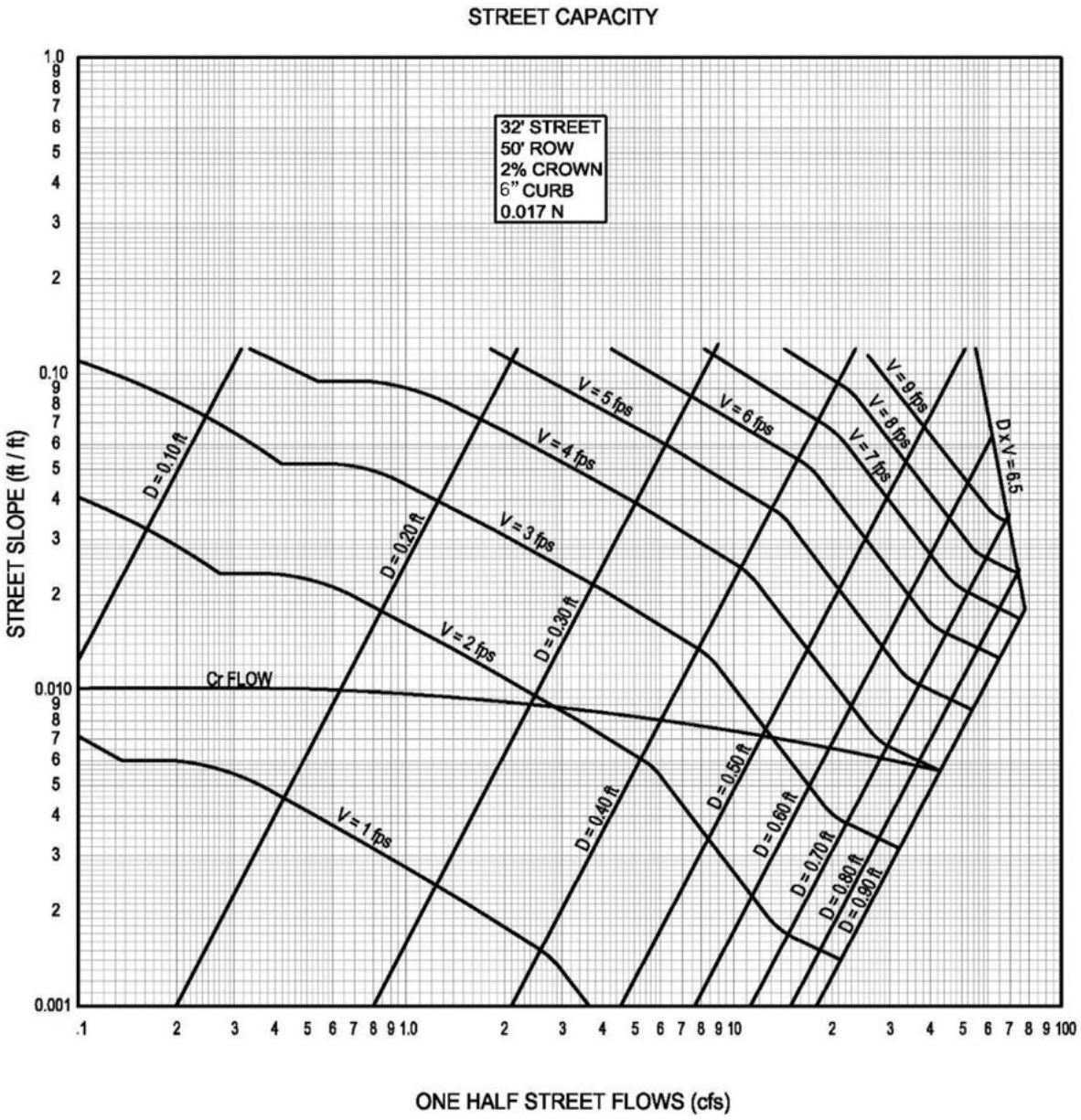

STREET CAPACITY
32' STREET
50' ROW
2% CROWN
6" CURB
0.017 N
STREET SLOPE (ft / ft)
ONE HALF STREET FLOWS (cfs)
Cr FLOW
V = 1 fps
V = 2 fps
V = 3 fps
V = 4 fps
V = 5 fps
V = 6 fps
V = 7 fps
V = 8 fps
V = 9 fps
D X V = 6.5
D = 0.10 ft
D = 0.20 ft
D = 0.30 ft
D = 0.40 ft
D = 0.50 ft
D = 0.60 ft
D = 0.70 ft
D = 0.80 ft
D = 0.90 ft

PLATE 22.3 D-2

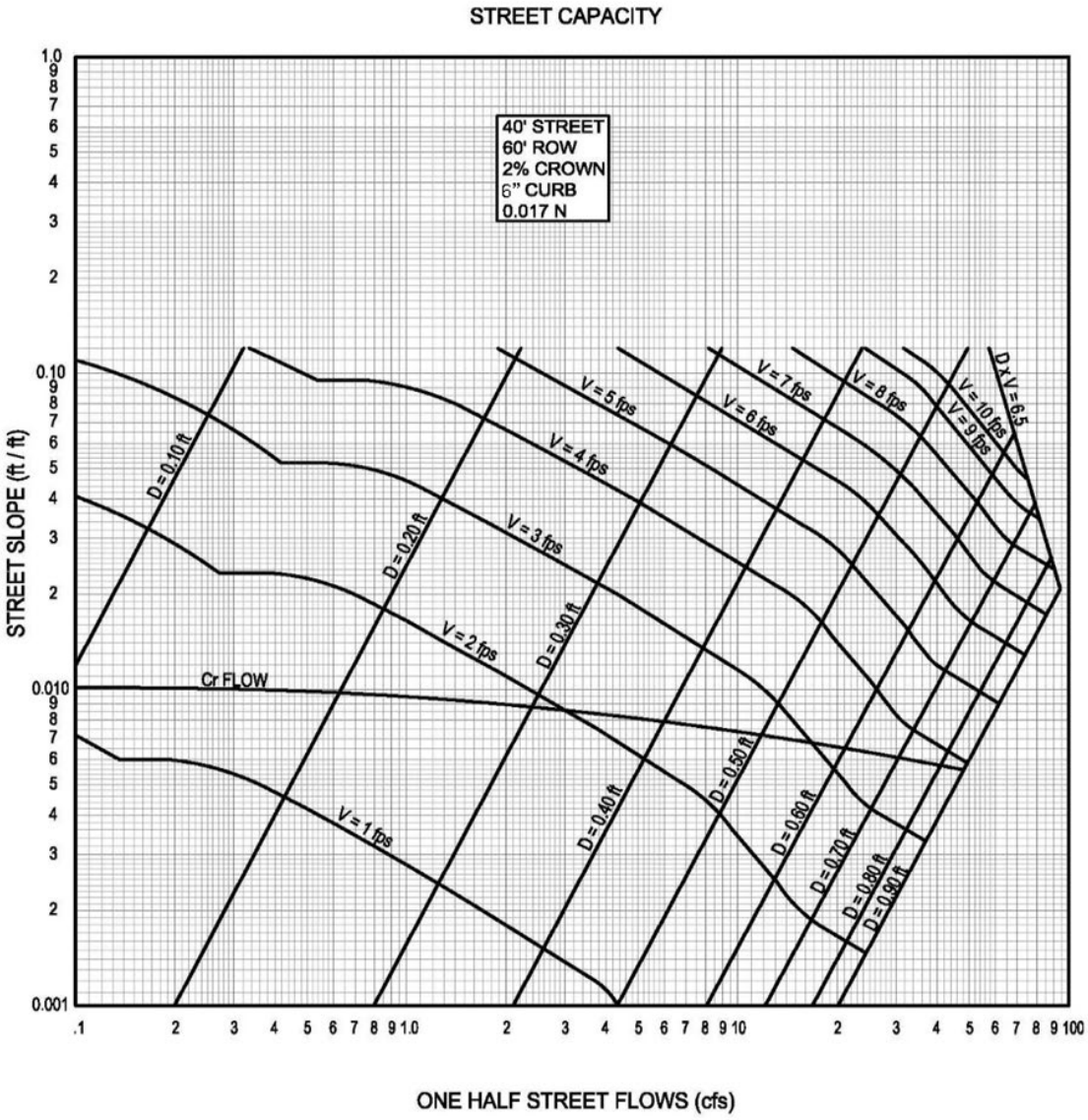

STREET CAPACITY
40' STREET
60' ROW
2% CROWN
6" CURB
0.017 N
STREET SLOPE (ft / ft)
ONE HALF STREET FLOWS (cfs)
Cr FLOW
D = 0.10 ft
D = 0.20 ft
D = 0.30 ft
D = 0.40 ft
D = 0.50 ft
D = 0.60 ft
D = 0.70 ft
D = 0.80 ft
D = 0.90 ft
V = 1 fps
V = 2 fps
V = 3 fps
V = 4 fps
V = 5 fps
V = 6 fps
V = 7 fps
V = 8 fps
V = 9 fps
V = 10 fps
D x V = 6.5

PLATE 22.3 D-3

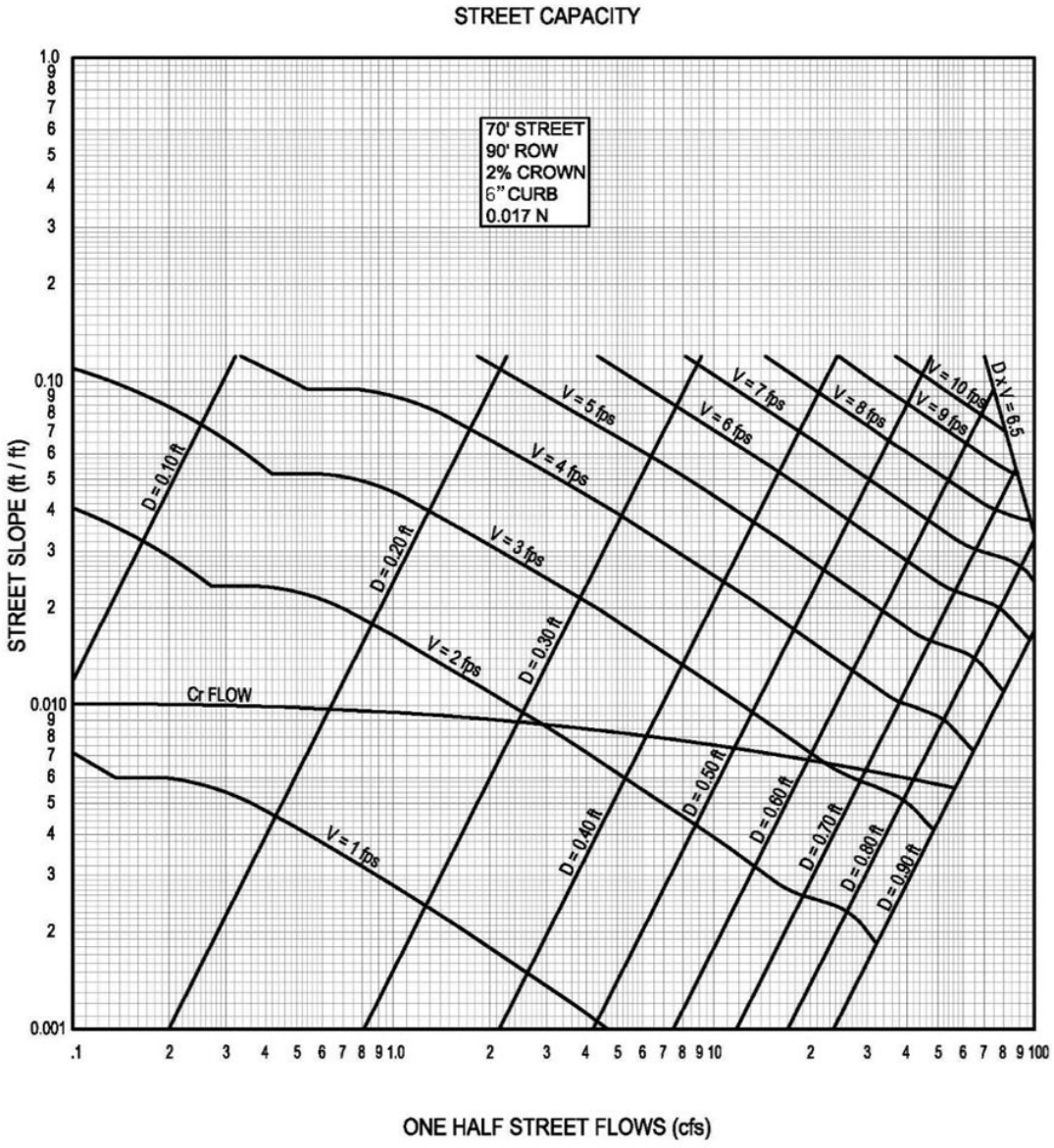

STREET CAPACITY
70' STREET
90' ROW
2% CROWN
6" CURB
0.017 N
STREET SLOPE (ft / ft)
ONE HALF STREET FLOWS (cfs)
Cr FLOW
D = 0.10 ft
D = 0.20 ft
D = 0.30 ft
D = 0.40 ft
D = 0.50 ft
D = 0.60 ft
D = 0.70 ft
D = 0.80 ft
D = 0.90 ft
V = 1 fps
V = 2 fps
V = 3 fps
V = 4 fps
V = 5 fps
V = 6 fps
V = 7 fps
V = 8 fps
V = 9 fps
V = 10 fps
D x V = 6.5

PLATE 22.3 D-4

GRATING CAPACITIES FOR TYPE “A”, “C” AND “D”

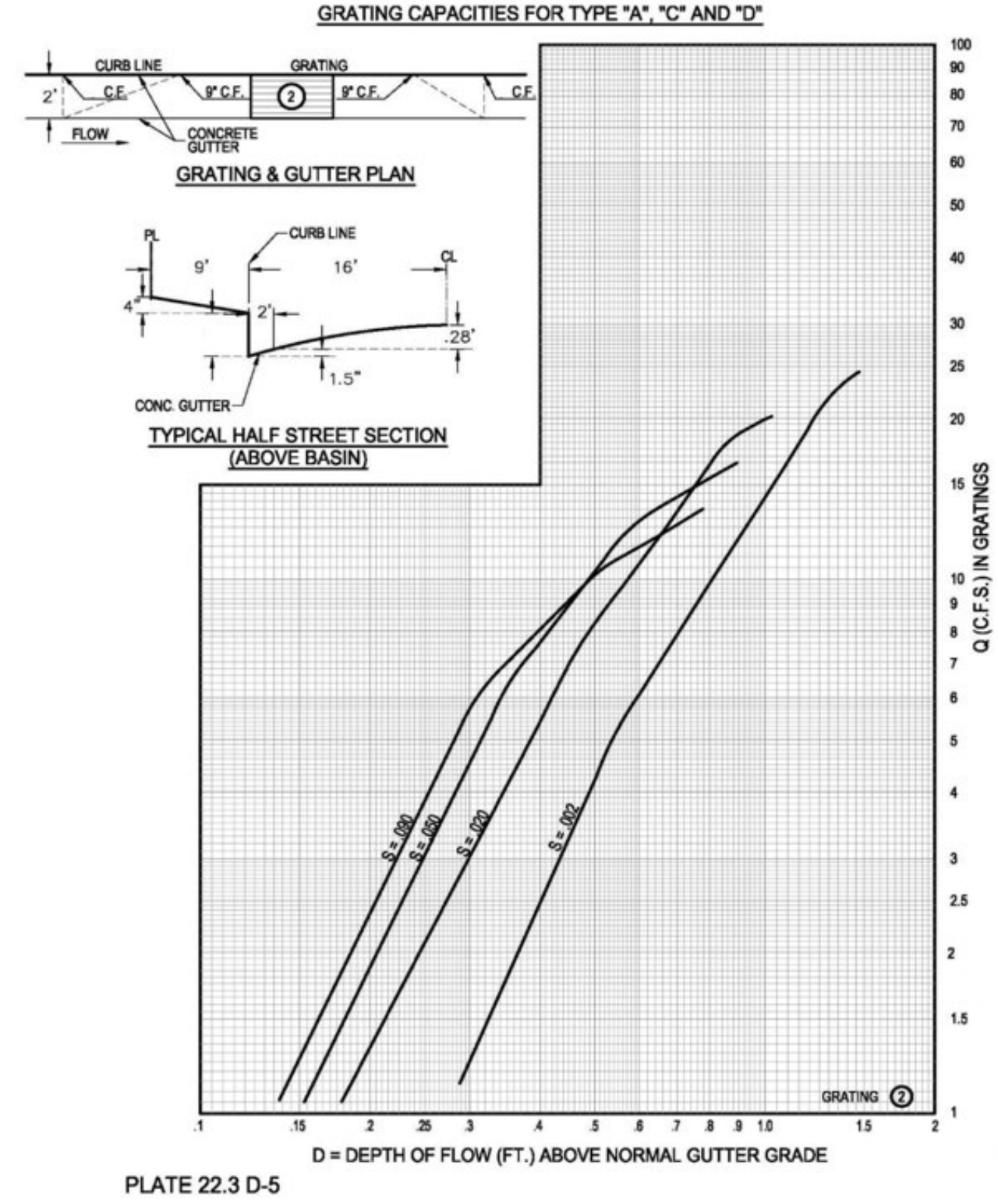


PLATE 22.3 D-5

GRATING CAPACITIES FOR TYPE DOUBLE “C” AND “D”

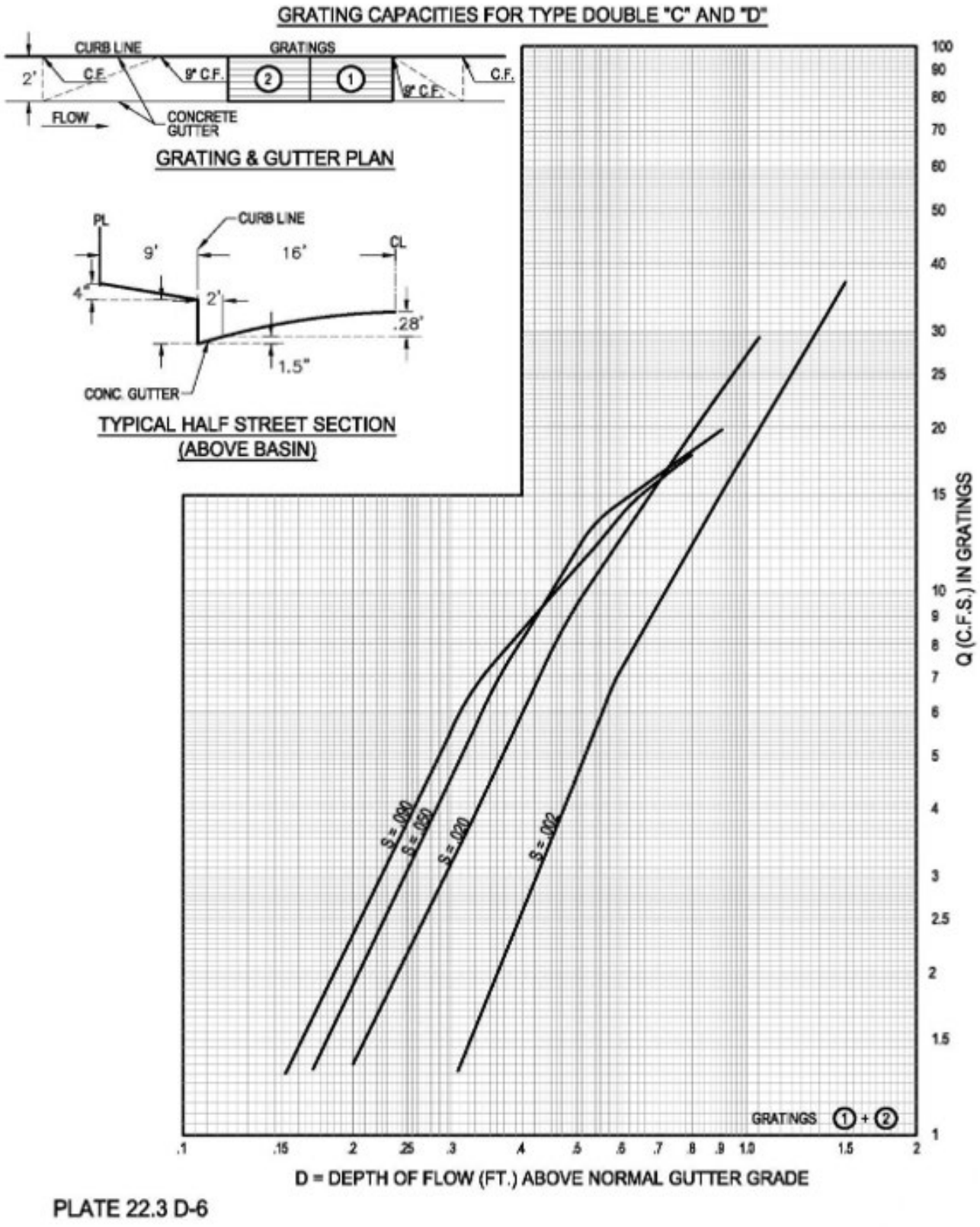


PLATE 22.3 D-6

GRATING CAPACITIES FOR TYPE “B”

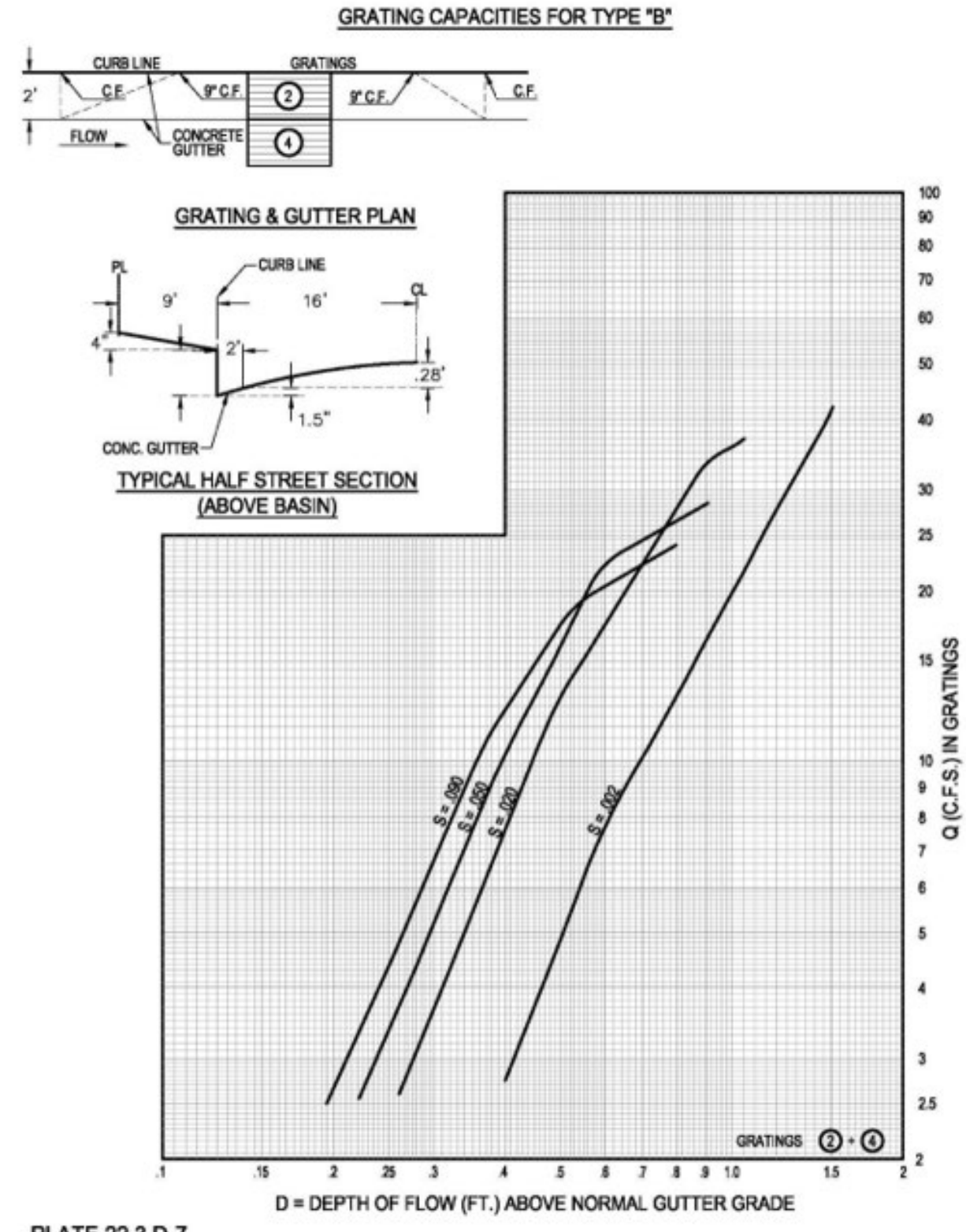


PLATE 22.3 D-7

Given the available head (H), the required connector pipe size can be determined from culvert equations, such as those given in King & Brater, Handbook of Hydraulics, Section Four, 5th Edition. Plate 22.3 D-8 can be used for a nomographic solution of a culvert equation for culverts flowing full.

The minimum storm inlet "V" depth should be determined as follows:

$$V = C.F. + 0.5 + 1.2\frac{V^2}{2g} + \frac{d}{\cos S}$$

Where:

V = Depth of the storm inlet , or "V" depth, measured in feet from the invert of the connector pipe to the top of the curb.

C.F = Vertical dimension of the curb face at the storm inlet opening, in feet.
V = Average velocity of flow in the connector pipe, in feet per second, assuming a full pipe section.
d = Diameter of connector pipe, in feet.
S = Slope of connector pipe.

The term $1.2(V^2/2g)$ includes an entrance loss of .2 of the velocity head.

Assuming a curb face at the storm inlet opening of 10 inches, which is the value normally used, and Cos S = 1, the above equation may be simplified to the following:

$$V = 1.33 + 1.2\frac{V^2}{2g} + d$$

Please refer to Plate 22.3 D-9 for a graphical solution to the above equation for curb faces of 10 inches.

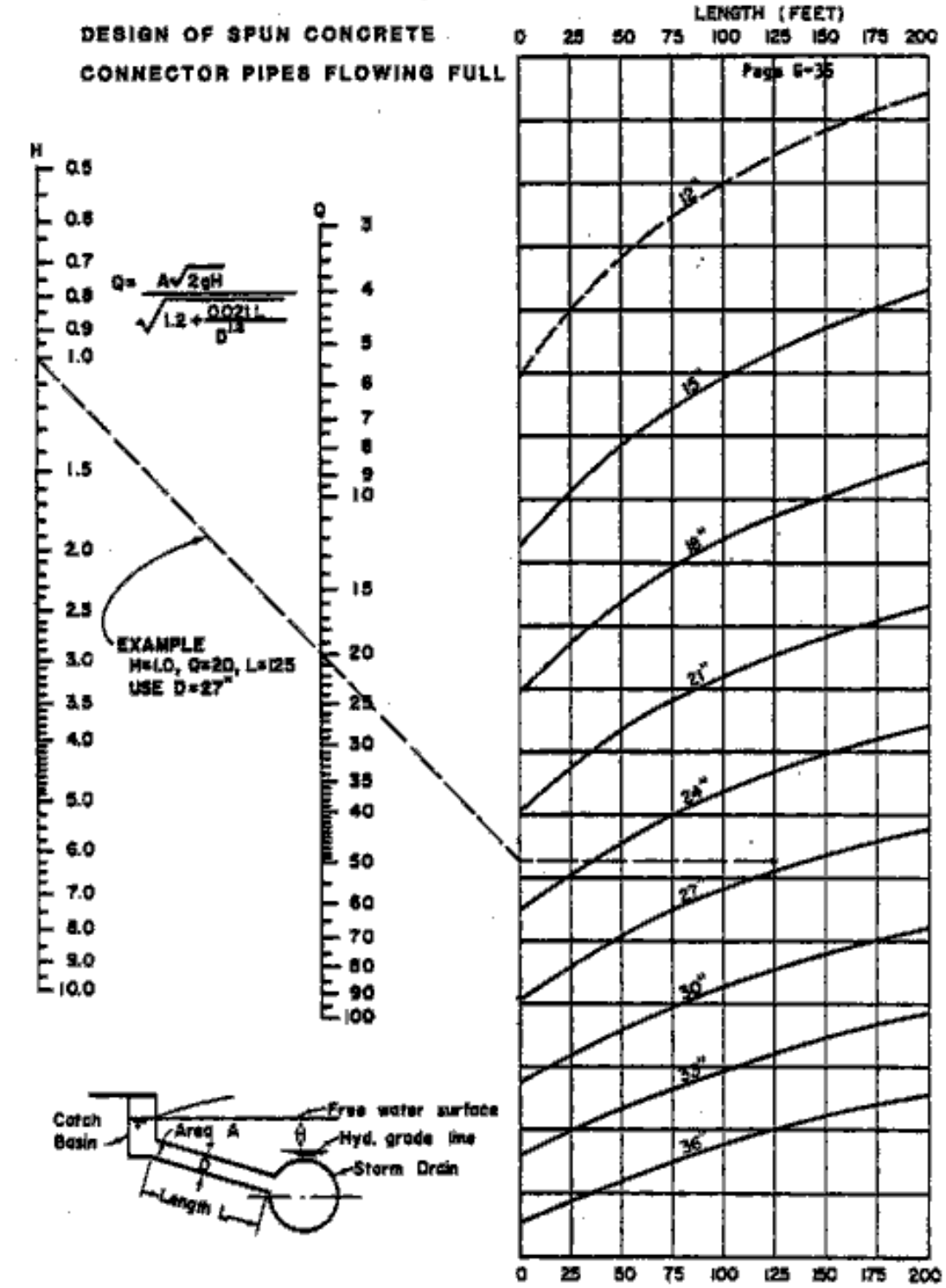

DESIGN OF SPUN CONCRETE
CONNECTOR PIPES FLOWING FULL
LENGTH (FEET)
0 25 50 75 100 125 150 175 200
Page G-35
H
Q
$Q = \frac{A\sqrt{2gH}}{\sqrt{1.2 + \frac{0.021L}{D^{1.5}}}}$
EXAMPLE
H=1.0, Q=20, L=125
USE D=27"
12"
15"
18"
21"
24"
27"
30"
33"
36"
Catch Basin
Area A
Free water surface
Hyd. grade line
Storm Drain
Length L

PLATE 22.3 D-8

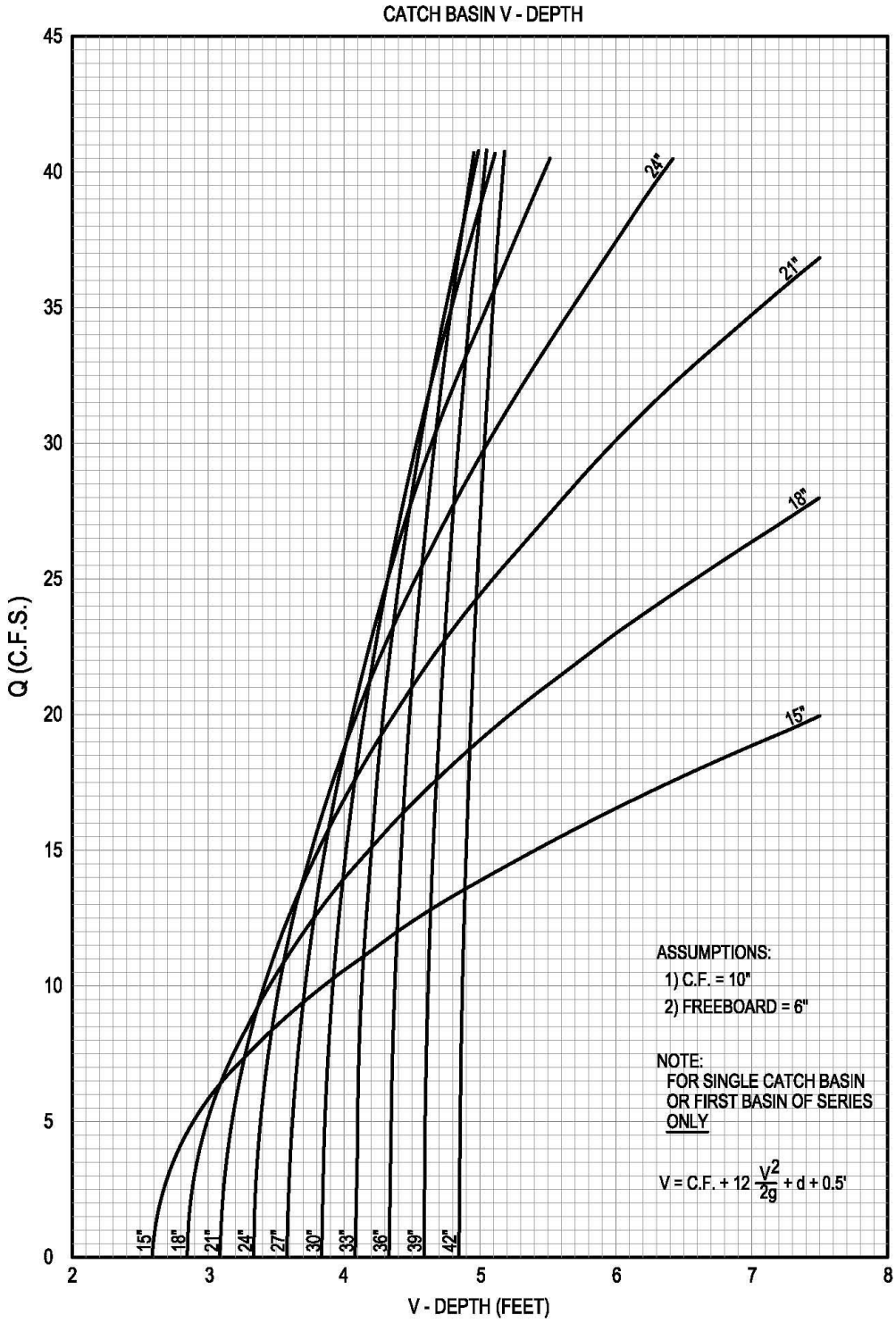

CATCH BASIN V - DEPTH
Q (C.F.S.)
V - DEPTH (FEET)
0
5
10
15
20
25
30
35
40
45
2
3
4
5
6
7
8
15"
18"
21"
24"
27"
30"
33"
36"
39"
42"
ASSUMPTIONS:
1) C.F. = 10"
2) FREEBOARD = 6"
NOTE:
FOR SINGLE CATCH BASIN
OR FIRST BASIN OF SERIES
ONLY
$V = C.F. + 12\frac{V^2}{2g} + d + 0.5'$

PLATE 22.3 D-9

STORM INLET **CALCULATION SHEET**

Sht _____ of _____

PROJECT _____ CALCULATED BY _____

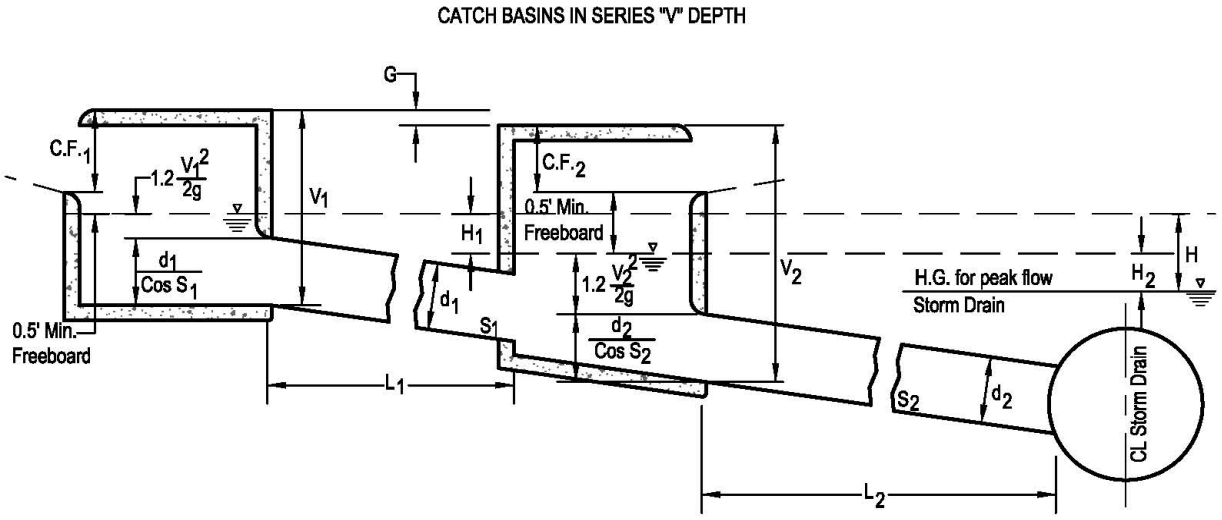
DESIGN FREQUENCY _____ DATE _____

FLOW DIAGRAM (Indicate street slopes)	Sym.	Drain Area	Q		Cap of 1/2 Street	Gutter "d"	C.B.		Connector Pipe			V Depth
			Total	Inter.			No.	Size	Head	L	Dia	

PLATE 22.3 D-10

Optimum Spacing of Storm Inlets on a Continuous Grade – Plate 22.3 D-12

d. Storm Inlets in Series



Select a connector pipe size for each storm inlet, and determine the related head loss (H_1, H_2) by means of a culvert equation, or by Plate 22.3 D-9 . The sum of head losses in the series should not exceed the available head, i.e.,

$$H_1 + H_2 + \cdots \ldots \ldots \ldots + H_n \leq H$$

The minimum storm inlet "V" depths are determined in the following manner:

(1) The first storm inlet "V" depth is calculated as for a single storm inlet:

$$V_1 = 1.33 + 1.2\frac{V_1^2}{2g} + d_1$$

(2) The second storm inlet "V" depth is determined as follows:

$$V_2 = C.F._1 + 0.5 + H_1 + 1.2\frac{V_2^2}{2g} + \frac{d_2}{\cos S_2} - G$$

Assuming again that C.F. = 0.83 and Cos S_2 = 1,

$$V_2 = 1.33 + H_1 + 1.2\frac{V_2^2}{2g} + d_2 - G$$

(3) The freeboard provided for the second storm inlet generally should not be less than 0.5 feet and shall be checked as follows:

$$FB_2 = V_2 - \frac{d_2}{\cos \quad S_2} - 1.2\frac{V_2^2}{2g} - C.F._{.2}$$

If C.F.$_{.2}$ = 0.83 and Cos S_2 = 1,

$$FB_2 = V_2 - d_2 - 1.2\frac{V_2^2}{2g} - 0.83$$

Where especially "tight" conditions prevail, the 0.5 feet freeboard requirement referred to above may be omitted. In such cases the difference between the gutter elevation and the hydraulic grade line elevation of the main line will be accepted as the available head.

(4) Connector pipes between storm inlets in series are be checked for adverse slope by the following relationship:

$$V_2 - 0.5 > V_1 - G$$

The figure of 0.5 shown above is the standard 6-inch cross slope of the storm inlet floors.

3.4.D.II.d. Other Criteria

3.4.D.II.d.i. General

1. Existing drainage systems which are not required to carry any portion of the design Q of a proposed system may be designated to be abandoned in place upon completion of the proposed drain. Such existing drainage systems should not be sealed or removed before completion of the proposed system, if needed to carry off storm water during the construction period. It is the designer's responsibility to ascertain the necessity of maintaining existing drainage systems in place.

    a. Existing street or sidewalk culverts may be designated to have the interfering portions removed and the inlets sealed, or the culverts may be kept in operation and connected to the storm drain or to the back of a proposed storm inlet. If the culvert is to be connected, a structural detail should be provided. Refer to the City Engineer for instructions.

    b. Existing street or sidewalk culverts that do not interfere with construction should be maintained in place.

2. Storm inlets will be located within street rights-of-way unless otherwise approved by the City Engineer. All storm inlets which must be located outside street right-of way lines in order to intercept storm waters under existing conditions are considered "must" storm inlets. Right-of-way or an easement for such storm inlets must be acquired. Storm inlets may be located outside dedicated streets to accommodate future street widenings and should be designed to intercept storm water under existing conditions.

    a. Storm inlets to be constructed off the paved portion of the roadway but within the street right-of way lines must be made operable by grading the roadway to permit storm water to flow to the basin.

Street remodeling of this nature will be performed during construction.

3. If a project is to have one or more cutoff points in phased construction, each cutoff point should have a battery of storm inlets at the upstream terminus sufficient to collect the flow carrying capacity of the storm drain at that point. Each battery of storm inlets should be designed with sufficient data regarding types and sizes of storm inlets, connector pipe sizes and D-loads, "V" depths, local depressions, and whatever other information may be necessary to construct the system.

4. Sump designs for storm inlets should normally be limited to local streets and only those situations where terrain or grading considerations warrant their use. When specifying a sump storm inlet(s) the designer shall ensure that surrounding properties are protected from the occurrence of system clogging by demonstrating that one of the following emergency backup conditions exist:

    a. The design storm peak flow rate will release to either a public R.O.W. or public easement without rising above any adjacent structure pad elevations; or

    b. Sufficient storage is available within a combination of public R.O.W., public easement, and non-structurally occupied private properties to hold 100% of the design event volume, without inflicting damage to structures, until such time as the underground system can be unclogged.

When relying on public easements across private property to achieve either objective, the easement language creating the encumbrance shall specify that said easement is a surface flowage easement and no structural improvements which would interfere with conveyance or storage of water shall be allowed. Any surface modification within the flowage easement will require an encroachment agreement from the City.

3.4.D.II.d.ii. Storm Inlets

The selection of type, number, and spacing of storm inlets should be based on Plates 22.3 D-l through 22.3 D-7 and the following instructions. Be aware that the City of Rio Rancho standard street curb heights are 6”and this may require design and construction adjustments.

City standard storm inlets "Type A, B and C" are combination inlet(s) with both curb opening and grating. Storm inlet "Type D" is a grating only inlet. Basin gratings tend to accumulate debris and clog. The curb opening both limits debris accumulation and offsets lost capacity due to clogging of the grating. Except for certain valley applications, combination basins should be used. Due to main line clogging, grating only basins should be used in valley applications where main line pipe diameters are 24" or less or where quarter full pipe velocities are less than 2.5 f.p.s.

"Type A" storm inlets should be used for single inlet applications and as the first inlet in a battery of inlets. The "Type A" basin performs the function of sweeping debris off the street upstream of the grating and minimizing clogging. "Type A" inlets are used with standard curb and gutter.

"Type B" storm inlets are generally placed downstream of and/or in conjunction with "Type A" storm inlets on streets other than arterials and collectors. This type storm inlet has potential to collect substantial runoff when the grating is clean. If "Type B" basins are used alone, without a "Type A" within 150 feet upstream, the capacity shown in Plate 22.3 D-7 should be reduced 15% due to clogging. "Type B" storm inlets are used with standard curb and gutter.

"Type C" storm inlets are generally placed downstream of and/or in conjunction with "Type A" storm inlets. If "Type C" storm inlets are used without a "Type A" within 150 feet upstream, the capacity shown in Plates 22.3 D-5 and 22.3 D-6 should be reduced 15% for clogging. "Type C" storm inlets are used with standard curb and gutter.

"Type D" storm inlets are generally used on streets with slope greater than 5%, in driveways and in certain valley areas as described above. "Type D" storm inlets can be used with either standard curb and gutter or with mountable curb.

The number of storm inlets to be connected in series should not exceed two. If the connection of more than two storm inlets in series is unavoidable, consideration should be given to designing a lateral drain.

3.4.D.II.d.iii. Connector Pipe

1. The minimum diameter of connector pipe is 18 inches.
2. The horizontal alignment of connector pipes must not contain angle points or bends, unless approved by the City Engineer.
3. Connections at manholes or junction structures are preferred.
4. The storm inlet spacing shall be a minimum of 25 feet between curb transitions.
5. Storm inlet connector pipes shall outlet at the downstream end of the storm inlets, unless prevented by field conditions. Downstream, in this paragraph, refers to the directions of the gutter slope at the storm inlet in question.
6. Where feasible, connector pipes should be located so as to avoid, as much as possible, cutting into existing cross gutters and spandrels.
7. The conversions of type A's, B's or C's to D's storm inlets will not be permitted. If the storm inlet is in conflict with a driveway, the storm inlet will be removed and replaced with another inlet outside of the driveway. To avoid conflicts with driveways, the engineer should identify the proposed driveways on the grading plan when storm inlets front the lots.

3.4.E Street Hydraulics

1. A secondary use of the street network is the conveyance of storm runoff. This secondary use must always be subsidiary to the primary function of streets which is the safe conveyance of people and vehicles. The goals of street hydraulic design are therefore:
    a. To provide an economical means of transporting storm runoff.
    b. To ensure that the safety and convenience of the public are preserved.
    c. To prevent storm runoff, once collected by the street system, from leaving the street right-of-way except at specially designated locations.
2. Street hydraulic design critical are as follows:
    a. Manning's roughness coefficient is 0.017.

b. Conjugate and/or sequent depth in the event of the 100-year design discharge may not exceed curb height and shall be contained within the street right-of-way.

c. Flow depths in the event of the 10-year design discharge may not exceed 0.33 feet at the curb line in any collector or arterial street. One lane free of flowing or standing water in each traffic direction must be preserved on arterial streets.

d. The product of depth times velocity shall not exceed 6.5 in any location in any street in the event of a 10-year design storm (with velocity calculated as the average velocity measured in feet per second and depth measured at the gutter flowline in feet).

e. The energy grade line of the street flow must be contained within the street right-of-way.

3. For streets with more than two driving lanes in each direction:

   a. The product of depth times velocity may not exceed 6.5 at any location in any street in the event of a 10-year design storm (with velocity calculated as the average velocity measured in feet per second and depth measured at the gutter flowline in feet).

   b. Inverted crown streets are prohibited unless prior authorization provided to and approved by the City.

   c. The assumption of equal flow distribution between gutters on undivided streets and between street sections on divided streets is only valid where its validity can be demonstrated.

4. Plates 22.3 D-1 through 22.3 D-4 may be used where applicable in the hydraulic design of streets. T-intersections, radical slope changes and intersections are potential locations for hydraulic jumps when upstream slopes are steeper than critical slope.

   a. When conditions indicate that a hydraulic jump or that the effects of superelevation will allow runoff to exceed street hydraulic design criteria, provisions must be made for treatment of the problem. The warping of street sections and the construction of deflector walls for these purposes is prohibited unless specifically authorized by the City Engineer.

5. Intersections and other radical changes in street cross section and slope require special consideration whenever the flow depth/street slope relationship results in flows occurring in the supercritical flow regime. The critical slope line shown on the street rating curves is used to determine on which side of critical depth the flow occurs and if slope or cross section changes will allow the flow to cross through critical depth from supercritical.

6. If flow is likely to cross into the subcritical flow range, then Plate22.3 E-1, "Tail Water vs. Froude Number" is used to determine the height and Plate 22.3 E-2, "Length of Jump vs. Froude Number" figure is used to determine jump length. The height of jump should not exceed curb height and shall be contained within the street right-of-way.

TAIL WATER DEPTH VS. D_1

HYDRAULIC DESIGN OF STILLING BASINS AND ENERGY DISSIPATORS

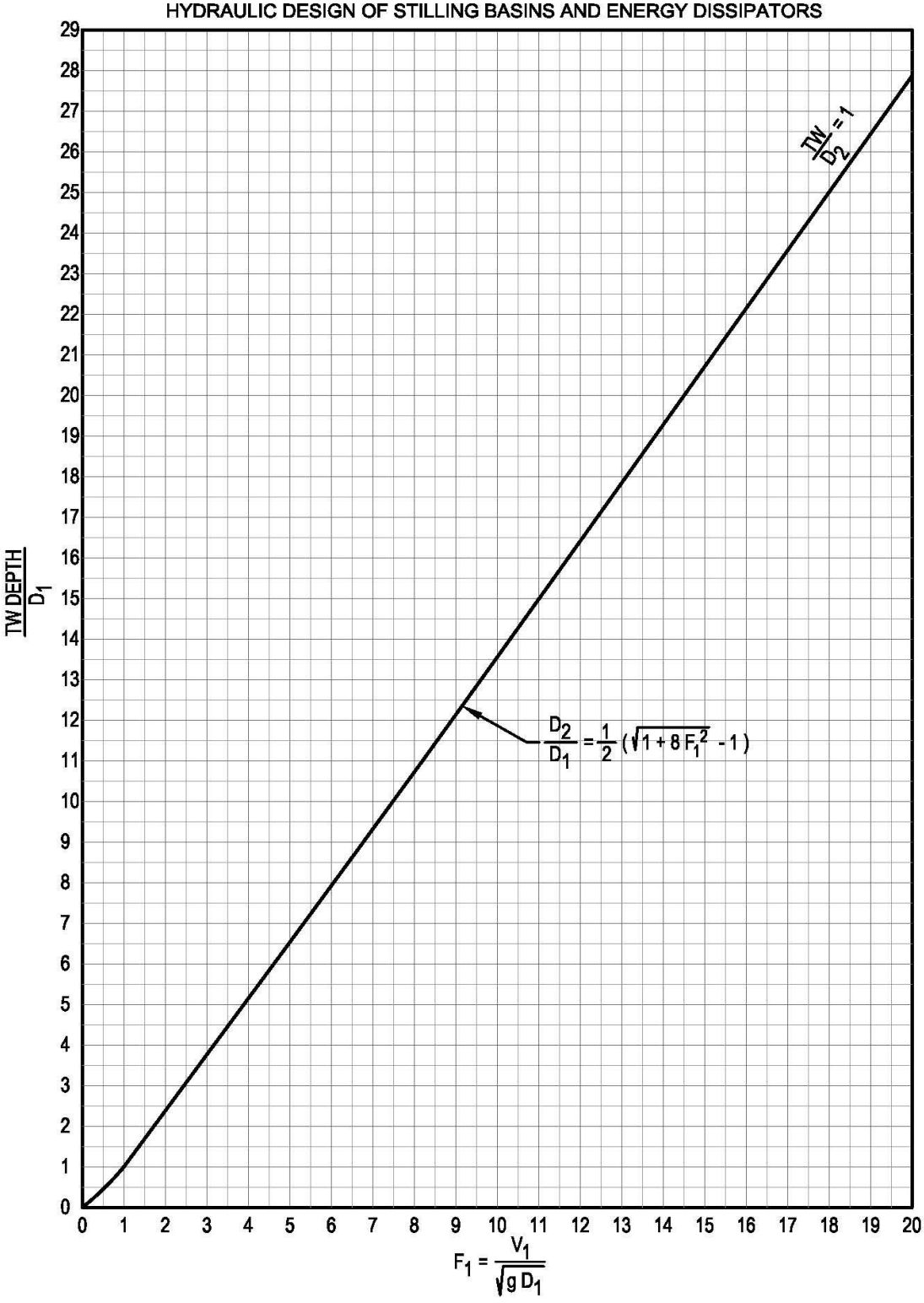


FIGURE5. - RATIO OF TAIL WATER DEPTH TO D_1 (BASIN I)

PLATE 22.3 E-1

LENGTH OF JUMP IN TERMS OF D_1

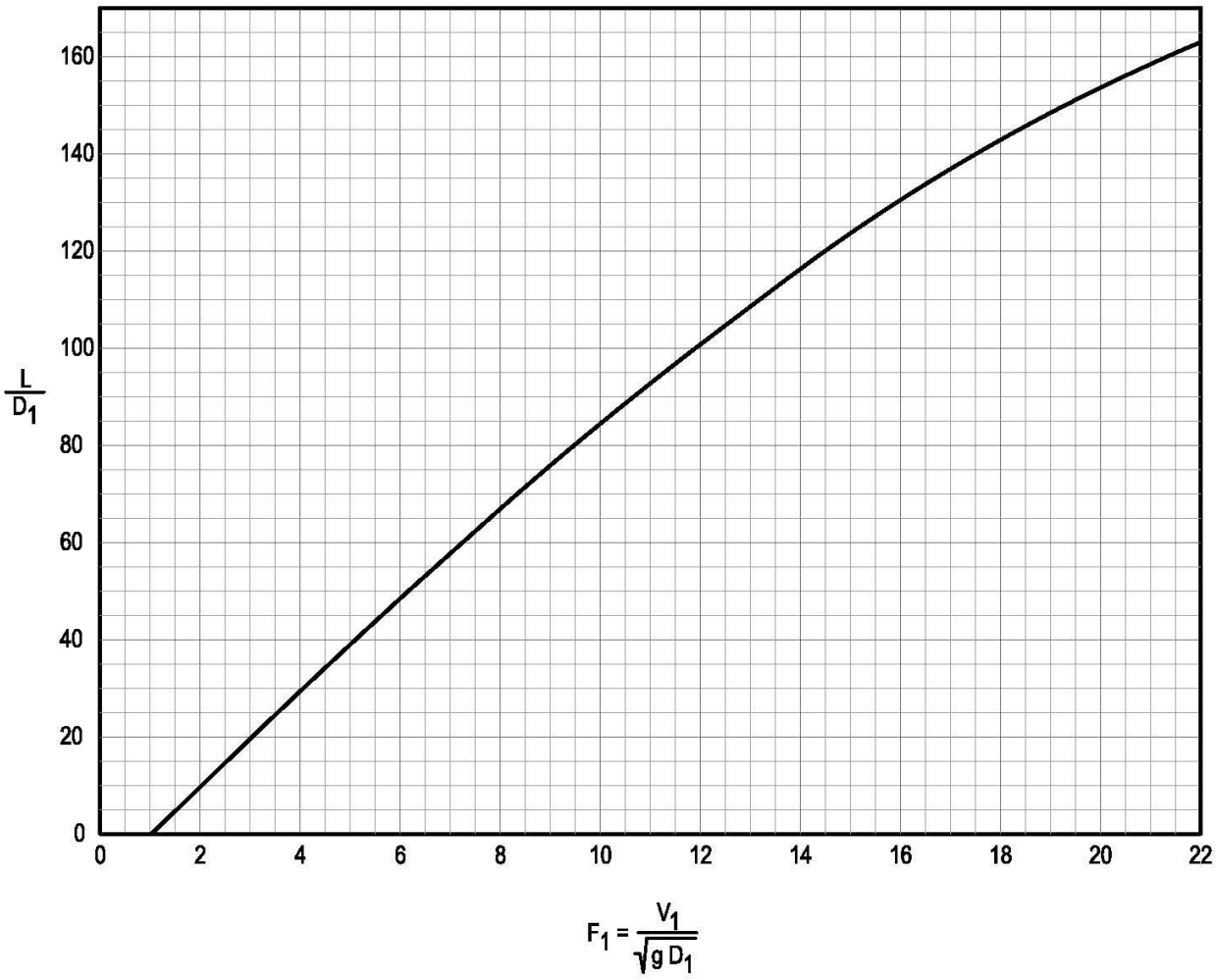


FIGURE 6. - LENGTH OF JUMP IN TERMS OF D_1 (BASIN I)

PLATE 22.3 E-2

3.4.F Berms and Levees

All levees and berms constructed for drainage or flood control purposes, and which are required to contain or convey 50 cfs or more in the event of the 100 year design discharge must conform to the following guidelines:

1. Cross Section
    a. Unarmored faces of berms and levees must have side slopes not steeper than 6:1 (horizontal to vertical).
    b. Rock graveled faces of berms and levees must have side slopes not steeper than 3:1 (horizontal to vertical).
    c. Concrete faced berms and levees will have side slopes of 2:1 (horizontal to vertical).
    d. Berms and levees less than 4.0 feet in height must have a minimum top width of 8.0 feet.
    e. Berms and levees 4.0 feet high and greater must have a minimum top width of 12.0 feet.
    f. All berms and levees must be provided with a structural keyway with bottom width equal to the top width and depth equal to at least one half the height, but not less than 3.0 feet and side slopes not steeper than 2:1 (horizontal to vertical).
2. Certification
    a. All levees and berms shall be inspected during construction and certified by a New Mexico Professional Engineer as to their substantial compliance to the plans and specifications. Certified as-built drawings, accompanied by daily inspection reports, shall also be provided.
3. Berm or Levee
    a. Any berm or levee whose purpose is to divert or convey runoff in a major arroyo shall be specially designed on a case-by-case basis and shall meet or exceed the guidelines listed herein.
4. Freeboard
    a. Berms and levees must be provided with freeboard for the 100-year design flow based on the following guidelines:
        i. For flow depths less than 3.0 feet and not involving a major arroyo; minimum freeboard is 2.0 feet.
        ii. For flow depths 3.0 feet and greater and, involving a major arroyo; minimum freeboard is 3.0 feet.
        iii. If the berm or levee structure is necessary to protect existing property or structures from a FEMA flood plain, FEMA criterion must be complied with in the design and construction of the structure.

5. Bank Protection

   a. All berms and levees expected to convey or divert 50 cfs or more in the event of the 100-year design discharge must be provided with bank protection according to the following guidelines:

      i. Bank protection must be provided wherever design velocities exceed 3 feet/sec.

      ii. Bank protection must be provided on the outside of curves from the beginning of curvature, through the curve and for a distance equal to 5 times the flow velocity in feet downstream from the point of tangency.

      iii. When required, bank protection must be provided to two feet above the design flow depth plus additional depth as required (e.g. superelevation, waves at confluences, hydraulic jumps, etc.).

      iv. Bank protection must extend downward on a projection of the bank slope, to a minimum depth equal to 1.5 times the design flow depth but never less than 3.0 feet. Bank protection for major arroyos shall be accompanied by a City Engineer approved sediment transport analysis.

         NOTE: Berms, dams, levees, and diversions of certain magnitudes and nature may fall within the jurisdiction of the Office of the State Engineer. The design professional is expected to be aware of and comply with regulations promulgated by that jurisdiction.

3.4.G Miscellaneous Hydraulic Calculations

3.4.G.I. HYDRAULIC JUMP

1. Location

   a. If the water surface from a downstream control is computed until critical depth is reached, and similarly the water surface from an upstream control is computed until critical depth is reached, a hydraulic jump will occur between these controls and the top of the jump will be located at the point where pressure plus momentum, calculated for upper and lower stages, are equal.

2. Length

   a. The length of a jump is defined as the distance between the point where roller turbulence begins and water becomes white and foamy due to air entrainment, and the point downstream where no return flow is observable.

      1. For rectangular channels, the length of jump (L) for the range of Froude Numbers between two and twenty, based on flow depth, is given by the following equation:

$$L = 6.9(D_2 - D_1)$$

Where D1 and D2 are the sequent depths.

2. For trapezoidal channels, the length of jump (L) is given by the following equation:

$$L = 5D_2\left(1 + 4\sqrt{\frac{t_2 - t_1}{t_1}}\right)$$

Where:
t_1 = width of water before jump
t_2 = width of water after jump

Side Slope	$L/(D_2-D_1)$
2:1	44.2
1:1	33.5
1/2:1	22.9
Vertical	6.9

3.4.G.II. TRASHRACK HEAD LOSS

The head loss through a trash rack is commonly determined from the following equation:

$$h_{TR} = K_{TR}(V_n/2g)$$

$$K_{TR} = 1.45 - 0.45(A_n/A_g) - (A_n/A_g)^2$$

Where:
K_{TR} = Trashrack coefficient
A_n = Net area through bars, in ft.^{2}
A_g = Gross area of trash rack and supports (water area without trash rack in place), in ft.^{2}
V_n = Average velocity through the rack openings (A/A_n), f.p.s.

For maximum head loss, assume that the rack is clogged, thereby reducing the value of A_n by 50%.

3.4.G.III. SIDE CHANNEL WEIRS

The Los Angeles District Corps of Engineers, as mentioned in Section 3.4.V.IV., has developed a side channel spillway inlet. The City may require this type of structure for drains outletting into their facilities. The Corps' procedure for designing a side channel spillway is as follows:

1. Set the top of that part of the main channel wall at the location of the proposed spillway about 6 inches above the computed water surface level in the main channel.

2. Determine the length of spillway (L) required to discharge the design inflow of the side inlet by the following equation, in which the maximum value of H is not greater than one and one-half feet.

$$L = \frac{Q}{CH^{\frac{3}{2}}}$$

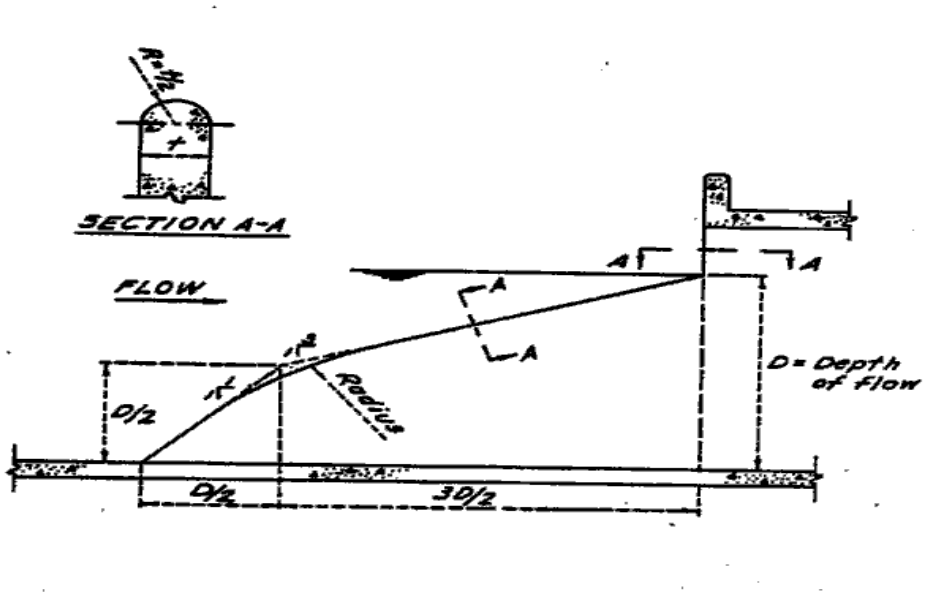
Where:
Q = discharge of side inlet, in c.f.s.
C = weir coefficient
H = depth of water over the crest of the side inlet in feet

3. Determine the depth of flow in the approach side channel at the upstream end of the spillway.
4. Set the side channel invert elevation at the upstream end of the spillway at an elevation below the spillway crest a distance equal to the water depth as determined in 3., above, minus the assumed head on the spillway.
5. Set the side channel invert slope equal to the spillway and the main channel water-surface slopes.
6. By trial, determine the width of the side channel required to maintain a constant depth of flow at several points downstream from the upstream end of the spillway. The discharge at each of these points is assumed to be the difference between the initial discharge less the amount spilled over that part of the spillway as computed by CLH3/2, in which C is 3.087 and H is equal to the critical depth over the crest (neglecting the velocity of approach).
7. Plot the widths thus determined for the side channel on the channel plan and approximate a straight or curved line through them to locate the point of intersection of this line and the main channel wall.
8. If the length between the assumed point at the upstream end of the spillway and this intersection point is equal to the length determined in b., above, the angle at the intersection indicates the required convergence for the side channel.
9. From the final layout determine the width and recompute the water surface in the side channel for the final design. The discharge over each portion of the spillway is calculated by using the average head between the two sections considered.

3.4.G.IV. PIER EXTENSIONS

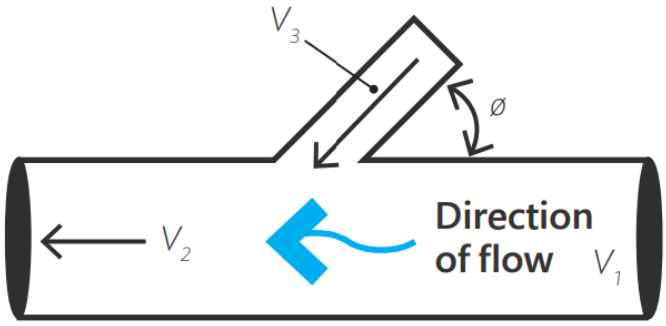
Pier extensions of a streamlined nature should be used when heavy debris flow is anticipated.

In supercritical flow the addition of a specified width to account for the assumed amount of debris may result in impractical and costly structures. In lieu of assuming additional pier width for debris, the use of streamline pier extensions should be investigated. Unless an unusual quantity of debris is anticipated, it can be assumed that the major portion of the debris will not cling to the pier extension. Pier extensions should be designed using the criteria indicated in the figure below.



THOMPSON EQUATION

The Thompson Equation for junctions is described by the following:



Where:

y = difference in hydraulic gradient for the two end sections, in feet,

A_{avg} = average area, in feet2 = 1/6 (A1 + 4Am + A2) or,

A_m = mean area of flow, in feet2

The above equation is applicable only to prismoidal and circular conduits or channels. The friction force may be considered negligible or can be calculated and taken into account. It is recommended that the Thompson equation not be used when an open channel changes side slope going through a junction.

For details of the above method, refer to Office Standard No. 115, Hydraulic Analysis of Junctions, 1968 edition, Storm Drain Design Division, Bureau of Engineering, City of Los Angeles.

In the following compilations:

1. "w", the unit weight of water, has been omitted since it appears in all terms.

2. The assumptions are made that the cosines of the invert slopes equal unity and that the tangents and sines of the friction slopes are equal.

The general equilibrium equation for all cases is:

$$P_2 + M_2 = P_1 + M_1 + M_3 \cos + P_i + P_w - P_f$$

Where:

P_1 = hydrostatic pressure on section 1

P_2 = hydrostatic pressure on section 2

P_i = horizontal component of hydrostatic pressure on invert

P_w = axial component of hydrostatic pressure on walls

P_f = retardation force of friction (S_1 and S_2 are friction slopes - see Kings Hdbk.)

M_1 = momentum of moving mass of water entering junction at section 1

M_2 = momentum of moving mass of water leaving junction of section 2

M = axial component of momentum of the moving mass of water entering the junction at section 3

P = $A\bar{y}$

$\bar{y}$ = distance to centroid from water surface

M = $\frac{Q^2}{s^A}$

3. Determination of Spillway Channel Widths

Using the spillway length determined above, the overflow spillway is laid out (see Plate 22.8 B-3) using widths determined by trial. Upon completing the layout, the spillway widths at 20-foot intervals are taken from the drawing and the outflow is checked.

See computation on Plate 22.8 B-3.

(Note all trials necessary to obtain the desired widths are not shown on the sample problem.)

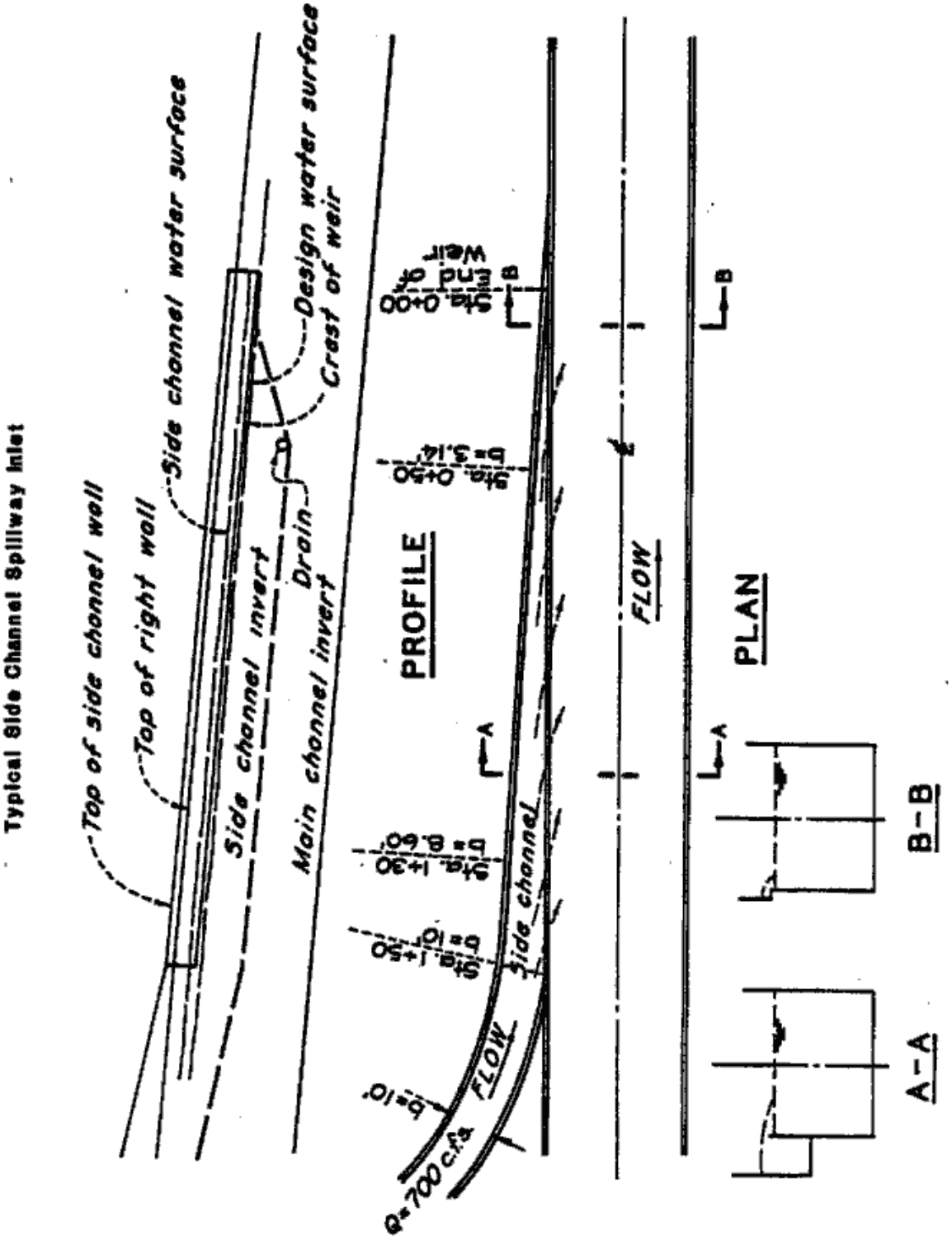
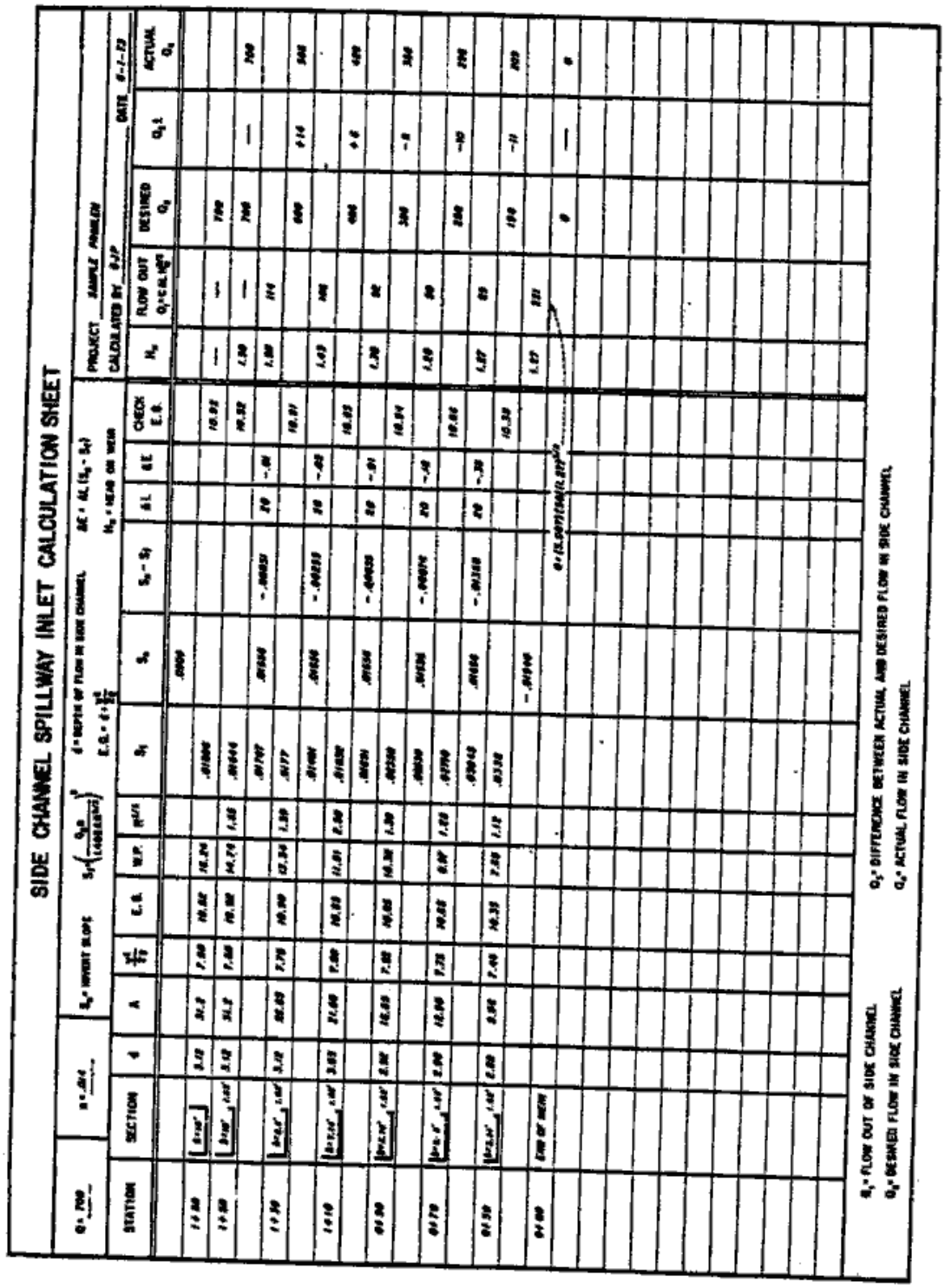

Typical Side Channel Spillway Inlet
Top of side channel wall
Top of right wall
Side channel water surface
Design water surface
Crest of weir
Side channel invert
Drain
Main channel invert
PROFILE
Sta. 0+00 End of Weir
B
Sta. 0+50
b= 3.14'
Sta. 1+30
b= 8.60'
Sta. 1+50
b= 10'
A
Side channel
b= 10'
Q= 700 c.f.s.
FLOW
FLOW
PLAN
B
A
B-B
A-A

PLATE 22.8 B-3



SIDE CHANNEL SPILLWAY INLET CALCULATION SHEET

PROJECT SAMPLE PROBLEM

CALCULATED BY RJP DATE 6-1-73

STATION	SECTION	d	A	$\frac{A}{T}$	E.E.	W.P.	$R^{4/3}$	S_f	S_o	$S_o - S_f$	ΔL	ΔE	CHECK E.E.	H_o	FLOW OUT $Q_o = C L H_o^{3/2}$	DESIRED Q_d	$Q_d - Q_o$	ACTUAL Q_o
1+30									.0060									
	3'x4'	3.12	31.2	7.80	10.82	10.24		.01806					10.93	—	—	190		
1+00	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.01644					10.57	1.30	—	700	—	700
1+30								.01707	.0060	-.00651	20	-.39		1.30	114			
	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.0177					10.91			690	+14	500
1+10								.01841	.0060	-.00655	20	-.42		1.33	140			
	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.01908					10.93			690	+8	499
0+90								.01931	.0060	-.00655	20	-.41		1.30	82			
	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.01980					10.94			190	-8	500
0+70								.01930	.0060	-.00670	20	-.40		1.30	80			
	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.01990					10.95			190	-10	500
0+50								.01943	.0060	-.00160	20	-.30		1.27	80			
	3'x4'	3.12	31.2	7.80	10.80	10.19	1.15	.01510					10.59			190	-11	500
0+00									-.01940					1.27	111			
	END OF WORK									0+(0.0010)(0.01)=0						0	—	0

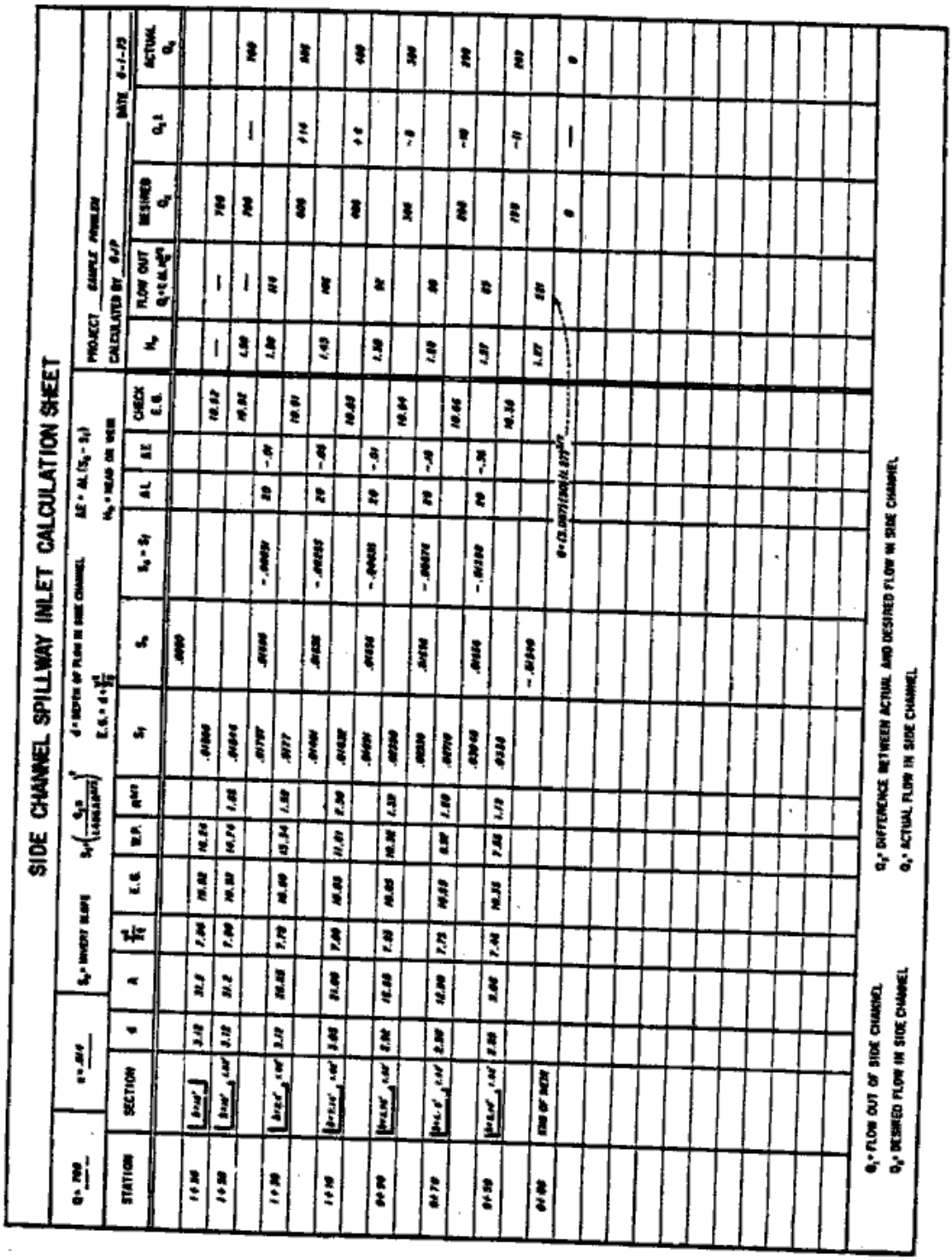
Q_o = FLOW OUT OF SIDE CHANNEL

Q_d = DESIRED FLOW IN SIDE CHANNEL

$Q_d - Q_o$ = DIFFERENCE BETWEEN ACTUAL AND DESIRED FLOW IN SIDE CHANNEL

Q_o = ACTUAL FLOW IN SIDE CHANNEL

PLATE 22.8 B-4



SIDE CHANNEL SPILLWAY INLET CALCULATION SHEET

PLATE 22.8 B-5

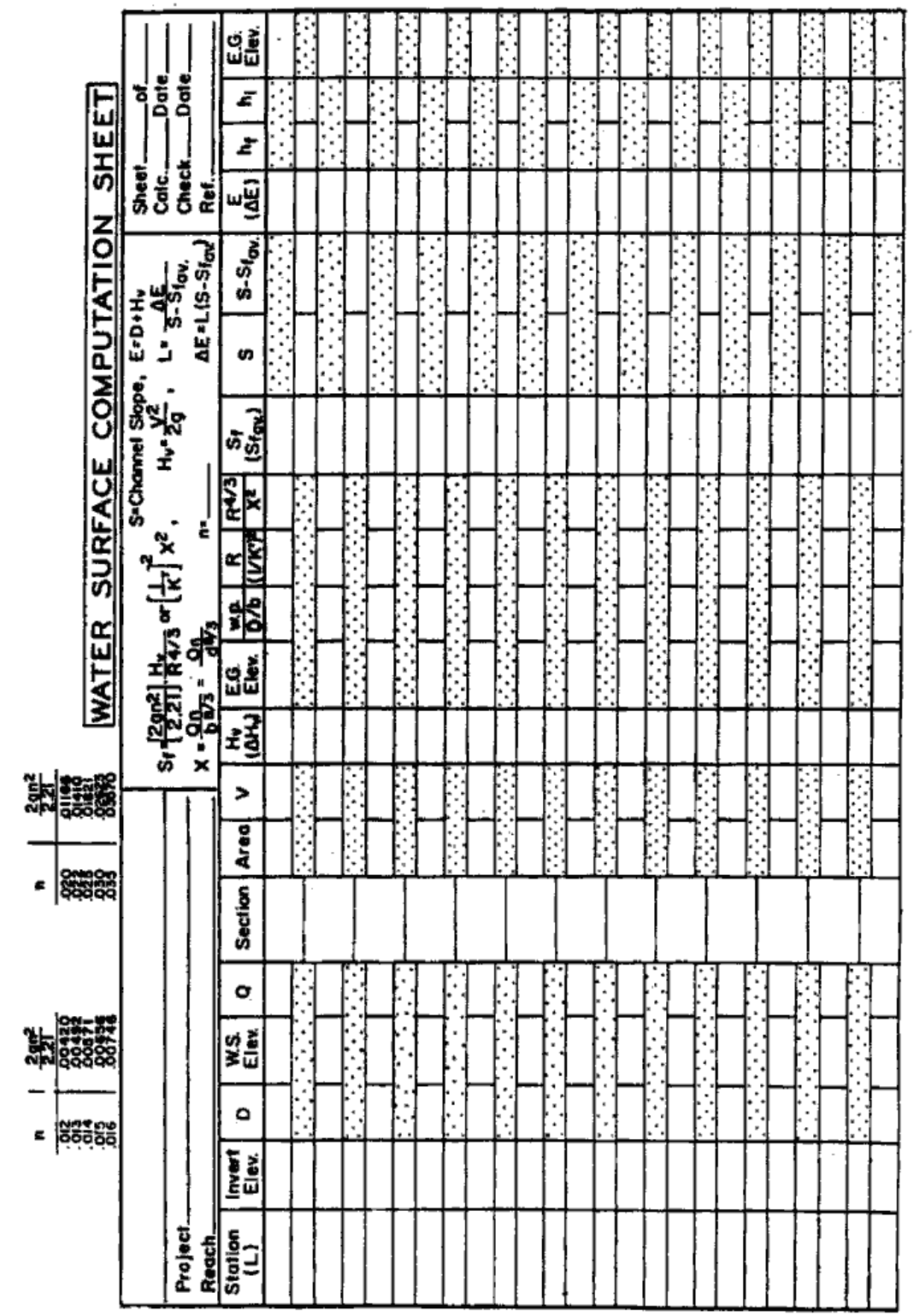
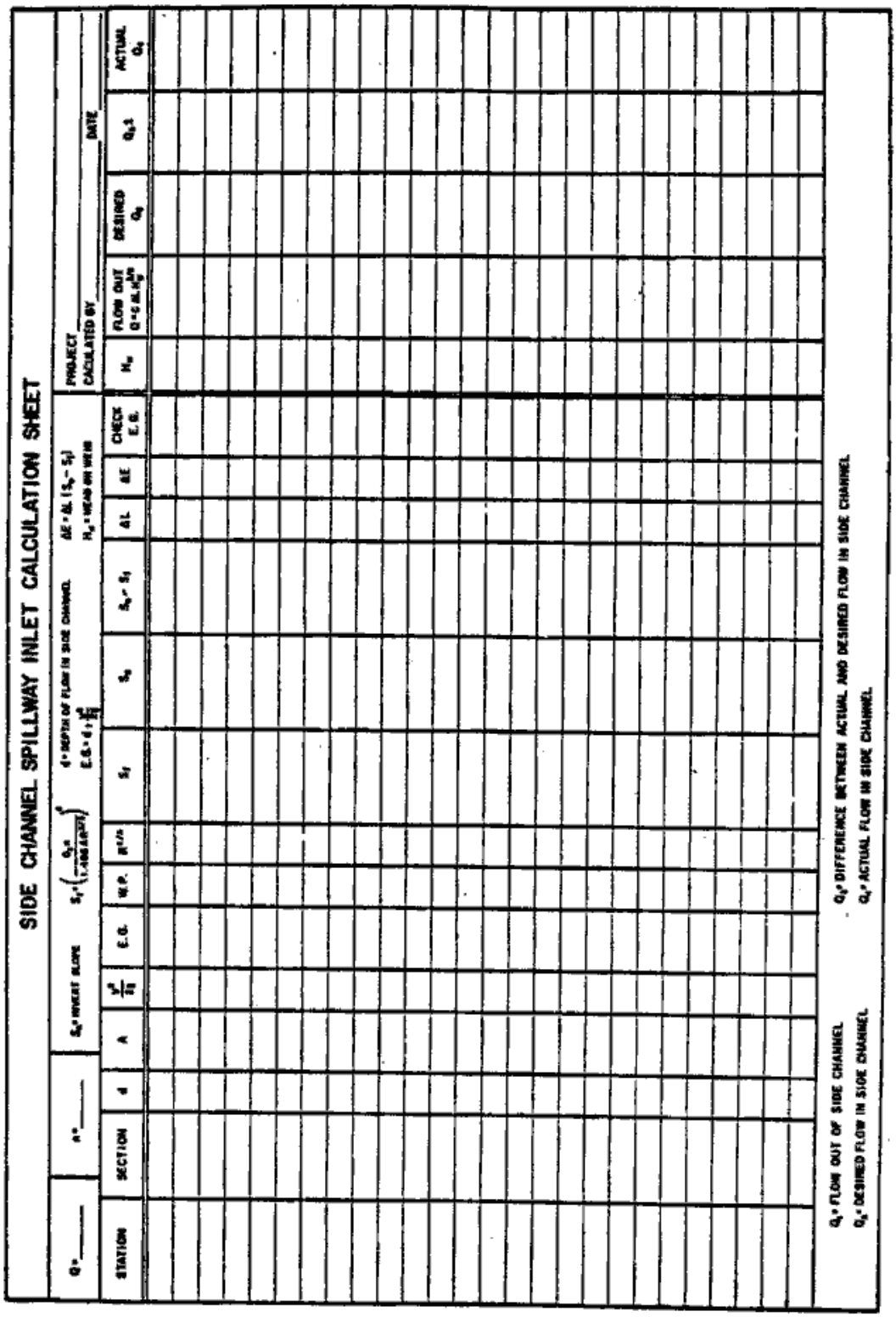

WATER SURFACE COMPUTATION SHEET
Project
Reach
Station (L)
Invert Elev.
D
W.S. Elev.
Q
Section
Area
V
E.G Elev.
w.p. b/b
R
R4/3 X²
Sf (Sfav.)
S
S-Sfav.
E (ΔE)
hf
hl
E.G. Elev.
S-Channel Slope, E=D+Hv
Sheet of
Calc. Date
Check Date
Ref.
n=
ΔE=L(S-Sfav)
n
2gn²/2.21

PLATE 22.8 B-6



SIDE CHANNEL SPILLWAY INLET CALCULATION SHEET

Q = _____ n = _____ S_w = WINGET SLOPE $S_f = \left(\frac{Q_d n}{1.486 A R^{2/3}}\right)^2$ d = DEPTH OF FLOW IN SIDE CHANNEL E.G. = d + $\frac{V^2}{2g}$ $\Delta E = \Delta L\,(S_w - S_f)$ H_w = HEAD ON WEIR

PROJECT _____ CALCULATED BY _____ DATE _____

STATION	SECTION	d	A	$\frac{V^2}{2g}$	E.G.	W.P.	$R^{2/3}$	S_f	S_w	$S_w - S_f$	ΔL	ΔE	CHECK E.G.	H_w	FLOW OUT $Q = C_d L H_w^{3/2}$	DESIRED Q_d	Q_d-1	ACTUAL Q_a

Q_o = FLOW OUT OF SIDE CHANNEL
Q_d = DESIRED FLOW IN SIDE CHANNEL
Q_d = DIFFERENCE BETWEEN ACTUAL AND DESIRED FLOW IN SIDE CHANNEL
Q_a = ACTUAL FLOW IN SIDE CHANNEL

PLATE 22.8 B-7

3.4.H Sediment Transport and Channel Stability

Moving water has the ability to transport sediment. The amount of sediment per unit of water that can be transported is related to flow depth, velocity, temperature, vertical and horizontal channel alignment, the amount of sediment available, the size and density of the sediment available and many other minor but sometimes important parameters. A channel's stability can be defined in terms of its ability to function properly during flood event without serious aggradation and/or degradation and that its continued operation can be relied upon without extraordinary maintenance and repairs. While channel stability problems are largely associated with earth and flexibly lined channels, concrete lined, supercritical channels are not immune. Any time a downstream channel reach has a lower sediment capacity than some upstream reach, there is a potential for sediment accumulation. The following worksheets can be used to make qualitative determinations with regard to channel stability.

Detailed qualitative analyses must be performed for any design requiring construction in a major arroyo.

3.4.H.I. CHANNEL STABILITY WORK SHEET INSTRUCTIONS

A stable earth-lined channel is defined for the purposes of design as one in which neither degradation or aggradation is occurring at such a rate that it causes a continuous and serious maintenance problem. Channel degradation can cause extensive damage to bridges and other crossing structures due to the undermining of their foundations. Channel aggradation on the other hand results in reduced channel and crossing structure capacities and, therefore, in increased frequency of flooding.

3.4.H.I.a. CHANNEL STABILITY WORK SHEET – A

The Proposed Development or Land Use Change Will Affect:	In the Following Way:		
	No Change	Increase	Decrease
Flow Rates			
Flow Velocities			
Flow Frequencies			
Flow Duration			
Flow Depth			
Sediment Reaching			
the Channel			
Sediment Particle Size			
Streambed Material Size			
Channel Vegetation			

3.4.H.I.b. CHANNEL STABILITY WORK SHEET – B

An Increase or Decrease In:	Will Have the Following Effect in the Channel	
	Increase	Decrease
Flow Rate……	Degradation	Aggradation
Flow……	Degradation	Aggradation
Flow Frequency……	Degradation	Aggradation
Flow Duration……	Degradation	Aggradation
Flow Depth……..	Degradation	Aggradation
Sediment Reaching the Channel ….	Degradation	Aggradation
Sediment Particle Size……..	Degradation	Aggradation
Streambed Material Size ……..	Degradation	Aggradation
Channel Vegetation ……..	Degradation	Aggradation

3.4.H.II. CHANNELS

1. Earthwork
    a. The following shall be compacted to at least 95% of maximum density as determined by ASTM D-1557 (modified Proctor):
        i. The 12 inches of subgrade immediately beneath concrete lining (both channel bottom and side slopes).
        ii. Top 12 inches of maintenance road. (either as subgrade or finished roadway if unsurfaced).
        iii. Top 12 inches of earth surface within 10 feet of concrete channel lip. It is particularly important to compact earth immediately adjacent to concrete lip. This area is sometimes overlooked when forms are removed.
        iv. All fill material.
2. Concrete
    a. All concrete channels shall be continuously reinforced.
    b. All exposed concrete drainage structures shall be tinted with San Diego Buff or a color approved by the City Engineer.
    c. Materials
        i. Cement type: ILA or I-IILA
        ii. Minimum cement content: 5.5 sacks/c.y.
        iii. Maximum water-cement ratio: 0.53 (6 gals. per sack)

iv. Maximum aggregate size: 1 ½ inches

v. Air content range: 4-7%

vi. Maximum slump: 3 inches

vii. Minimum compressive strength (fc): 3500 psi @ 28 days

viii. Class F Fly ash meeting the requirements of ASTM C618 shall be proportioned in the mix at a 1:4 ratio of fly ash to cement weight.

ix. Steel reinforcement shall be a minimum of grade 60 deformed bars. Wire mesh shall not be used, however welded wire mats are allowed.

d. Lining Section

i. Where appropriate, the City supports maintaining unlined channel bottoms as much as possible (in coordination with SSCAFCA Resolution 2022-05). When required, concrete lined channels must follow the following criteria.

(1) Bottom width - 10 feet minimum.

(2) Side Slopes - 1 vertical to 2 horizontal slope, or flatter.

(3) Concrete lining thickness.

(a) All concrete lining shall have a minimum thickness of 8 inches.
(b) The lining shall be thickened to 10 inches on the channel bottom and lower 18 inches of the side slope when design velocity exceeds 25 feet per second. This will provide an additional top two inches of sacrificial concrete. Steel placement shall be based upon the standard 8" thickness as measured from the bottom of the concrete lining.

(4) Concrete Finish

(a) The surface of the concrete lining shall be provided with a tined finish. Pneumatically applied "shotcrete" is an acceptable concrete lining alternative and does not require a tinned finish, but it must be preapproved by the City. Precautions shall be taken to guard against excessive working or wetting of finish.

(5) Concrete Curing

(a) All concrete shall be cured by the application of liquid membrane-forming curing compound (white pigmented) immediately upon completion of the concrete finish.

(6) Steps

(a) Ladder-type steps shall be installed at locations suitable for rescue operations along the channel but not farther than 700 ft. apart on both sides of the channel. Bottom rung shall be placed approximately 12 inches vertically above channel invert.

e. Joints

i. Insofar as feasible, channels shall be continuously reinforced without transverse joints. However, expansion joints may be installed where new concrete lining is connected to a rigid structure or to existing concrete lining which is not continuously reinforced.

ii. The preferred design avoids longitudinal joints. However, if included, longitudinal joints should be on side slope at least one foot vertically above channel invert.

iii. All joints shall be designed to prevent differential displacement and shall be watertight.

iv. joints are required at the end of a day's run, where lining thickness changes.

f. Reinforcing Steel for Continuously Reinforced Channels.

i. Ratio of longitudinal steel area to concrete area not including additional thickness of sacrificial concrete.

$$\frac{A_s}{\text{long}} \Big/ \frac{A_c}{\text{long.}} \geq .005$$

(a)

ii. Ratio of transverse steel area to concrete area not including additional thickness of sacrificial concrete.

$$\frac{A_s}{\text{transv.}} \Big/ \frac{A_c}{\text{transv.}} \geq .0025$$

Note: In (a) and (b) above As = crossectional area of steel in the direction indicated; Ac = crossectional area of concrete in the direction indicated. Longitudinal = long.; transverse = transv.

ii. Steel Placement: Temperature and shrinkage steel shall be placed so as to be in the top of the middle third of the slab, but at least 3" from the bottom of the slab. Longitudinal steel shall be on tip of the transverse steel. (NOTE: Inspectors must insure this requirement is not violated by contractors during pouring operations.)

3.4.H.III. EARTHWORK FOR LEVEES AND BERMS

All earthfill berms and levees shall be constructed of high-quality fill material free of debris, organic matter, frozen matter and stone larger than 6 inches in any dimension. The key trench shall be scarified to a depth of 6 inches to ensure bonding with the fill material. Lifts shall not exceed 12 inches of loose material before compaction. The material in each lift shall contain optimum moisture content (-1% to +3%) and shall be compacted to at least 90% and not more than 95% of maximum density as determined by ASTM D 1557 or as

recommended by a geotechnical engineer and accepted by the City Engineer. Proper bonding between lifts shall be guaranteed by scarifying each lift after compaction to a depth of at least 3 inches.

Levees and berms intended to provide flood protection for properties and structures shall comply with all FEMA requirements for removal from a 100-year floodplain. A minimum 3' freeboard above the high-water elevation is required on all levees and berms.

3.5 Channel Treatment Selection Guidelines

3.5.A General

The selection of a treatment type or of a combination of treatment types for a channel within the City area should be based on an assessment of the needs of the community as they relate to:

- System Failure.
- Safety.
- Safety System Impacts.
- Adjacent Treatment Types.
- Operation and Maintenance.
- Initial Costs and Life Expectancy.
- Costs Including ROW.
- Joint use Possibilities.
- Water Quality Impacts.

These items are briefly described below:

3.5.B Flood Control

The magnitude of the flood control requirements and the consequences of a system failure should be considered foremost in the treatment selection process.

3.5.C Drainage

The existing and future land uses, the specific on- and off-site drainage treatments, and watershed topography should each be evaluated in terms of their impacts on the channel system. The unmitigated hydrologic effects of urbanization generally include higher peak runoff rates from smaller, more frequent storms, cleaner runoff (with respect to sediment), and increased annual runoff volumes.

3.5.D Maintenance

The selection of a channel treatment type should include analyses of both short- and long-term maintenance. While maintenance efforts will vary between treatment types, all facilities should be able to function through one runoff event with no maintenance, through one flood season with very little maintenance and from season to season with regular, but minimal maintenance requirements.

3.5.E Rights-of-Way and Easements

The cost of land and the availability of rights-of-way or easements should be considered in the channel treatment selection process. Rights-of-way and easements should be appropriately located, aligned and sized for the particular treatment type. Some treatment types may require significant construction easements, but much smaller permanent rights-of-way or easements. The likelihood of replacement or reconstruction should be considered when channel treatment selection is balanced against the configuration of permanent rights-of-way and easements.

3.5.F Safety

The selection of a channel treatment type should be based on any special safety considerations dictated by adjacent or nearby land uses. Whenever a required channel treatment is not compatible with adjacent land uses, adequate safety hazard mitigation measures should be incorporated into the design and construction of the facilities. Channels with vertical walls of 30 inches or greater will require a barrier or fence. Minimum fence or barrier height shall be 42 inches.

3.5.G Upstream and Downstream Channel Treatments

The treatment selection process for each channel reach should include an analysis of the impacts of existing and planned upstream and downstream treatment types on a proposed treatment type and, in turn, the effects of the proposed treatment on existing and planned upstream and downstream treatments.

3.5.H Initial Cost and Life Expectancy

The initial construction costs of various channel treatment types are and will always be one of the more heavily weighted factors in the selection process. However, when viewed on a larger scale, maintenance and replacement costs can be more important to the total costs of providing adequate levels of protection over time, and therefore must be considered in the planning, design and construction of channel treatment measures.

3.5.I Joint Use Possibilities

The opportunities for including other uses such as transportation and utility corridors, open space or recreation in the design should be considered when selecting a treatment type and when establishing rights-of-way and easements. The inclusion of any other uses must be self-supporting financially and in no way impair or delay the implementation of the drainage and flood control function of the facilities. Operations and Maintenance of these joint use facilities must also be considered. SSCAFCA will only operate and maintain regional drainage and flood control facilities in accordance with their current policies.

3.6 Design Grading and Erosion Control

3.6.A Slope Criteria

Earthen slopes shall confirm to the following:

Maximum slope should not be steeper than 6:1 (horizontal to vertical) unless protected from erosion and slope failure through City Engineer approved means.

3.6.B Grading near the Property Line

Particular attention must be given to grading (either cut or fill) near property lines. Care should be taken to ensure that existing foundations, retaining walls, stable slopes or other structures are not endangered and that the adjacent property is not or will not be damaged, or its use constrained due to grading at or near the property line. Grading must accommodate runoff onto the site and ensure discharge to the historic drainage location at or below the historic flow rates, unless an alternative is approved by the City Engineer in writing.

3.6.C Grading In and Adjacent to Major Facilities

No grading, excavation, or fill may take place in or adjacent to any watercourse defined as a major facility without express written approval from the City Engineer. Construction activities within major facilities shall provide for the safe passage of the 100-year design flow especially during the months of June, July, August and September. Construction activities in arroyos shall provide procedures and install systems that ensure the safety of the pubic and personnel from runoff events. Particular attention shall be given to potential runoff from flash floods occurring upstream of the facility.

3.6.D Floodplain Development

No floodplain development will be permitted within a FEMA Special Flood Hazard Area (A or V zone designations) without an approved drainage report and financial guarantees for the permanent improvements. Development of critical facilities within a FEMA recognized 500 year floodplain must be designed and constructed in such a manner as to protect the critical facility from a 500 year event.

3.6.E Violations as to Construction Or Site Alteration

No grading or other alteration of a site shall take place:

1. Prior to approval of an infrastructure list/preliminary plat, building permit or development plan by the City, if the grading or site alteration is related to a proposed subdivision.
2. Prior to approval of a drainage plan or report, or a determination by the City Engineer/ that no such plan or report is required.
3. Contrary to the provisions of a drainage plan or drainage report or to the specifications of a preliminary or final plat, approved under the provisions of this section.
4. Prior to the submittal of a construction schedule for the proposed drainage infrastructure improvements/grading.
5. Prior to the issuance of any permits required pursuant to this section.
6. Prior to submittal of financial guarantees required by the City.
7. Prior to:
    a. Submittals and review of Storm Water Pollution Prevention Plan
    b. Filing and activation of Environmental Protection Agency Notice of Intent
    c. Installation of Best Management Practices per Storm Water Pollution Prevention Plan

d. USACE 404 permit approval, if required.

3.6.F Erosion and Stormwater Pollution Control

All grading within the City of Rio Rancho must be performed in a manner which prevents the movement of significant and damaging amounts of sediment onto adjacent property and public facilities by both water and wind, and minimizes the impacts to stormwater runoff quality. Every project involving the grading of more than 1.0 acre or the importation or excavation of more than 500 cubic yards of soil must be accompanied by an erosion control plan accepted by the City Engineer. All grading shall conform with EPA Stormwater Regulations. See Chapter 2.10.Q for detailed information on the Stormwater Pollution Prevention Plan. All required stormwater pollution improvements/drainage infrastructures must be constructed at the start of the project.

1. Construction Phase:

It is the responsibility of the contractor to implement the erosion and stormwater pollution control plans during the construction phase. Repair of damaged facilities and clean-up of sediment accumulations on adjacent property and in public facilities is the responsibility of the contractor. Failure to do so promptly may result in a "stop-work order" being issued that will remain in force until repair and clean-up is completed to City Engineer satisfaction. All exposed earth surfaces must be protected from wind and water erosion prior to final acceptance of any project. The continued maintenance of these protective measures is the responsibility of the owner or his assigns. Penalties will be assessed for graded sites left inactive for fourteen (14) days or more as provided for in the City's Drainage Ordinance.

2. Phased Construction:

Areas graded in conjunction with phased projects, but not left in their permanent condition must be protected during the interim from wind and water erosion and must not increase stormwater pollution from the existing pre-project conditions per City policies.

3.6.G Means of Erosion Control

There are numerous mechanical and vegetative methods for preventing soil erosion. The U.S. Environmental Protection Agency Publication EPA-R2-72-OIS Guidelines for Erosion and Sediment Control Planning and Implementation, New Mexico Department of Transportation Manual and the local U.S.D.A. Natural Resource Conservation Service Office can provide numerous, inexpensive and effective erosion management techniques.

1. The soils in the City's jurisdiction are highly erosive requiring special attention during the design, construction and post construction phases of development.
2. Methodology
    a. The SSCAFCA Erosion and Sediment Design Guide will be the basis for analysis and evaluation of erosion control, sediment transport, sediment deposition and related issues.
3. Erosion and Sediment Generation

a. Erosion, both on-site, off-site and from natural arroyos and channels shall be considered and incorporated in the analysis, evaluation and design of site development. The volume of sediment in the off-site flow, determined from the sediment bulking factors as defined in the hydrologic analysis procedures in section 3.4, will be the minimum volume of sediment generation considered in evaluating downstream capacity.

4. Sediment Transport

    a. Sediment generation, transport and deposition shall be considered in the drainage and flood control system analysis and design and in determining downstream capacity.

3.6.H Pond/Dam Design

1. Detention Ponds: Detention ponds shall not be constructed in public street rights-of-way. Discharge from the detention pond(s) shall be conveyed to public infrastructure capable of containing the release. Such infrastructure may be streets and channels. The means of conveyance to the public infrastructure shall be approved by the City. If flows may be conveyed by pipes smaller than 24" then 24" pipe shall be used with an appropriately sized orifice plate. Detention ponds shall be sized to provide a storage capacity for the 100 year 24 hour storm plus 1 foot of freeboard and to empty within 24 hours. Percolation and evaporation may only be considered if supported by calculations and data for the specific location of the pond. Regional soil data will not be accepted.

2. Retention Ponds: Retention ponds are not generally allowed. Retention ponds must be approved by the City Engineer. If retention ponds are approved by the City Engineer they shall not be constructed in public street rights-of-way. Retention ponds shall be sized to provide storage capacity for twice the volume of the 100 year 24 hour storm plus 1 foot of freeboard. A maintenance plan shall be provided to and approved by the City Engineer. The plan shall contain at a minimum:

    a. Treatment procedures for water that remains in the pond for more than 24 hours.

    b. Names and telephone numbers for contacts responsible for the treatment and maintenance of the pond.

    c. Time frame for the existence of the retention pond.

3. At the City Engineers discretion, retention ponds may be required to have a maintenance financial guarantee.

4. Individual on Lot Ponds: Individual on lot ponds are not allowed in "planned subdivisions" even if such planned subdivisions are using existing (premature) platting. For the purpose of this ordinance a planned subdivision is defined to mean: Any area of land within the jurisdiction of the City that has either previously been divided or will be divided in accordance with an approved plan. For previously divided land it shall either be owned by a single entity or advertised or sold under a common promotional plan. NMSA 1978 (Supp. 1981) section 47-6-2(K).

5. Access: Access into a facility shall be opposite the outlet if possible with a minimum width of 12 feet. Maximum access slope shall be 10:1 or flatter. Standard design tube or pipe gates shall be installed to restrict vehicle access. Gates shall be set back 50 feet from arterial or collector streets so equipment does not have to park in the street.

6. Spillways: Principal spillways shall be designed, at a minimum, for the 100 year fully developed condition and shall always be provided, be erosion resistant, and discharge to a public right-of-way, drainage easement and/or historic flow path.

    a. Emergency spillways for ponds shall be designed, at a minimum, for the 500-year storm event for fully developed conditions and discharge to a public right-of-way, drainage easement and/or historic flow path.

    b. Emergency spillways for dams shall be designed, at a minimum, to meet the Office of the State Engineer criteria and discharge to a public right-of-way, drainage easement and/or historic flow path.

7. Outlets:

    a. Facility outlets shall always be gravity flow whenever feasible and located in a corner or accessible edge of facility, opposite of facility access point if possible. Outlet pipe shall be a minimum of 24 inches in diameter with a slope such that when flowing at ¼ full, velocity is 2 fps or greater.

    b. The outlet will be surrounded by a stabilized grade pad appropriately sized for maintenance with a minimum of 6 feet of stabilized grade in all directions.

    c. To protect downstream properties, outlets may be sized to restrict flows below historic or existing conditions at the sole discretion of the City Engineer.

8. Pond Bottoms:

    a. Facility bottoms shall be designed to convey nuisance flows from the inlet to a storm water pollution prevention feature (such as a pervious bottom area for infiltration) prior to discharging to the outlet. Ease of maintenance shall be a consideration in all dams/detention basins. A feature such as a low flow channel having minimum dimensions of 3’ wide by 8” thick, structurally reinforced concrete with a 1” invert shall be considered to allow maintenance crews a non-saturated, hardened surface to perform maintenance and provide a grade check in the bottom of the basin. Special care should be given to ensure that the channel is not under-cut. Each dam/detention basin should be evaluated with regard to such features as ease of maintenance, water quality, desirability of vegetation and habitat, effect on neighborhoods (odors, mosquitoes, vectors), stability/safety of the foundation and embankment, well wash water and possible recharge.

    b. The minimum pond bottom slope is 0.5%, both cross slope and longitudinally.

9. Side Slope and Bottom Treatments:

    a. Vegetation will be accepted if seeded per the New Mexico APWA Standard Specifications for Public Works Construction, most recent edition.

    b. Side slopes shall be treated with gravel mulch per New Mexico APWA Standards Specifications for Public Works Construction, most recent edition.

    c. A geotechnical investigation and report will be required.

10. Minimum Pond Size: In order for a pond to be publicly maintained by the City, it must be a minimum of two (2) acre-feet.

11. Fencing: Detention ponds will require five (5) strand barbless wire fencing with wooden posts in accordance with the City Standard Details.

12. Drainage: All detention ponds must be evacuated in twenty-four (24) hours or less, unless discharge is limited by downstream constraints. In any event, all ponds shall be evacuated within 96 hours unless approvals are received from both the City and the Office of the State Engineer. Ponds that take more than six (6) hours to drain will be designed for a design storm equal to or exceeding the evacuation time. No percolation credit for volume reduction will be given.

13. Signage: All ponds shall have a sign fixed to the fence, in the vicinity of the access gate and visible to the public, that designates the name of the facility and the agency or organization responsible for maintaining the pond. The sign location and sign face shall be included in the infrastructure plans.

14. Freeboard: All ponds shall have a minimum of one (1') foot of freeboard above the 100-year, 24-hour period.

15. In-Pond Sediment Storage: An evaluation shall be performed to ensure sufficient in pond storage of sediment deposited during a 100-year event will not affect the functional capability of the structure.

16. Sediment Stock Pile and Transport Provision: An evaluation shall be performed to how sediment and debris shall be removed from the facility and transported offsite.

3.6.I Temporary Ponds

1. Interim or temporary facilities shall be protected by a covenant. These covenants may cover a tract of land larger than needed for the final permanent facility in lieu of financial guarantees.

2. An emergency spillway must be provided that will safely convey the 100 year design flow entering the pond.

3. Temporary ponding may be allowed if the owner performs all operations and maintenance, accepts all liability and owns the downstream property. City approval is required.

3.6.J Private Storm Drain Improvements Within Public Rights-of-Way and/or Easement.

Frequently a grading and drainage plan developed for a particular property involves either discharge directly into a public facility or across a portion of a public right-of-way to a public facility. Examples include connections to the back of an existing storm inlet, construction of sidewalk culverts or a connection to a storm drain manhole or a channel. When such solutions are employed the construction of private storm drain improvements within the City's rights-of-way must comply with the following requirements:

1. Professional Engineer's stamp with signature and date.

2. Vicinity map.

3. North Arrow.

4. Plan drawings size 24"x36".

5. Address of the project.

6. Detail of the proposed improvements:

    a. All work details on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in agreement with the New Mexico APWA Standard Specifications for Public Works Construction.

7. An excavation permit will be required before beginning any work within City of Rio Rancho City's right-of-way. An approved copy of these plans must accompany the application for permit.

8. Two working days prior to any excavation, contractor must contact Line Locating Services for location of existing utilities.

9. Backfill compaction shall be according to City Standards.

10. Maintenance of these facilities shall be the responsibility of the owner of the property served. Include this maintenance note on the plan.

11. A signature block for approval by either the City Engineer.

12. A signature block for approval by either the City Engineer's inspector.

Note #1: If the proposed improvements are part of a building permit application, this information can be incorporated on the appropriate drainage submittal.

Note #2: Private Storm Drain Improvements within City's ROW is not allowed without City's approval.

3.7 Rights-Of-Way And Easements

3.7.A Rights-of-Way

Projects on/with SSCAFCA owned and/or maintained facilities must have an agreement in place with SSCAFCA.

Land necessary for permanent drainage, flood control or erosion control facilities or major arroyos that the City will ultimately maintain/control, must be dedicated fee simple to operation and maintenance.

3.7.A.I. DEDICATION LANGUAGE

The real estate shown and described in this plat is surveyed with the free consent of and in accordance with the wishes and desires of the undersigned Owner(s) thereof, and the Owner(s) of such real estate do hereby dedicate all drainage rights-of-way which are shown hereon including parcels _____ to [insert name of the entity], a political subdivision of the State of New Mexico, in fee simple with warranty covenants. Subject to the easements shown or noted hereon, and do hereby grant any and all easements shown or noted on the plat including the right of ingress and egress.

3.7.B Easements

Projects on/with SSCAFCA owned and/or maintained facilities must have an agreement in place with SSCAFCA.

Easements for drainage, flood control and erosion control facilities are acceptable in rare, special occasions as long as a clear written and approved agreement exists as to other acceptable uses and no permanent facilities are constructed within them (including masonry fences and retaining walls but excluding pavement) without an agreement between the owner and the City governing the permitted uses. High hazard structures can only be constructed on publicly owned property.

3.7.C Configuration

Rights-of-way and permanent easements required for drainage, flood control and erosion control facilities will conform to the following criteria:

3.7.C.I. SURFACE FACILITIES

The dedicated area shall contain the entire facility including any slopes, maintenance roads, turn arounds or other necessary appurtenances, and may not be less than 10 feet wide.

3.7.C.II. UNDERGROUND FACILITIES

Dedicated areas for underground facilities may be not narrower than 20 feet for any facility defined as a major facility and must conform to the formula:

$$W = 2 \cdot D_i + pipe\ diameter\ +\ 4feet$$

Where:
W = dedicated width in feet
Di = depth to invert

For box conduits or arch pipes use the inside vertical dimension rather than inside pipe diameter.

Pipe should be installed within the easement to allow for stockpiling of material.

3.7.D Designation Language

3.7.D.I. DRAINAGE FACILITIES AND/OR DETENTION AREAS MAINTAINED BY LOT OWNER

Areas designated on the accompanying plat as “drainage easement” [“detention areas”] are hereby dedicated by the owner as a perpetual easement for the common use and benefit of the various lots within the subdivisions for the purpose of permitting the conveyance of storm water runoff and the constructing* and maintaining of drainage facilities [storm water detention facilities] in accordance with standards prescribed by the City of Rio Rancho. ** No fence, wall, planting, building or other obstruction may be placed or maintained in said easement area without approval of the City Engineer, and there shall be no alteration of the grades or contours in said easements area without the approval of said City Engineer. It shall be the duty of the lot owners of this subdivision to maintain said drainage easement [detention area] and facilities at their cost in accordance with standards prescribed by the City. The City shall have the right to enter periodically to inspect the facilities. In the event said lot owners should fail to adequately and properly maintain said drainage easement [detention area] and facilities, at any time following fifteen (15) days written notice to said lot owners, the City may enter upon said area, perform said maintenance, and the cost of performing said maintenance shall be paid by said lot owners proportionately on the basis of lot ownership. In the event said lot owners fail to pay the cost of said maintenance or any part thereof within

thirty (30) days after demand for payment made by the City, the City may file a lien therefor against all lots in the subdivision for which proportionate payment has not been made. The obligations imposed herein shall be binding upon the owner, his heirs, and assigns and shall run with all lots within this subdivision.

The Grantor agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Grantor's failure to construct, maintain, or modify said drainage facility.

*This assumes owner's promise to construct will be imposed by a separate agreement.
** [Possible alternative:] Grantor shall construct drainage [detention] facilities in the easement in accordance with standards prescribed by the City and plans and specifications approved by the City Engineer in accordance with the drainage report entitled _____, submitted by _____ on, _____ and approved by the City on _____, together with the amendments approved on _____, which report and amendments are on file in the office the City Engineer.

3.7.D.II. DEDICATION OF DRAINAGE EASEMENTS: OWNER CONSTRUCTS AND MAINTAINS

A perpetual easement on the areas designated on this plat as "drainage easement" ["detention area"] is here by dedicated to the City of Rio Rancho for the purpose of permitting the conveyance of storm water runoff and for the purpose of constructing, maintaining, operating, removing, and replacing storm water drainage facilities [detention facilities]. No fence, wall, planting, building, or other obstruction may be placed or maintained in said easement area and there shall be no alteration of the grades or contours in said dedicated area without the approval of said City Engineer. No obstructions may be placed in said easement area which would prevent ingress and egress to same by maintenance vehicles or which would prevent said vehicles traveling on said drainage way for maintenance purposes.

*The City could require dedication of this property in fee simple since the City here will be responsible for maintenance. The beginning of the first sentence could read: "the areas designated on this plat as 'drainage facilities' are hereby dedicated to the City of Rio Rancho in fee simple for the purpose of _____." We might then add: "the City may use the property hereby dedicated for other public purposes."

3.7.D.III. GRANT OF DRAINAGE EASEMENT

This easement grant is made and executed this _____ day of _____

20___, by and between _____, hereinafter

called the "Grantor" and the City of Rio Rancho, New Mexico, a municipal corporation, hereinafter call the "City"

1. The Grantor is the owner of the following described real property within the City of Rio Rancho:

2. * For Good and valuable consideration, the receipt of which is hereby acknowledged, Grantor does hereby grant and deliver to the City of Rio Rancho a perpetual easement over and across a portion of Grantor's property for the purpose of permitting the flow, conveyance, and discharge of storm water runoff. [For the purpose of constructing and maintaining a storm water detention facility].

3. The land affected by the grant of this easement and right-of-way is more particularly described as follows:

4. ** Grantor shall construct drainage [detention] facilities in the easement in accordance with standards prescribed by the City and plans and specifications approved by the City Engineer.

5. The easement and any drainage facilities constructed thereon shall be maintained by the Grantor, at his cost, in accordance with standards prescribed by the City. The City shall have the right to enter periodically upon the premises to inspect the drainage facilities.

   ==========

   * [Alternative purpose:] Storm water detention

   ** [Possible alternative:] Grantor shall construct drainage detention] facilities in the easement in accordance with standards prescribed by the City and plans and specifications approved by the City Engineer in accordance with the drainage report entitled _____, submitted by _____ on _____, and approved by the City Engineer on _____ together with the amendments approved on _____, which report and amendments are on file in the office of the City Engineer.

6. In the event that the Grantor should fail to construct the drainage facilities contemplated here in or fail to adequately and property maintain the easement and any facilities constructed thereon, the City of Rio Rancho or its agents, at any time following fifteen (15) days written notice to the owner of record of said property, may enter upon said property to perform necessary construction or maintenance. The cost of performing such construction or maintenance shall be paid by the property owner. In the event the property owner fails to pay the costs of such construction or maintenance within thirty (30) days after being notified in writing of the cost of same, the City may file a lien therefore against the real property described in paragraph 1.

7. No fence, wall, planting, building or other obstruction may be placed or maintained in the easement without the written approval of the City Engineer of the City of Rio Rancho and there shall be no alteration of the grades or contours in said easement after drainage facilities are constructed without the written approval of the Rio Rancho City Engineer. Any violation of this provision will be promptly corrected upon receipt of notice from the City, or the City shall have the right to remove or otherwise eliminate such violation and assess the cost to the property owner as provided in paragraph 6 above.

8. Said easement is intended to be permanent in nature for the uses and purposes recited above to the City, it's successors and assigns, until such time as the City releases said easement in writing.

9. The obligation of the Grantor set forth herein shall be binding upon the Grantor, his heirs, and assigns and the property of the Grantor as described herein and will run with said property until released by the City.

10. The City shall not be liable for any damages to the Grantor resulting from its construction, modification, or maintenance of said facilities.

    The Grantor agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Grantor's failure to construct, maintain, or modify the drainage facility under this covenant.

11. The written notice provided for herein shall be accomplished by mailing same to:_____

12. The Grantor may change said address by written notice, certified mail, return receipt requested to the City Engineer, 3200 Civic Center Circle, Rio Rancho, New Mexico 87144.

IN WITNESS WHEREOF, the parties have set their hands and seals this _____ day of _____ 20_____.

GRANTOR
By: _____
Title: _____

REVIEWED BY THE CITY OF RIO RANCHO LEGAL DEPARTMENT

_____ _____
City Manager

ACKNOWLEDGMENTS
STATE OF NEW MEXICO)
) SS.
COUNTY OF SANDOVAL)

The foregoing instrument was acknowledged before me this ____ day of _____, 20____, by _____.
(Name of Grantor)

_____
Notary Public

My Commission Expires:

IN WITNESS WHEREOF, the parties have set their hands and seals this _____ day of _____ 20_____.

GRANTOR

By: _____

Title: _____

3.7.E Drainage Right-of-Way Access

All newly constructed drainage facilities within a public right-of-way must have restricted access control to prevent unauthorized vehicular access with Pipe or Tube Gate.

3.8 Miscellaneous

3.8.A Maintenance Standards

3.8.A.I. GENERAL

All private drainage control, flood control and erosion control facilities shall be regularly inspected and maintained. Accumulations of silt, trash, litter or stagnant water which create a health or safety hazard or which endanger the design function of the facility are not permitted. Excessive growth or accumulation of woody vegetation in channels and on dams and levees shall not be permitted. Active erosion due to wind or water associated with drainage control, flood control and erosion control facilities shall not be permitted.

All newly constructed drainage facilities within a public right-of-way must provide restricted access to prevent unauthorized vehicular access. Restricted and authorized access shall be provided with City Standard Tube Gate.

3.8.A.II. PRIVATELY MAINTAINED FACILITIES

Privately maintained facilities must be maintained to ensure functional operation. The City reserves the right to inspect privately maintained facilities, as necessary, to ensure facilities will operate as expected and necessary during storm events.

The private owner shall regularly maintain, make available upon request, and keep written records of all maintenance activities for drainage control, flood control and erosion control facilities for which it has responsibility based on the above general requirements and the following schedule:

Facility	Maintenance	Inspection
Channels	Monthly June-October	Semi-Annual
Channel Joints	Monthly June-October	Semi-Annual
Crossing Structures	Monthly June-October	Semi-Annual
Pump Stations	Monthly June-October	Semi-Annual
Detention Facilities	Silt removal and weed control	After any major operation or monthly during flood season
Storm Pump	Periodic cycling	Semi-Annually in April and October
	Vibration analysis	3-5 Years

Storm Drain Systems	Annual	Bi-Annual
Storm Drain Inlets	On-going process	Semi-Annual during flood season

Every facility shall be inspected by the owner and qualified engineer after ½" of rain to ensure the facility features are functioning as designed.

Privately owned drainage control, flood control, water quality, and erosion control facilities shall be maintained according to the general standards above and such that adjacent upstream or downstream public or private facilities are not damaged or endangered. A sign must be erected adjacent to the facility indicating the private maintenance responsibility. The sign must be prominently located and must include the name and telephone number of the party responsible for the maintenance.

3.8.B Multiple Use of Rights-of way and Easements Criteria

Multiple uses are encouraged for drainage rights-of-way and drainage easements including, but not limited to, utility corridors, wildlife habitat, open space and recreation trails. Where multiple uses are planned by the city, another public agency, or a public utility, the city may require that dedication statements include language which permits said specified multiple uses and Watershed Management Parks amenities in addition to the primary drainage function. Land required to be dedicated for drainage rights-of-way shall include those land areas necessary for drainage control, flood control, erosion control, Watershed Management Park amenities, recreation trails, sanitary sewer corridors and necessary appurtenances. The following is the criteria for the subject encroachment:

To determine the feasibility of installing underground utilities in an existing drainage way or arroyo, consultation with the underlying land owner is required.

SSCAFCA's Resources Website: https://www.sscafca.org/resources/The utility line shall be designed and constructed to reduce the failure potential to the maximum extent practicable. Design, permitting, construction, operation and maintenance of utility lines are the responsibility of the Utility Owner and Operator; including, but not limited to, the construction of drainage improvements necessary to protect the utility and amenities associated with the utility.

All utilities planned to be installed within SSCAFCA's right-of-way require an agreement with SSCAFCA.

3.8.B.I. UTILITIES

All utilities planned to be installed within SSCAFCA's right-of-way require an agreement with SSCAFCA. All utilities in a City facility require an easement granted by City for construction, operation and maintenance. The easement shall include the following language:

The Utility Owner (Utility) is responsible for operations and maintenance of all Utility owned facilities. Any damage to any drainage facilities or downstream arroyos as a result of the installation, operation or maintenance of Utility owned facilities is the responsibility of the Utility Owner, including environmental mitigation of any spills, leaks or blockages of Utility owned facilities.

All designs shall be submitted to and require approval by the City Engineer.

3.8.B.I.a. Engineering Design Criteria for Underground Utilities in and Adjacent to Arroyos

Underground Utilities in Arroyos and Utilities Adjacent to Arroyos include both "wet" utilities such as sanitary sewer lines, water lines, etc.; and "dry" utilities such as electric lines, communication lines, etc. Design considerations shall include 100-year flood plains, floodways, and the areas included within the LEE.

The design criterion applies to all arroyos.

3.8.B.I.b. Engineering Design Criteria for Gravity Sewer Lines in Arroyos

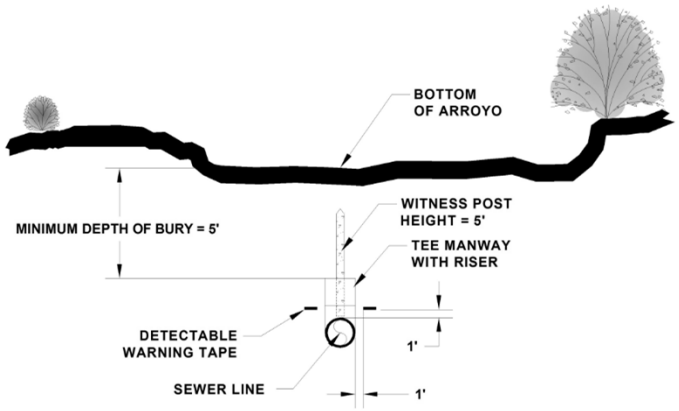
3.8.B.I.b.i. Design Capacity Criteria

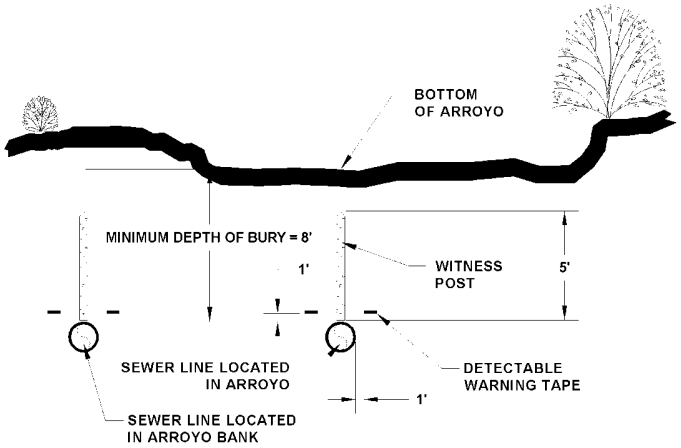
Develop design flow as defined in the Water Utility Design of the City of Rio Rancho's DPM.

3.8.B.I.b.ii. Longitudinal Placement

Longitudinal placement includes locations more or less aligned with the average down-valley direction as defined in SSCAFCA's Sediment and Erosion Design Guide, November 2008.

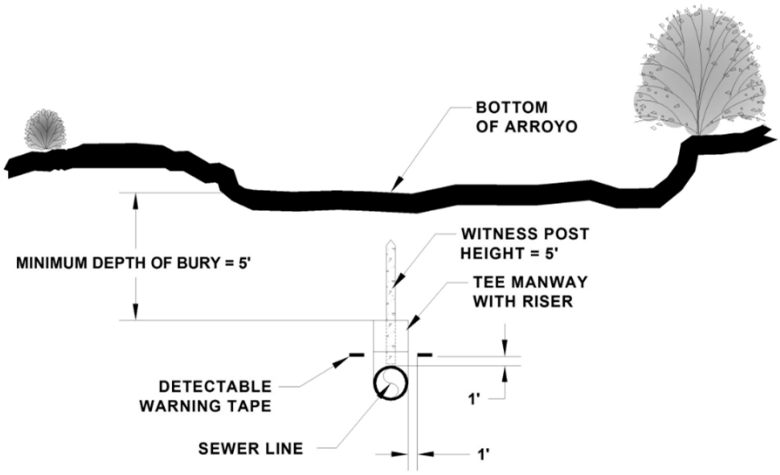
1. Horizontal Location
    a. Place the utility in the bottom of the existing arroyo where practical. This will minimize disturbance to existing habitat and vegetation.
2. Vertical Location
    a. Place the utility at a depth of 8 feet or the depth of scour for the 100-year discharge (the "SAS Erosion Control Zone"), whichever is greater. The depth shall be measured from the minimum elevation of the channel bed.
        i. Sewer line shall be marked with a witness post, 5-feet in height, placed above the pipe. Maximum distance between witness posts: 300-feet.
        ii. Sewer line shall be marked with detectable warning tape on either side of the pipe, at 1-foot above the top of pipe, for the entire length of the pipe.

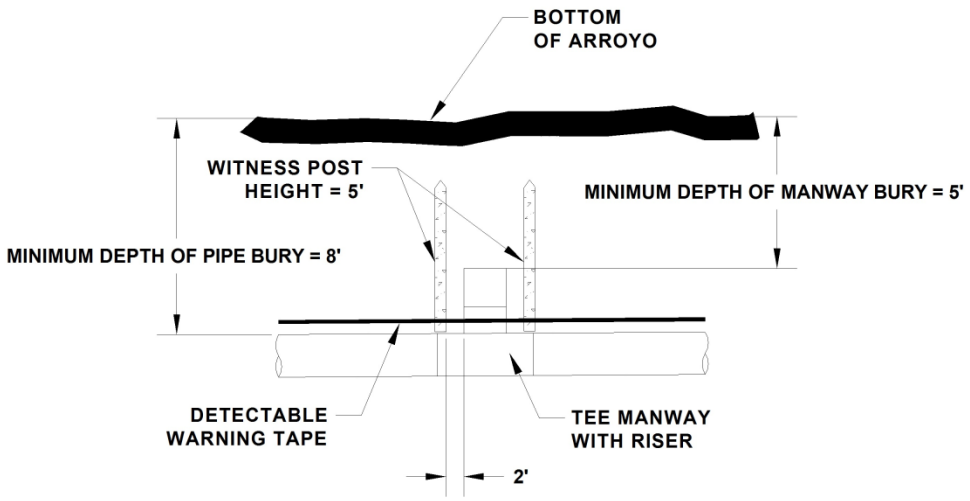




3.8.B.I.b.iii. Manway Criteria

1. Manways must be located in the arroyo bottom and buried. Manholes in arroyos are not acceptable. All manways must be accessible by sewer maintenance truck.
2. Manways shall be marked with two witness posts, one on each side of manway. Witness post shall be 5-feet in height.
3. Minimum depth of bury to top of manway: 5-feet below bottom of arroyo.





4. Manways shall be fabricated of a fused HDPE tee with a HDPE riser, and a bolted blind flange. The required inside diameter for a manway shall be the same inside diameter as the inlet/outlet pipe.
5. Inlet/outlet connections shall be continuously fused to manway and shall be restrained with an electrofusion flex restraint. Gasketed joints are not acceptable.
6. The maximum distance allowed between manways is 600-feet.

3.8.B.I.b.iv. Manhole Criteria

1. Manholes shall be located at all roadway crossings. Manways in roadway crossings are not acceptable.
2. Manholes shall be fabricated from fusible HDPE.
3. Inlet/outlet connections shall be continuously fused to manholes and shall be restrained with an electrofusion flex restraint. Gasketed joints are not acceptable.
4. The minimum required inside diameter for a manhole is 6-feet.
5. Invert elevations shall be called out for each inlet and outlet at a manhole.

3.8.B.I.b.v. Line Criteria

1. Sewer line shall be continuously fused HDPE pipe only. All other materials are not acceptable. Gasketed joints are not acceptable.
2. Minimum line size allowed: 15-inch inside diameter.
3. Curvilinear sewers are permitted, in accordance with manufacturer's recommendations.
4. Service connections are not acceptable.
5. Sewer line shall be marked with a witness post, 5-feet in height, placed at the top of the pipe. Maximum distance between witness posts: 300-feet.

6. Sewer line shall be marked with detectable warning tape on either side of the pipe, at 1-foot above the top of pipe, for the entire length of the pipe.

7. Connecting sewer lines are only allowable at a manway or manhole. Connections on the pipe, between manways or manholes, are not acceptable. Minimum connecting line size allowed: 8-inch inside diameter. Connecting sewer lines shall conform to the same criteria listed above from LEE line to LEE line or manhole to manhole, whichever is the greater distance.

3.8.B.I.c. Engineering Design Criteria for Gravity Sanitary Sewer Lines Crossing Arroyos

Sewer lines crossing the arroyo shall conform to the same criteria listed above from LEE line to LEE line or manhole to manhole, whichever is the greater distance.

3.8.B.I.d. Watershed Park Amenities

Each design shall incorporate Watershed Park amenities. The types of amenities required shall be determined on a case-by-case basis. Appropriate Watershed Park amenities associated with a utility line include linkage elements such as trails and wildlife corridors; and, supporting elements such as trailheads, view sites, benches, and educational/informational signage.

3.8.B.II. AMENITIES

If an amenity is identified as required with the installation of a utility, it shall be designed in accordance with the City of Rio Rancho Development Standards for Parkland and the following criteria:

3.8.B.II.a. Design Criteria for Trail Systems

1. For public health, safety, and welfare, trails shall have signage notifying users they are in an arroyo. The sign shall use City standard language for warning signs.

2. Trails shall have signage notifying users of the agency operating and maintaining the trail (i.e. Utility Owner, City of Rio Rancho, etc.)

3. Due to location, trails may not be ADA compliant. Trails shall have signage that indicates ADA accessibility constraints.

3.8.B.II.b. Design Criteria for Trail Heads

Construct Trail Heads in conjunction with trail systems at roadway crossings.

1. Trail heads shall control access to the arroyos with the following elements:

2. Fencing

    a. Trail head step-through gates

    b. Access gates for operations and maintenance.

    c. Trail heads shall have areas designated for vehicular and bicycle parking.

3. Trail heads shall be designed in accordance with ADA.

4. Trail heads shall have signage notifying users of trail name.
5. It is recommended to incorporate the following design elements at trail heads:
    a. Shade structures.
    b. Benches.
    c. Educational/informational signage and maps.
    d. Bear-proof trash receptacles.
    e. Dog-waste bag dispensers.

3.8.B.II.c. Protection and Restoration of Existing Wildlife Habitat and Existing Vegetation

1. Maintain wildlife habitat and existing vegetation to the maximum extent practicable.
2. Provide for the protection of existing wildlife habitat and existing vegetation in the design and construction of the utility.
3. Limit construction work zone areas to minimize disturbance to existing wildlife habitat and existing vegetation.
4. Re-vegetate all disturbed areas not in arroyo bottom.
5. Restore disturbed habitat as appropriate.

3.8.B.III. OPERATIONS AND MAINTENANCE

The City of Rio Rancho is responsible for the operation and maintenance of the Watershed Park amenities. Operation in arroyos during monsoon season is potentially dangerous and is discouraged.

3.8.C Lateral Erosion Envelope

Encroachment into the LEE Line will require the following:

1. Update the existing LEE Line Study.
2. Identify the drainage improvements required to reduce the LEE Line.
3. Construct and/or financially guarantee the required drainage improvements prior to building permit/subdivision plat approval. If these drainage improvements benefit other properties within the drainage basin.
4. Provide construction plans for the required drainage improvements and related SSCAFCA Quality of Life Master Plan improvements, if applicable.

For information regarding LEE, visit SSCAFCA's website: https://www.sscafca.org/resources.

3.9 Stormwater Quality and Low Impact Development

3.9.A General

Stormwater runoff is generated from rain and snowmelt events that flow over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. The runoff picks up pollutants like trash, chemicals, oils, and dirt/sediment that can harm our rivers, streams, lakes, and wetlands.

Population growth and development of urban/urbanized areas are major contributors to the amount of pollutants in stormwater runoff as well as the volume and rate of runoff from impervious surfaces. Traditional stormwater management approaches that rely on peak flow storage have generally not targeted pollutant reduction and can exacerbate problems associated the changes in hydrology and hydraulics.

Therefore, sustainable stormwater management strategies must be utilized to control runoff by minimizing impervious cover and by using natural or man-made systems to filter and recharge stormwater into the ground. The goal is to reduce runoff and to mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, filtering, storing, evaporating, and detaining stormwater runoff close to its source.

3.9.B Applicability

Stormwater quality is regulated by the EPA National Pollutant Discharge Elimination System (NPDES) permit program, including Construction General Permit (CGP), Multi-Sector General Permit (MSGP), and Municipal Separate Storm Sewer (MS4) Permit. This section addresses post-construction stormwater management in new development and redevelopment. Specifically, stormwater quality design standards that manage on-site the 90th percentile storm event discharge volume associated with new development sites and 80th percentile storm event discharge volume associated with redevelopment sites.

All land development projects must comply with the MS4 Permit and City of Rio Rancho, Municipal Code, Chapter 153, which requires stormwater Best Management Practices (BMP) to manage the stormwater quality design volume onsite for all new development and redevelopment projects with land disturbance equal to or greater than one acre. This includes sites which disturb less than one acre but are part of a larger common plan of development. Projects must also evaluate opportunities to implement low impact development and green infrastructure best management practices.

Structural and non-structural runoff controls / BMPs remove pollutants from Stormwater Quality Volume (SWQV) by decreasing or delaying the volume of stormwater that enters the storm drain system, reducing the maximum flow rate by decreasing the stormwater volume and lengthening the duration of discharge, and improving water quality through infiltration, filtering, and biological and chemical processes.

3.9.C Stormwater Quality Volume

Direct runoff values may be calculated though site specific pre-development hydrology and associated storm event discharge volume using the methodology specified in U.S. Environmental Protection Agency (USEPA) Technical Report entitled *"Estimating Predevelopment Hydrology in the Middle Rio Grande Watershed, New Mexico, EPA Publication Number 832-R-14-007"*. Estimated rainfall depths for the 90th percentile storm event (new development) and 80th percentile storm event (redevelopment) are 0.615 and 0.48 inches, respectively.

The NRCS Runoff Curve Number method used in the USEPA Technical Report, yields runoff values of 0.424 inches for the 90th percentile storm event and 0.30 inches for the 80th percentile storm event.

For new development, to calculate required post-construction SWQV, multiply post-construction impervious area draining to the BMP by the 90th percentile storm rainfall depth. Required water quality volume, provided water quality volume and surface water quality elevation, as well as 100-year water surface elevation shall be shown on the Grading and Drainage Plan. Permeable areas (e.g., landscaped depression, lawn, parking lot island, depressed median, planter box, etc.) used to disconnect impervious surface shall be identified on construction plans.

Redevelopment applies to project that alter the footprint of an existing site or building resulting in disturbance equal or greater than one acre of land or smaller sites that are part of a larger common plan of development or sale. To calculate required post-construction SWQV, multiply net increase impervious area (post- minus pre-construction impervious area) draining to the BMP by the 80th percentile storm rainfall depth.

Post-Construction 80th and 90th Percentile Rainfall Depths and Runoff Depths

New Development Sites		**Redevelopment Sites**	
90th Percentile Storm Rainfall Depth (inches)	90th Percentile Storm Runoff Depth (inches)	80th Percentile Storm Rainfall Depth (inches)	80th Percentile Storm Runoff Depth (inches)
0.615	0.424	0.48	0.30

Equation: **Stormwater Quality Volume** = (R/12) x A

Where:
SWQV = Stormwater Quality volume to be treated, ac-ft
R = 90th or 80th percentile event direct runoff depth, inches
A = Impervious area of new development or redevelopment, acres

For single-family subdivisions, stormwater quality ponds will not be allowed on individual lots. Instead, a centralized stormwater quality pond for the entire subdivision must be constructed for all impervious areas or combination of on-site ponding and payment-in-lieu can be paid to the entity who will apply funds to a public stormwater quality project.

Impervious area calculations shall include all roads, driveways, parking areas buildings, concrete, and other impermeable construction covering the natural land surface. Unpaved roads, driveways, and parking areas compacted by vehicle use shall be considered impervious surface area.

3.9.D Low Impact Development

Low Impact Development (LID) refers to engineered systems, either structural or natural, that use or mimic natural processes to promote infiltration, evapotranspiration, and/or reuse of storm water as close to its source as possible to protect water quality. LID practices at the regional and sites specific level preserve, restore, and create green space using soils, vegetation, and rainwater harvesting techniques. These systems and practices are referred to as Best Management Practices. Green Infrastructure (GI) includes LID practices

but is a broader practice that also includes ecological services and approaches such as "filtering air pollutants, reducing energy demands, mitigating urban heat islands, sequestering and storing carbon, enhancing aesthetics and property values, and preserving and creating natural habitat functions." (United States Environmental Protection Agency, 2012).

BMPs that employ LID and GI can be found in the "National Pollutant Discharge Elimination System Manual – Stormwater Management Guidelines for Construction, MS4, and Industrial Activities". Appendix A3 provides technical guidance and illustrations, as well as maintenance requirements to consider when selecting LID/GI intervention strategies.

EPA GI/LID Resources:

EPA Green Infrastructure

Green Infrastructure in the Semi-Arid West

Green Infrastructure Opportunities that Arise During Municipal Operations

New Mexico GI/LID Resources:

Los Alamos Low Impact Development Standards

Bernalillo County Green Stormwater Infrastructure – Low Impact Design Strategies for Desert Communities

References:

National Pollutant Discharge Elimination System Manual, Stormwater Management Guidelines for Construction, MS4, and Industrial Activities

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   a. SSCAFCA's Sediment and Erosion Design Guide prepared by Mussetter Engineering, Inc. dated November 2008. Available at www.sscafca.com.

DEVELOPMENT PROCESS MANUAL

Chapter 4: Transportation



RioRancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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4. TRANSPORTATION

4.1 Introduction

4.1.A Purpose

The purpose of this chapter is to provide standards for roadway design elements where it is necessary for consistency and to ensure, as far as it is practical, that the City of Rio Rancho's minimum requirements are met for roadway and transportation safety, welfare, aesthetics, environmental sensitivity, and economical maintenance.

The standards outlined in this chapter cannot realistically apply to all situations. They are intended to assist the professional engineer's competent work but not to substitute for it. Professional engineers are expected to bring the best of their skills and abilities to each project so that it is designed accurately.

Further, these standards are not intended to unreasonably limit any innovative or creative effort that might result in higher quality or increased cost savings for the public. Any proposed departure from these standards will be judged on the basis of whether such a variance will yield a compensating or comparable result that is fully adequate for road users and City residents.

At the beginning of each project, the following shall be established:

1. Impacted existing roadways and new roadways to be constructed.
2. Any associated roadway functional classification.
3. Future traffic volumes for impacted roadways.

These basic criteria shall determine the design standards to be used. Any deviations from these published standards must be approved by the City of Rio Rancho (CORR) Department of Public Works or an authorized representative before the project design will be considered for approval. The standards are based upon the most current version of the guidelines promulgated by the American Association of State Highway and Transportation Officials (AASHTO).

The guidelines in this Development Process Manual will be periodically updated as needs become apparent to reflect changes to City practice. It is the responsibility of the user to determine that they are utilizing the most current version of these standards.

4.2 Applicability

These standards shall govern all construction and reconstruction of transportation facilities within the City as a whole. They shall also apply to all transportation facilities proposed to be built in right-of-way that is intended to be dedicated to the City, or is already within City right-of-way, and is accepted into the City Road System for maintenance.

Before the City accepts a road for maintenance, it shall meet the standards outlined in this chapter. Permitted work shall also conform to the requirements of the current City Resolutions governing permitted work. If field conditions change after plan approval, improvements shall be made as necessary in order to bring the transportation facilities up to these standards. These standards shall be used by private parties, consulting engineers, public utilities, agencies, and City staff.

All roads owned and managed by the CORR shall follow the standards in this chapter. All roads owned and managed by NMDOT within the municipal limits of the City shall comply with applicable standards of the NMDOT.

4.3 Definitions

Average Daily Traffic (ADT) - The total traffic volume during a given period, ranging from 2 to 365 consecutive days, divided by the number of days in that time period and expressed in vehicles per day.

Bikeway - A bikeway is any road, path, or way that is specifically designated for bicycle travel.

Bicycle Facilities - Bicycle facilities are the infrastructure that accommodates or encourages bicycling including bikeways, shared roadways not specifically designated for bicycle use, bicycle parking and storage facilities, and bicycle signal actuation hardware.

Bicycle Lane – A portion of a roadway that has been designated for preferential or exclusive use by bicyclists. A typical bicycle lane is delineated from the adjacent general-purpose lane(s) by longitudinal pavement markings and bicycle lane symbol or word markings and, if used, signs.

Bike Route - Bike routes are designated roadways with appropriate directional and informational signing, with or without a specific bicycle route number, in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

City - Refers to City of Rio Rancho staff reviewing and/or approving any requests or submittals.

Design Year - The Design Year for future traffic volumes is the year when construction/buildout is complete.

Design Hour Volume - The Design Hour Volume is the traffic volume used to determine the number of traffic lanes on the roadway. It is derived by multiplying the Annual Average Daily Traffic (AADT) by a "K-factor," which represents the percentage of traffic that occurs during the peak hour considered for design purposes – typically the busiest hour of the day.

Developer - Refers to the applicant requesting the proposed improvements or development. This includes any consultants or contractors that may be hired by the developer to complete the project.

Functional Classification - Functional classification is the process by which roads are grouped into classes or systems according to the kind of service they will provide. Functional classification categorizes streets according to their ability to 1) move traffic, and 2) provide access to adjacent properties. Street types under functional classification include arterials, collectors, and locals. Using national classification terminology, these systems are sub-classified based on the trips served, the areas served, and the operational characteristics of the streets or highways.

Horizon Year - The Horizon year is the farthest future time that the impacts of a development shall be studied in a traffic impact analysis. Unless otherwise directed by City staff, the horizon year is five years after completion of construction.

Level of Service (LOS) - LOS is a term used to qualitatively describe the operating conditions of a roadway based on factors such as speed, travel time, maneuverability, delay, and safety. The level of service of a facility is designated with a letter, A to F, with A representing the best operating conditions and F the worst.

- LOS A: free flow, with low volumes and high speeds.

- LOS B: reasonably free flow, speeds beginning to be restricted by traffic conditions.
- LOS C: stable flow zone, most drivers restricted in freedom to select their own speed.
- LOS D: approaching unstable flow, drivers have little freedom to maneuver.
- LOS E: unstable flow, may be short stoppages.
- LOS F: forced or breakdown flow.

MRCOG - Mid-Region Council of Governments.

Paved Shoulder Bikeways - Paved shoulder bikeways are located on uncurbed arterials and collectors and consist of a smooth paved surface that covers all or part of the roadway shoulder.

Peak Hour - Represents the highest, or busiest, hour of traffic measurement.

Shared Roadway - A shared roadway is any roadway that may be legally used by both motor vehicles and bicycles and is not specifically designated as a bikeway.

Shared Use Path/Trail - A shared use path is a bikeway physically separated from motorized vehicle traffic by an open space or barrier and constructed within the street right-of-way or within an independent right-of-way including shared-use rights-of-way or utility or drainage easements.

Traffic Impact Analysis (TIA) - A TIA analyzes the effects of new development on the city's transportation infrastructure, and helps the city determine what changes, if any, are necessary to minimize those effects. It is also used to determine how much capacity a new road within a development is required to appropriately serve its needs. Also known as a Traffic Impact Study (TIS).

Trip Generation - Trip generation is performed by relating the number or frequency of vehicular trips to the characteristics of the individuals, of the zone, and of the transportation network. The zone that contains the home end of home-based trips or the origin end of non-home-based trips is considered to have produced the trip, while the destination zone where an out-of-home activity will be undertaken is considered to have attracted the trip.

Trip Generation Report - A trip generation report outlines anticipated vehicular trips based on associated land uses within proposed development.

Wide Curb Lanes - Wide curb lanes are located on shared roadways with outside lane widths of 14 to 16 feet.

4.4 Transportation Planning

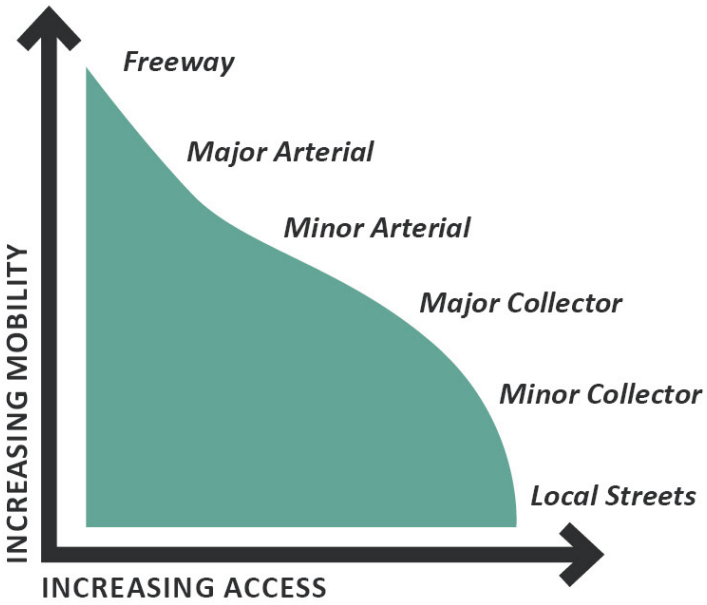
4.4.A Functional Classification and Level of Service (LOS)

The City of Rio Rancho utilizes roadway functional classification and level of service analysis to determine required roadway infrastructure to support the community's transportation needs and account for impacts from continued development. Details specific to the functional classification of roads in the City of Rio Rancho are provided in the following section (4.4.A.I Transportation System). Typical cross sections are available in the City of Rio Rancho Standard Details available on the City's website.

As a rule, traffic analysis shall be used in conjunction with previously identified roadway expectations to support the determination of functional classification in the City. The base desired Level of Service (LOS)

for all roads constructed in the City is LOS D. Through the Development Review process and the completion of a trip generation report (detailed in the Procedures Chapter), consultation with City staff may require roadway improvements (for example, increased number of lanes, restricted turning movements, etc.) to an increased LOS classification and associated functional classification.

Figure 1 Functional Classification Hierarchy



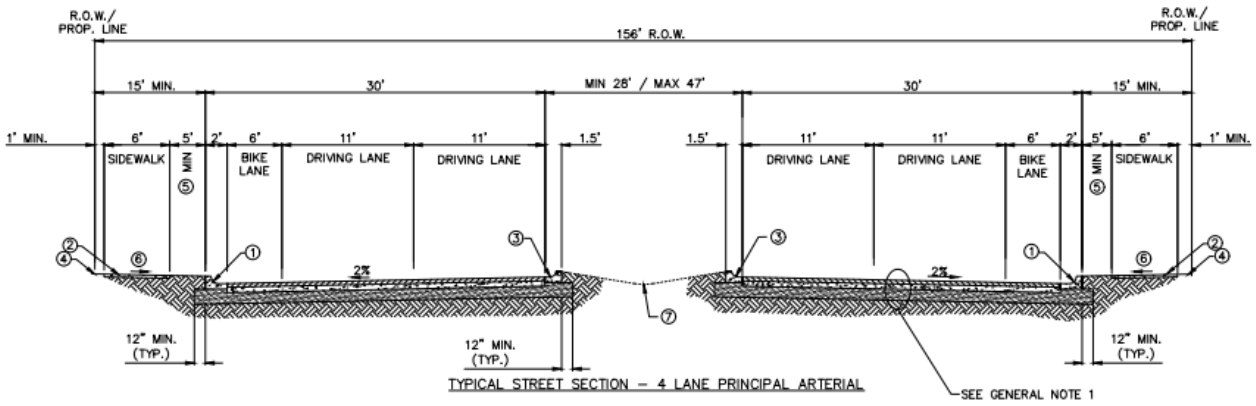
4.4.A.I. TRANSPORTATION SYSTEM

4.4.A.I.a.Principal Arterial

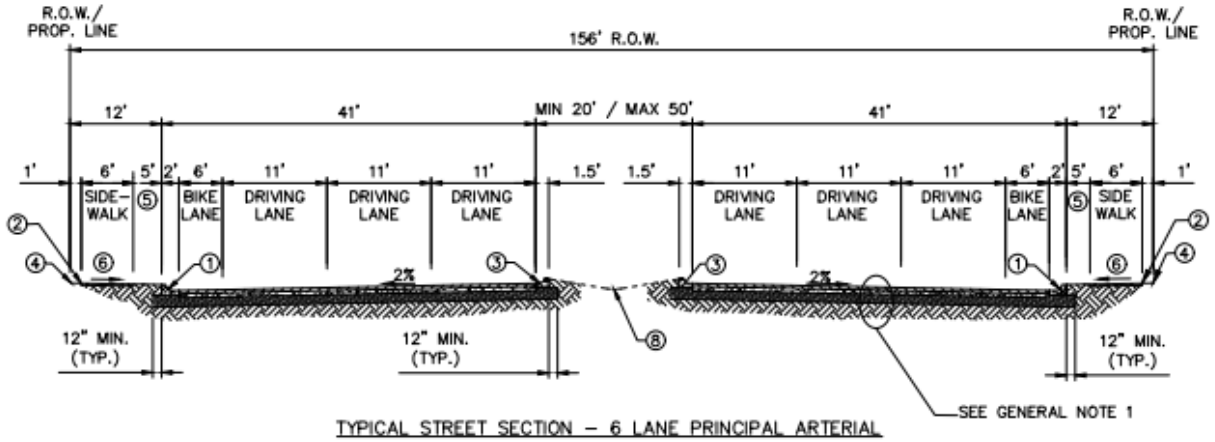
Principal Arterials are roads with the following characteristics:

1. Traffic movements consisting of through movements and major circulation movements, with limited access for adjacent parcels of land.
2. Posted speeds between 45 mph and 65 mph.
3. Four-lane or six-lane roads with exclusive turn lanes where applicable.
4. Planning volumes as shown in Table 4.1.

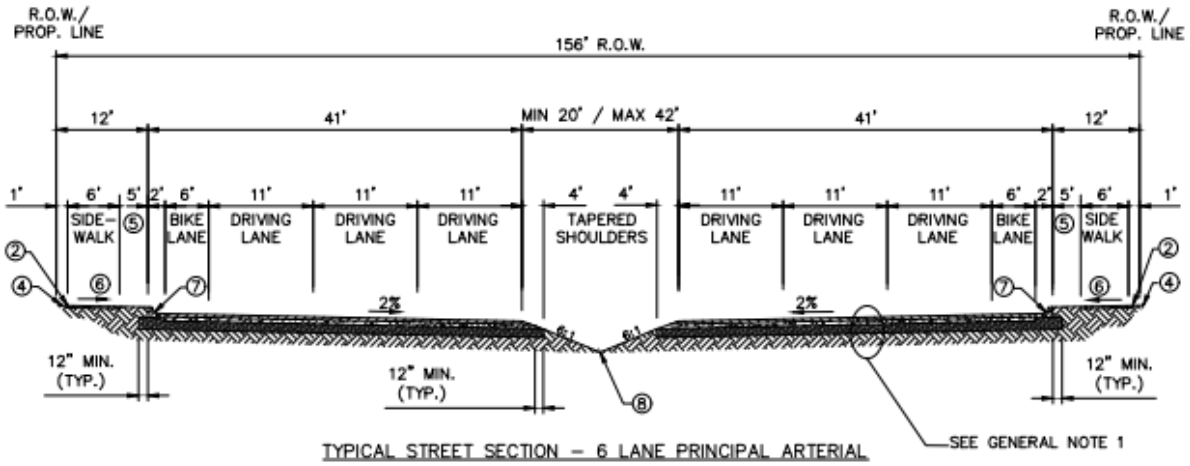
Figure 2 Arterial Cross Section (4-lane and 6-lane)



TYPICAL STREET SECTION – 4 LANE PRINCIPAL ARTERIAL



TYPICAL STREET SECTION – 6 LANE PRINCIPAL ARTERIAL



TYPICAL STREET SECTION – 6 LANE PRINCIPAL ARTERIAL
INVERTED CROWN

ERAL NOTES:

4.4.A.I.b.Minor Arterial

Minor Arterials are roads with the following characteristics:

1. Traffic movements consisting of major circulation movements, with some access included for adjacent parcels of land.

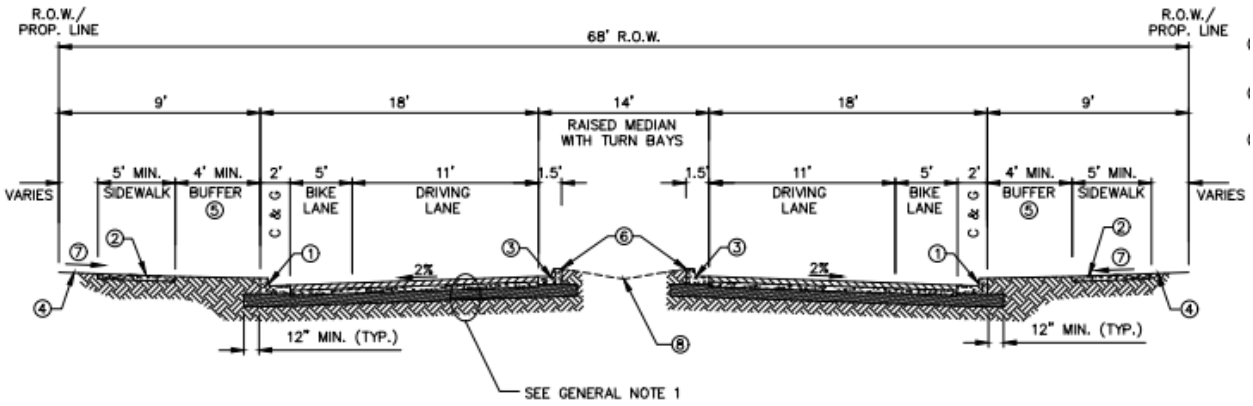
2. Traffic movements do not directly penetrate residential neighborhoods.
3. Traffic movements with partially controlled access facilities.
4. Minimum speed limit of 40 mph.
5. Undivided or divided (divided preferred) two or four-lane with intersections at grade and exclusive turn lanes where applicable.
6. Planning volumes as shown in Table 4.1.

4.4.A.I.c. Major Collector

Collector Roads are roads with the following characteristics:

1. Traffic movements consisting of both adjacent land access and traffic circulation, typically connecting arterials with local roads or other collectors.
2. Traffic movements may access residential and local areas.
3. Commercial development may front directly on the road.
4. Traffic capacity is limited not by the typical capacity of the road section but instead by the desirability of maintaining acceptable traffic levels using raised medians with left turn bays.
5. Planning volume as shown in Table 4.1.
6. Residences do not front collectors.
7. Minimum speed limit of 35mph.

Figure 3 Collector Cross Section



TYPICAL STREET SECTION – COLLECTOR STREET

4.4.A.I.d.Minor Collector

Minor Collector roads are roads with the following characteristics:

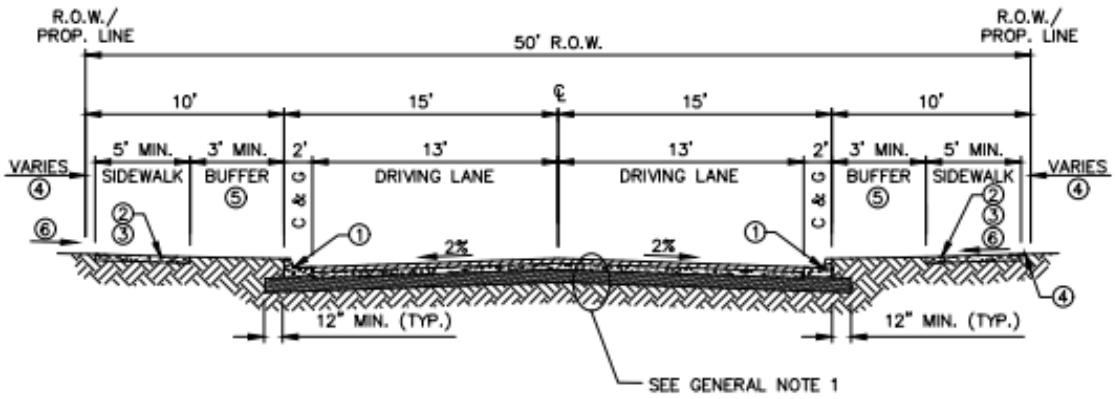
1. Traffic movements consisting of both adjacent land access and traffic circulation, typically connecting arterials with local roads or other collectors.
2. Traffic movements may access residential and local areas.
3. Commercial development may front directly on road.
4. Planning volume as shown in Table 4.1. Any roadway that is anticipated to exceed 1,000 vehicles per day should be designed as a collector.
5. Residences do not front collectors.
6. Minimum speed limit of 30 mph.
7. Minor collectors are differentiated from Major collectors in two ways: anticipated traffic volumes as shown in Table 4.1, and the necessary characteristics of the road given implementation.

4.4.A.I.e.Local Road System

Local Roads are those with the following characteristics:

1. Two-lane undivided roads with intersections at grade with frequent driveway access.
2. Planning volumes as shown in Table 4.1.
3. Speed limit of 25 mph.
4. Traffic movements between adjacent lands and collectors or other roads of higher classification.

Figure 4 Local Road Section



TYPICAL STREET SECTION – RESIDENTIAL STREET

Table 4.1 Roadway Planning Level Traffic Provides general ranges of traffic volumes that can be expected for various roadway types. ADT refers to Average Daily Traffic (24-hour weekday, two-way volume).					
Road Classification	**ADT / Lane**	**No. Thru Lanes**	**2-Way ADT Range**	**Peak Hr./ ADT% (K)**	**Max. Roadway Length***
Local	350	2	50 – 1,000	15	1,000 ft.
Minor Collector	2000	2	500-6,500	12	2 mi.
Major Collector	3,500	2	800 – 8,500	12	2 mi.
Minor Arterial	5,500	4	5,000 – 35,000	8	---
Principal Arterial	7,500	6**	30,000 – 60,000	8	---
* Length may be variable as a function of degree of home frontage on the road. ** Guidance is for planning level only. Requirement may vary after consultation with CoRR staff.					

4.4.B Street Location and Naming

4.4.B.I. STREET LOCATION

Streets must conform in character, location, and arrangement to adopted plans. Governing plans may be the approved neighborhood site plan, site development, sector plans, or adopted future street lines. The Department of Development Services should be consulted for information regarding applicable plans for areas under design consideration.

Proposed street arrangements must provide for the continuation of existing streets or appropriate projections thereof if not otherwise governed by an adopted plan. No half street improvements are allowed within the City of Rio Rancho. All proposed roadway improvements must be continuous for a total length, intersection to intersection, and approved by the City.

4.4.B.II. STREET NAMING

The naming of streets shall be coordinated with the City of Rio Rancho Development Services Department. Street naming shall be in accordance with the ordinances and guidelines set by Development Services.

4.4.C Traffic Impact Analysis Procedures

Developers are required to discuss proposed projects with City staff prior to beginning any traffic impact analysis. Please refer Table 2.3 Traffic Impact Analysis Level of Effort, Chp.2 for more information. This is to enable discussion and determination of parameters to be used and to open communications between City staff and the Developer. Such communication will help in identifying land uses with traffic characteristics that are in the entire community's best interests. Coordination with City Staff is outlined in the procedures chapter and begins with the Development Review meeting. Developers shall initially provide a trip generation report and a site plan for staff to review to determine if further traffic impact analysis is required. For roads with a projected ADT above 18,000 vehicles, the City may require two lanes in each direction so long as intersections maintain operation at LOS D or better.

4.4.C.I. TRAFFIC IMPACT ANALYSIS (TIA) REQUIREMENTS

The primary concerns to be addressed in the TIA are site access, impact on the existing roadway system, and what construction is necessary to mitigate both the on-site and off-site impacts. Site design should

be tailored to the traffic requirements, and the City reserves the right to require changes to the access points to better serve the transportation system. For specific requirements related to TIAs, including methodology and procedures, please reference Chapter 2 Procedures, section 2.8.A.III.c.

4.4.D Design Hour Volumes

4.4.D.I. ADJUSTMENT TO DESIGN YEAR ADT VOLUMES

For some roadway design projects, adjustments will be required to the volumes projected by MRCOG. Adjustments will be required in anticipation of major land developments or significant changes in nearby street and/or highway networks that will affect future traffic volumes expected on the roadway under design. Adjustments in traffic volumes for major land developments will follow the CORR Traffic Impact Analysis Procedures as referenced in the Procedures chapter 2.8.A of the Development Process Manual. Adjustments for other impacts shall be approved by the City before being undertaken by the Developer.

4.4.D.II. DESIGN HOUR VOLUME

The number of lanes required for each direction of traffic for an interim roadway is determined by the TIA. However, the interim roadway shall be designed for conversion to the ultimate section determined by the functional classification.

For special activity centers such as recreational areas, factories, sports arenas, etc., other values of the trip generation factors used in the development of the TIA should be used. It is also recognized that special traffic conditions may or will exist that require modification of these factors. In these two sets of cases, the different factors must be documented and approved for use by City staff.

4.4.D.III. TURNING MOVEMENT PERCENTAGES

At major intersections and at driveways leading to major activity centers, the design hour turning volumes are important in determining the intersection capacity, resulting number of lanes, and the storage length for exclusive turning lanes required for each approach. For intersections being reconstructed and that are in fully developed areas, existing turning movement percentages will be collected in the field and are assumed to be the same for the future design year. For new intersections or for those significantly impacted by new land developments or major changes in nearby street/highway networks, existing and projected traffic data along with engineering judgment will be used to reassign vehicle trips on nearby street networks to derive the turning movements at project intersections.

Turning movements must be analyzed for both AM and PM peak hours at project intersections so that the maximum turning or through volumes can be determined for each approach. It is important for the Developer to obtain sufficient existing traffic counts by hourly variation to accurately identify and quantify project intersection turning movement volumes for the design year.

4.4.D.IV. OTHER TRAFFIC VOLUME REDUCTION FACTORS

Vehicle trip (traffic volume) reductions for future transit ridership or other transportation modes are generally not permitted. Reductions for "passer-by" or "diverted" trips are allowed as per the Institute of Transportation Engineers (ITE) Trip Generation Manual (latest revision) but must first be approved by City staff. Trip reductions for special land uses utilizing travel demand management (TDM) strategies will be considered on a case-by-case basis.

4.4.D.V. CAPACITY ANALYSIS

Current HCM procedures will be used to determine the capacity and resulting number of lanes for roadway design project street sections and intersections. The number of lanes on collector and arterial roadways must also be consistent with any City-adopted overall thoroughfare plan, regional or project-specific master plans, and traffic impact analysis for other projects in the area. For street sections with existing or planned traffic signals more than a mile apart, the appropriate section of the HCM will be used. For areas where traffic signals are at or less than a mile apart, it will be assumed that the signalized intersection capacity will control the design of the roadway segments.

The number of through lanes on street sections must be consistent with the number of through lanes at adjacent intersections. For capacity and lane determination, major intersections are assumed to be signalized for the design year. The signalized intersection section of the HCM will be used for the analysis. The default values of the peak hour factor (PHF), percentage of trucks, and saturation flow rate shall be used. Other input criteria will be those equal to existing or future traffic conditions and approved by the City.

4.4.D.VI. FUTURE TRAFFIC VOLUMES

Future traffic volumes shall be used to ensure that the road has enough traffic carrying capacity. The general unit of measure for traffic on a road is the ADT, the total volume of traffic in each time period divided by the number of days in that time period. If available, the future ADT shall be derived from the MRCOG travel demand model and the City's judgment of growth patterns in the area.

The traffic volume during a period shorter than a day shall be used for design purposes, reflecting peak hour periods. For roads with unusual or highly seasonal fluctuation in traffic volumes, the 30th highest hour of the design year should be used.

The directional design hour volume is the traffic volume for the peak hour period in the peak direction of flow. Use directional distribution factors based on existing traffic counts. Reference Table 4.1 for design volume threshold per hour per lane. A more detailed analysis of intersection and road capacity should be completed in accordance with the current version of the HCM.

4.5 Design Procedure

4.5.A Basic Criteria – Scoping meeting

4.5.A.I. ROAD FUNCTIONAL CLASSIFICATION AND TYPICAL SECTION

During development review and following the requirements outlined in the procedures chapter 2.8.A of the Development Process Manual, the roadway functional classification shall be identified in the materials outlining the proposed project including adopted plans such as master plans, area plans, neighborhood plans, etc. If the classification is not identified, the Developer must submit a classification for approval to the City.

4.5.A.II. DESIGN VEHICLE

The design vehicle is the largest vehicle likely to use the road with considerable frequency or a vehicle with special characteristics that must be considered in designing the road. The design vehicle will affect the radii at intersections and the radii of turning roadways. It will also affect the climbing lane requirements on two lane roads and roundabout design. Unless otherwise specified, all arterial and

collector roadways and intersections will be designed to accommodate a WB-50 design vehicle. All residential roadways shall be designed to accommodate a Single Unit (SU) design vehicle. Design vehicles shall be those as defined in the AASHTO publication, A Policy on Geometric Design of Highways (current edition). The Developer shall confirm with City staff which design vehicle to use for the purpose of roadway design.

4.5.A.III. DESIGN FOR FUTURE TRAFFIC VOLUMES

The primary design consideration for roadways is the handling of vehicular traffic. When streets are built or reconstructed, they will be designed with sufficient traffic handling capacity to accommodate a future level of traffic volumes. Section 2.8.A.iii Traffic Impact Analysis Procedures describe in greater detail the acceptable process that shall be followed in determining the capacity of roadways and intersections used in the design process.

While the functional classification approved for a roadway will govern the basic cross-sectional elements, additional through or left turn lanes, auxiliary right turn lanes, acceleration lanes, and similar design features may be required based on further coordination and direction from City staff. The New Mexico Department of Transportation establishes access management requirements which will protect the functional integrity of the state highway system. The state access management manual provides procedures and standards to preserve and protect the public health, safety, and welfare, and to maintain smooth traffic flow. The Developer may be required to complete a detailed capacity analysis to determine the need for additional or auxiliary lanes.

An additional design consideration is traffic calming. On residential streets, to control speeds and improve safety, various forms of traffic calming measures include Bulb outs, Semi-diverters, Chicanes, and Curvilinear Roads. The developer may be required to implement one or more of these traffic calming measures on straight roads that will likely encourage speeding.

4.5.A.IV. TOPOGRAPHY

The topography of the area shall be determined by a site visit and available topographic maps. The terrain shall be classified as level, rolling, or mountainous.

1. *Level terrain* is when roadway sight distances are or could be made adequate without major construction requirements. This generally includes short grades of no more than 1 or 2 percent.
2. *Rolling terrain* is when natural slopes consistently rise and fall with grades of up to 6 percent for lengths of 700 feet.
3. *Mountainous terrain* is when changes in the ground's elevation with respect to a road are abrupt. Mountainous terrain has greater than 15 percent slopes on the U.S.G.S. 7.5-Minute Series Maps.

4.5.A.V. DEVELOPMENT OF PLANS AND SPECIFICATIONS

Project design and construction, unless otherwise indicated, shall be in accordance with the latest edition and current revision of the following publications:

- Design Criteria, Standard Details, and Standard Construction Specifications as provided/required by the City of Rio Rancho.
- APWA Uniform Standard Specifications and Details for Public Works Construction as distributed by American Public Works Association New Mexico Chapter.

- Manual on Uniform Traffic Control Devices for Streets and Highways as distributed by the U.S. Department of Transportation, Federal Highway Administration.
- A Policy on Geometric Design of Highways and Streets as distributed by the American Association of State Highway and Transportation Officials (AASHTO).
- Roadside Design Guide as distributed by the American Association of State Highway and Transportation Officials (AASHTO).
- Highway Capacity Manual and the current Highway Capacity Software, as distributed by the Transportation Research Board.
- State Access Management Manual (SAMM) , as distributed by the New Mexico Department of Transportation.
- Standard Specifications for Highway and Bridge Construction as distributed by the New Mexico Department of Transportation (NMDOT).
- Information Guide for Roadway Lighting as distributed by the American Association of State Highway and Transportation Officials (AASHTO).
- Guide for Development of Bicycle Facilities as distributed by AASHTO.
- Urban Bikeway Design Guide as distributed by NACTO.

4.5.A.VI. ALTERNATIVE MULTI-MODAL CROSSINGS

The City will incorporate identified trail crossings of the MRCOG Long Range Bikeways Systems Map in the design and construction of roadways. The City will consider all trails, shared-use paths, and other multi-modal facilities proposed by developers or other agencies in the design and construction of roadways. The type of crossing will be determined on a case-by-case basis. Grade separated intersections at major road crossings should be considered whenever feasible. Guidelines for crossings will comply with the latest edition of the AASHTO Guide to the Development of Bicycle Facilities and/or the NACTO Urban Bikeway Design Guide, MRCOG Long Range Bikeways Systems Map, City of Rio Rancho Mid-block Crossing Policy, or other agreed upon national or local design guidelines or standards.

4.5.A.VII. TIME LIMITATION OF APPROVAL

The City approval of residential developments, commercial developments, and road construction plans shall be valid for a period of one (1) year. Plans not under construction within this time period are to be resubmitted and approved by the City prior to construction.

4.5.B Special Provisions and Engineer's Estimate

4.5.B.I. SPECIAL PROVISIONS

4.5.B.I.a. Residential/Commercial Development

The Developer shall prepare Special Provisions for construction items not contained in or adequately covered by the APWA New Mexico Standard Specifications and Details for Public Works Construction, or the City of Rio Ranchos Specifications and Details as needed. Special provisions shall insure that each construction item is clearly defined, and all material and construction requirements are identified. Special Provisions shall be written and arranged in the same format as the APWA New Mexico Standard

Specifications and Details for Public Works Construction. The Developer shall prepare and submit sealed Special Provisions. Special provisions shall be included with proposed construction documents submitted for review.

4.5.B.II. ENGINEER'S ESTIMATES

4.5.B.II.a. Residential/Commercial Developments

The Developer shall provide City staff with an Engineer's Estimate of Probable Cost at final submittal of the construction documents. The estimate shall contain a comprehensive itemized listing of individual project components with quantities, estimated unit costs and extended total costs identified for each item. Unit costs shall accurately reflect current market costs. Supporting documentation shall be provided to the City upon request.

An example of the preferred formats for the Estimate of Probable Cost for Onsite, Offsite, and Deferred Improvements can be found at the following website: www.ci.rio-rancho.nm.us.

4.5.C Survey and Data Acquisition

The development of a survey for the purposes of roadway design shall be completed in accordance with Chapter 7 Survey and Permanent Monumentation of the Development Process Manual.

4.5.D Right of Way

The Preliminary Plat and/or Concept Report submitted to City staff, by the Developer, will identify the anticipated basic right-of-way for individual projects. It is understood that the design process will refine the concept by identifying additional requirements and any construction, drainage, or slope easements required. Permanent right-of-way, including the size of triangles at intersections, shall be recommended at the time of initial submittal. The location and configuration of construction, drainage, slope, and temporary easements, including any required for detours, shall be shown. The plans shall show and clearly identify both existing and new right-of-way and easement configurations.

The Developer shall furnish a base map to City staff showing existing and new right-of-way required for the proposed improvements.

4.5.E Utilities

Relocation of existing utilities shall be avoided, except where necessary due to construction or drainage requirements. Design of culverts and/or storm drain systems should avoid or minimize any disruption of utility service. The location of existing and new underground utilities and culverts shall be appropriately shown in paving profiles, culvert profiles, and storm drain profiles. All above ground utilities and signal poles shall be offset behind future sidewalk in urban areas. In rural areas, above ground utilities shall be located as close to the right-of-way line as is practical.

4.5.E.I. COORDINATION WITH UTILITIES OWNERS

4.5.E.I.a. Residential/Commercial Developments

Close coordination with utility owners is very important to new developments and roadway projects to ensure timely relocations or installation of new facilities. The Developer shall research utility information, determine the location and ownership of all utilities within the project limits and resolve each design issue associated with utilities. When two or more utility owners with the same type of facility exist within the project limits, the plans shall indicate the owner

associated with each installation. The construction documents shall clearly identify any conflicts or relocations that will need to take place within the project limits. Dry utilities shall be in the Public Utility Easement (PUE) and wet utilities shall be located in the roadway per City of Rio Rancho standards.

The Developer shall furnish plan sets to each utility owner impacted by the project. Direct contact with utility company for design coordination and land conflict resolution will be led by the Developer but coordinated with City staff. The Developer shall record minutes of all meetings and provide the City with copies of all minutes and correspondence directly received by the Developer from the utility owners.

4.5.F Signing and Striping

4.5.F.I. SIGNING & STRIPING DESIGN

The developer shall design signing and striping in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).

4.5.F.II. COORDINATION WITH THE CITY

4.5.F.II.a. Meeting with the City of Rio Rancho Development Services Department

The Developer may meet with City staff prior to beginning the pavement marking and signing design to discuss the project in detail. This discussion should address all applicable pavement marking and signing related items, as noted below.

1. Identify current design standards that will control the design.
2. Verify which pavement marking materials are to be used.
3. Verify that traffic signs will use the following criteria:
   a. All sign posts shall be square tube perforated sign posts.
   b. Use street light poles to mount signs when possible.
   c. Signs to be installed per City of Rio Rancho Standard if available.
4. Verify the project's design speed and posted speed limit.
   a. Projects design speed should be based on functional classification.
5. Clarify the limits of the project and determine how the new design will match into the existing roadway.
6. Confirm the primary City of Rio Rancho Development Services Department contacts for the project.
7. Overall project schedule.

Developer will identify any specialty signing in the area of the project or any unusual roadway pavement marking needs (e.g., hospitals, park and ride facilities, freeway trailblazing, libraries, bike lanes, etc.).

4.5.F.II.b. Post Meeting Communication

The Developer may send to City staff any follow-up material that may be needed, particularly information that modifies or changes the concepts that were discussed during the original pre-design meeting. For example, the Developer will:

1. Prepare and distribute meeting minutes to all concerned parties.
2. Send project scope changes and design criteria changes to City staff.
3. Update the project schedule and proposed submittal dates.
4. If necessary, schedule a meeting with City staff to discuss and review comments.

4.5.F.III. EARLY TRAFFIC ENGINEERING INPUT INTO GEOMETRIC DESIGN

4.5.F.III.a. Traffic Engineering Input

The Developer shall coordinate with City staff early, and often throughout the roadway design process. This process shall reference the current version of the AASHTO in the development of all roadway designs for the process. Additional transportation design requirements can be found in Section 4.6.A Roadway Design Criteria.

4.5.F.IV. LIGHTING AND SIGNING

4.5.F.IV.a. Streetlight Design

4.5.F.IV.a.i. Streetlights – Required

Streetlights shall be required for all public roadways being developed or constructed unless as noted in Section (4.5.F.IV.a.i). In addition, streetlights may be required for lots and parcels which are being improved or altered, depending on the nature and extent of the work. Illustrations of streetlights generally required are shown on City of Rio Rancho Standard Drawings.

4.5.F.IV.a.ii. Streetlights – Not Required

For planned developments, residential, commercial, and industrial developments where the internal streets are not offered for dedication (private roads), a streetlighting system will not be required for the internal non-dedicated streets but shall be provided by the developer on the external public street frontage.

4.5.F.IV.a.iii. Developer Responsibility

Existing streetlights which must be relocated or repositioned because of the construction of new streets or driveways into a development shall be the responsibility of the developer.

Where a development abuts a roadway and/or the development's Traffic Impact Analysis identifies improvements to the roadway or intersection, streetlights shall be installed on both sides of the roadway according to City of Rio Rancho Standard Drawings.

Any new service, including any transformer, required for new service or modification, replacement, or relocation of an existing utility service pedestal, shall be the responsibility of the developer. The developer shall also be responsible to ensure that power shall remain to existing streetlights during the period of any such modification, replacement or relocation of an existing utility service pedestal unless otherwise approved by the City.

Except where lighting is approved by the City's Traffic Section Manager as an addition to an existing metered service, Developers or their contractors shall be fully responsible for service applications in their own name and shall retain responsibility for the streetlights including all costs for PNM to provide power service until the City has granted final acceptance. The City will assume responsibility for the streetlight power service upon final acceptance and will be responsible for the costs associated with the power service thereafter.

The Developer or their contractor shall submit permits to the City of Rio Rancho Building Division and Project Manager and complete all inspections as required by the City Building Division and New Mexico Administrative Code (NMAC). Submittal documents shall be approved by the Project Manager and Rio Rancho Building Division prior to construction and shall include proposed equipment and a site map showing locations of pedestals, poles, luminaires conduit conductors etc. Submittals shall also include

one-line diagrams with all pertinent information, including, but not limited to, grounding details, voltage drop calculations, overcurrent protection, etc.

4.5.F.IV.a.iv. Streetlight Design Standards

Streetlighting shall be designed in conformance with the current edition of the City of Rio Rancho Standard Street Light Standard Drawings for the intended roadway classification typical section. Where roadway conditions and typical sections do not conform to those established in the City's standard drawing, streetlighting shall be designed in accordance with the current ANSI/IES standards for roadway lighting.

4.5.F.IV.a.v. Streetlight General Plan Details

The plans shall show and identify all streetlights to be installed, all existing streetlights in the immediate vicinity of the project, all conduit and conductor runs, service points, trees, and all applicable provisions and details specified in these standards.

On subdivision plans, the streetlights shall be shown on their own streetlight plan sheets. The following shall be required on the streetlight portion of subdivision plans, even though duplications may be involved:

- A vicinity map or equivalent.
- Utility infrastructure (including water, sewer, gas, communications, poles, transformers, junction boxes, etc.) and public utility easements.
- Names of adjacent subdivisions.
- Intersecting property lines of adjacent properties.
- A north arrow and appropriate scale (1"=10' to 1"=100').
- All existing streetlights on both sides of any streets and in the median.
- All trees within the vicinity of the conduit runs or proposed streetlights.

Plans shall be submitted to the City of Rio Rancho Development Services Department in accordance with the requirements outlined in the Development Process Manual for construction of infrastructure in the public right-of-way. Material cut sheets, manufacturer drawings, or product data sheets for all poles, luminaires, photocells / lighting controllers, service / disconnect / meter pedestals, and pull boxes shall be submitted for review and approval prior to ordering of any materials. The City reserves the right to require removal and replacement of any unapproved materials at the Developer's sole expense.

Where roadway conditions and typical sections do not conform to those established in the City's standard drawings, a photometric analysis shall be included with the lighting design that includes the lighting design criteria, street class, pedestrian activity classification, light plot, average luminance, Average Uniformity Ratio, Maximum Uniformity Ratio, and Maximum Veiling Luminance Ratio.

4.5.F.IV.a.vi. Streetlight Design Details

Design details for streetlights are as follows:

- Roadway Streetlighting – Streetlighting shall be placed along the roadway as shown on City of Rio Rancho Standard Drawings for their intended functional classification and roadway typical section. Median streetlighting may only be utilized on corridors where existing median streetlighting has been implemented or where preapproved by the City of Rio Rancho traffic Section Manager.

- Intersections -- Intersections shall have at least one streetlight over each of the stop-controlled approaches. Single lane all-way stops may have only two streetlights over opposing approaches. The number and locations required shall conform to City of Rio Rancho Standard Drawings. Excluding residential roadways, intersection streetlighting shall not be included as a part of streetlight spacing along a roadway. Roundabouts and signalized intersections shall be designed to conform to the latest edition of ANSI/IES RP-8 requirements for approval by the City Traffic Section Manager.
- Cul-de-Sacs -- All cul-de-sacs exceeding 130-feet in length, measured from the streetlight location at the intersection to the right-of-way line at the end of the cul-de-sac shall have a streetlight within the bulb. The location of the streetlight within the cul-de-sac bulb shall conform to City of Rio Rancho Standard Drawings.
- Curves – Except as noted below in spacing for arterials, streetlights shall be located on the inside of curves with a radius of less than 200 feet and internal angle of less than 120 degrees.
- Mid-block Pedestrian Crossings -- Streetlights shall be placed at both ends of marked mid-block pedestrian crossings. The design of streetlighting at mid-block pedestrian crossings shall conform to the latest edition of ANSI/IES RP-8 requirements.
- Spacing -- Maximum streetlight spacing, measured along the street centerline, shall conform to City of Rio Rancho Standard Drawings, except on arterial streets with a 1,000-foot or smaller radius horizontal curve, in which case the maximum spacing shall be determined by photometric analysis. The ultimate planned street type and right-of-way width shall be the controlling factor for determination of streetlight spacing rather than the existing street classifications (arterial, collector, etc.).
- Streetlight Poles and Luminaires -- All streetlight poles shall be as shown on City of Rio Rancho Standard Drawings. Where roadway conditions and typical sections do not conform to those established in the City's standard drawing Street Lighting shall be designed in accordance with the he the current ANSI/IES standards for roadway lighting and submitted to the City for approve by the Traffic Section Manager.

4.5.F.IV.a.vii. Light Emitting Diode Luminaries

All new streetlight installations shall utilize Light Emitting Diode (LED) luminaires. All luminaires shall conform to the specific manufacturer, model, and wattages shown on City of Rio Rancho Standard Drawings, unless otherwise supported by a photometric analysis approved by the City's Traffic Section Manager.

4.5.F.IV.a.viii. Service

All streetlight systems shall have underground service provided. Service voltage shall be shown on the plans. Service voltage shall be either 120 volts or 240 volts for unmetered and 240 volts for metered service. Service points shall be provided within a Public Utility Easement immediately adjacent to the right-of-way, or within the existing right-of-way, and at a point which is as reasonably near as possible to the serving utility power source as shown on City of Rio Rancho Standard Drawings.

4.5.F.IV.a.ix. Pull Boxes

All pull boxes, including the size, shall be shown, and identified on the plans. Pull boxes shall be installed at all locations where more than two conduit runs intersect, where conduit runs are more than 300 feet long and where shown on City of Rio Rancho Standard Drawings. Pull boxes shall conform to City of Rio Rancho Standard Drawings.

4.5.F.IV.a.x. Conductors

All conductors, including quantity and size, shall be identified on the plans. Unless otherwise specified, conductors shall only be single conductor, solid or stranded aluminum, sized in accordance with these standards and the National Electrical Code (NEC) and shall conform to City of Rio Rancho Standard Drawings.

4.5.F.IV.a.xi. Photo Cell and Receptacle

All luminaires shall have an intelligent lighting management controller as shown on City of Rio Rancho Standard Drawings.

4.5.F.IV.a.xii. Conduit

All conduit runs, including the size, shall be shown, and identified on the plans and shall conform to City of Rio Rancho Standard Drawings.

4.5.F.IV.a.xiii. Electrical Equipment and Work

Control and switching equipment and fusing of all circuits shall meet the requirements of the New Mexico Administrative Code (NMAC), National Electrical Code (NEC), New Mexico Electrical Code, the rules of the National Board of Fire Underwriters, and the City of Rio Rancho Standard Drawings and Standard Construction Specifications.

4.5.F.IV.a.xiv. Substantial Completion

Prior to requesting substantial completion, the developer shall have all streetlights, disconnects, field wiring, conduit, pull boxes, and luminaires etc. fully installed. For the substantial completion walk through the developer shall provide the City's Project Manager and Traffic Section Manager with the location and extent of the development including any off-sight improvements, a copy of the latest plan set, including light locations, service locations, spacing, pull boxes, street light submittals, etc. During the substantial completion, the Developer or their Contractor shall remove pull box lids and hand holes as necessary to verify connections and grounding as requested.

4.5.F.IV.a.xv. Final Completion

Prior to requesting final completion, the developer shall have resolved any deficiencies found during substantial completion, the services shall be green tagged, streetlights energized, and smart nodes all pre-programmed and configured to the City's panel. For the final completion walk through the developer shall provide the City's Project Manager and Traffic Section Manager with the location and extent of the development including any off-sight improvements and As-Builts of luminaire locations, service pedestals, conduit, and conductor, pull boxes, and services pedestals, etc. Upon final completion the City's traffic section will verify street light function via smart node and lock service disconnects once verified.

4.5.F.IV.b. Signing

The developer is responsible for all signing.

The roadway classification and/or design speed shall typically govern the posted speed limit. A speed limit sign shall be required at all subdivision entrances and at all areas where the speed limit changes.

All other signing within the proposed development shall be shown on the construction plans for review and approval by City staff.

4.5.F.V. INTERSECTION CONTROL AND MARKINGS

Intersection control and markings are important elements to be considered in the design of all street systems. The application of these elements to the design of streets are described in several of the references in this chapter. The latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) shall be used to define the design of these elements.

4.5.F.V.a. Traffic Signals and Roundabouts

The determination of where and when traffic signals and roundabouts are to be installed shall be made by the City with a recommendation to be included in the appropriate Master Plan or TIA. This decision is based upon the evaluation of traffic conditions at an intersection in accordance with the warrants contained within the MUTCD. Excepting intersections on principal arterials, roundabouts shall be considered for every location that does meet or is anticipated to meet MUTCD criteria for a traffic signal. The City will decide what the appropriate treatment is based on criteria that includes, but is not limited to, safety, efficiency, construction and operating costs, and available right-of-way.

4.5.F.V.b. Markings

Street markings in accordance with the MUTCD shall be included in new construction, the marking layout must be shown in the plans and included in the work to be performed by the contractor. The Developer shall layout the proposed signing and striping plan in the field for verification by City staff. See 4.19 Appendix A for guidance on intersection stop bars, yield marks, crosswalks, and lane designation symbols.

4.5.F.VI. TRAFFIC CONTROL, CONSTRUCTION PHASING AND CONSTRUCTION PERMITS

All anticipated construction activities shall include a plan to identify the phasing of construction activities and the necessary traffic control devices in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

Construction activities within the right-of-way require a Right-of-Way Use Permit. Prior to the issuance of the permit, plans must be submitted with appropriate approvals which define the construction activities, appropriate traffic control measures, and evidence of notification through the One Call System (505-260-1990) or 811 and submitted to the City for review and approval.

Information regarding Right-of-Way Use Permits can be obtained on the City of Rio Rancho website.

4.5.G Subdivision Infrastructure Requirements

The following information has been provided to assist the development community in determining the extent of public infrastructure that will be required in conjunction with a planned residential development. The information is to be used as a guide, and additional coordination and discussions with the City's Department of Public Works and Development Services will be required.

Note: The Developer will be required to meet the applicable design procedures, design guidelines, drafting and submittal requirements as outlined in the City's DPM for the development of their project.

4.5.G.I. ROADWAY IMPROVEMENTS

The Developer will be required to construct full roadway improvements adjacent to and surrounding the project's boundaries.

The roadway typical sections for the road system adjacent to the project's boundaries will need to be established by the developments Traffic Impact Analysis (TIA), as necessary – see Section 4.4.C of this chapter. Once completed, the results of the analysis shall be submitted for review and approval by City staff. Once the analysis is approved, the developer will be required to construct improvements along the project's frontage, as determined by the TIA, and provide the necessary pavement tapers in accordance with AASHTO to transition the proposed roadway section to match the existing roadway section.

In the event that the proposed residential development is located away from any existing paved roads, the developer will be required to pave full width roadway improvements necessary to gain unrestricted access to the development from the nearest arterial or collector roadway. The extent of those improvements outside the project boundaries will also be based on the information provided in the TIA.

4.5.G.II. WATER AND SEWER IMPROVEMENTS

The Developer will be required to provide the necessary water and sewer facilities needed to successfully service all the proposed residential homes / commercial developments that will be located within the planned community. The extent of the water and sewer improvements will be based on the location of the residential subdivision / commercial development in relation to existing City water and sewer facilities and their available capacities. The Developer will be required to prepare a Master Water and Sewer Report to determine the demand and the corresponding line sizes that will be needed to service the development.

If the development is located outside the limits of the City's existing water and sewer system, the Developer will be required to extend the necessary lines (water and sewer) to service the development. If the demand would overload the City's water and sewer system, the City is not obligated to approve the proposed subdivision.

If the demand of the residential development does not overload the existing City water and sewer system, the Developer will be allowed to extend the existing water and sewer system as needed to service the development.

It is the sole responsibility of the Developer to provide the water and sewer lines required to service the development no matter the cost associated with the improvements.

4.5.G.III. STORM DRAIN IMPROVEMENTS

The Developer is required to construct and install all the necessary storm drain improvements to capture and convey the runoff generated from the development so that it does not have a negative impact on surrounding developments/residents or the environment.

It is the sole responsibility of the Developer to evaluate and analyze the impacts that the runoff generated from the development may have to the surrounding area. The Developer will be required to address and mitigate potential drainage issues that could arise. Discussion with the City Roadway and Drainage Sections should take place to determine the best course of action in the event that additional drainage improvements may be required. (See Chapter 3 –Drainage, Flood Control and Erosion Control).

4.5.H Post Construction Requirements

See Chapter 2.8 Submittal Requirements.

4.5.H.I. FINAL PROJECT SUBMITTAL

Upon receipt of the acceptance letter the "Final Project Submittal Package" shall be submitted. See Chapter 2.8 Submittal Requirements.

4.6 Roadway Design Standards

4.6.A Design Criteria

The criteria presented within this section are major controlling factors in the design of streets. It is expected that designers will carefully apply, with attention to detail, these criteria to individual design circumstances. Suitable transitional elements must be provided between changes in geometric configuration, pavement and curb character, and drainage carrying aspects of the ultimate street design.

In the following, the major criteria governing design speed, horizontal and vertical geometrics, sight distance, curvature and superelevation, gradients, and comfort controls are presented.

The guidelines contained herein are intended to provide direction in the design of transportation facilities. While most of the design parameters that should be used are provided in the following pages, unusual conditions may occur in some projects. When additional guidance and explanation is needed, the designer should refer to the list of publications already included in Section 4.5.A.V. of this chapter or the most current edition thereof.

Variances in design standards may be sought to cover unusual circumstances or alternative design concepts. Variances for these would be granted by the review body or person(s) that would have primary responsibility for those standards.

4.6.B Roadway Cross Sections

4.6.B.I. LANE WIDTHS

Consult the standard cross sections found on the City of Rio Rancho design criteria, standard detail, and standard construction specifications webpage for standard lane widths and other relevant cross section geometry. For analyzing non-typical situations, The Developer must consult with and obtain prior approval from City staff before using alternative values. The Developer shall prepare a design memo detailing the cross section and lane widths when changes to the standard City cross sections are needed. All dimensions are in feet and measured to center of lane lines from the edge of pavement (no curb) or to the edge of curb. Current City standard details for roads, drainage, and traffic can be found on the City's website.

4.6.B.II. CROSS SLOPE

The desirable cross slope on normal sections of all pavement types should be 0.02 foot per foot (2%), with 0.01 foot per foot (1%) minimum and 0.03 foot per foot (3%) maximum for collector and residential roads. For arterials, follow ASHTO. The minimum cross slope at intersections may be reduced to 0.005 foot per foot (0.50%). The 1% absolute minimum cross slope shall not be used in combination with a minimum longitudinal slope.

The slope is downward on each side of a centerline high point for two-way roads. For one-way roads, the slope should be constructed to angle uniformly throughout the full surface width. When pavements are resurfaced the desirable transverse slope should be 0.02 foot per foot (2%) with a maximum slope of 0.03 foot per foot (3%).

The minimum desirable longitudinal curb grade shall be 0.005 foot per foot (0.50%). The absolute minimum shall be 0.0035 foot per foot (0.35%). The maximum desirable shall be 0.06 foot per foot (6%) with 0.10 foot per foot (10%) as absolute maximum. The Developer is required to discuss using the absolute minimum and maximum values for longitudinal slope with City staff for approval.

4.6.B.III. GRADED SHOULDERS

Graded shoulders should slope 0.05 foot per foot (20:1) downward from the adjacent pavement edge. In superelevated sections, the graded shoulder slope shall continue to slope away from of the pavement. The graded slope on the high side may have a reduced slope. The graded slope on the low side shall remain at 0.05 foot per foot (20:1) downward, except when the superelevation rate exceeds 0.05 foot per foot (5%), in which case the low side graded shoulder slope shall equal the rate of superelevation. However, when portions of the shoulders on two-lane highways are paved as an integral part of the travel lanes (and the paved portion is 5 feet or less in width) the paved shoulder slope shall be the same as the cross slope of the traveled lanes. The remaining unpaved portion of the shoulder should be sloped 0.05 feet per foot (20:1) except when modification is needed for superelevated sections. Local roads shall have the graded portion of the shoulder sloped at 10:1.

Street Type	Street ROW Cross Section								Design/Posted Speed	Max Gradient	Min. Gradient	Min Radius @ Centerline	Min. Sight Distance	Min. Tangent Length	Max. Length
	Min. Width	Curb & Gutter	Driving Lane	Parking Lane	Median Width	Bicycle Lane	Sidewalk Width	Buffer Separation							
Principal Arterial	156 ft	STD DWG CG-01	11 ft	-	Varies by # of Lanes	6 ft	6 ft	5 ft min	45 mph-65 mph	10%	0.50%	SEE AASHTO	SEE AASHTO	SEE AASHTO	
Minor Arterial	Varies Min 86 ft Max 106 ft	STD DWG CG-01	11 ft	-	22 ft	6 ft	6 ft	5 ft	40 mph min	10%	0.50%	SEE AASHTO	SEE AASHTO	SEE AASHTO	
Intersections (750 ft. distance)	Additional 30 ft (15 either side)	-	-	-	-	-	-	-	-	4% max 50 ft from intersection	0.5 min - 3% max through the intersection	-	-	-	
Minor Collector	Varies Min 80 ft Max 102 ft	STD DWG CG-01	15 ft	9 ft (parallel) 14-30 ft (angle)	-	-	Varies Min 14 ft Max 20 ft	N/A	30 mph min	10%	0.50%	SEE AASHTO	SEE AASHTO	SEE AASHTO	
Major Collector	68 ft	STD DWG CG-01	11 ft	-	11 ft	5 ft	5 ft min	3 ft min	35 mph min	10%	0.50%	SEE AASHTO	SEE AASHTO	SEE AASHTO	
Local	50 ft	STD DWG CG-01	13 ft		-	-	5 ft min	3 ft min	25 mph	10%	0.50%	SEE AASHTO	SEE AASHTO	SEE AASHTO	600 ft
Alley	20 ft	-	20 ft		-	-		-	-	-	-	-	-	-	
Driveway	STD DWG DW-01	-	-		-	-		-	-	-	-	-	-	-	-
Cul-de-Sac	100 ft diameter	-	-		-	-		-	-	-	-	-	-	-	500 ft

The design control at the crossover line between the pavement and the graded portion of the shoulder is the algebraic difference in the cross-slope rates. The maximum algebraic difference at this point is 0.08 foot per foot (8%). For superelevated pavements greater than 0.03 foot per foot (3%) but less than 0.06 foot per foot (6%) the graded portion of shoulder on the high side can vary from 5% to 2% to affect a maximum algebraic grade difference of 0.08 foot per foot (8%). For superelevated pavements greater than 0.06 foot per foot (6%) the graded portion of shoulder shall be paved to match the cross slope of the roadway. Where they both slope in the same direction, it is the difference of their cross-slope rates. Shoulder slopes that drain away from the paved surface on the outside of well-superelevated sections should be designed to avoid greater than an 8.0% grade break.

When the designer is matching pavement, the cross slope or breakover should not exceed 0.01 foot per foot (1%) except at crown lines.

4.6.C Design Speeds and Posted Speeds

The design of geometric features such as horizontal and vertical curves will depend upon the design speed selected for the street. The choice of the design speed is primarily determined by the street classification. The design speed is the maximum recommended speed at which reasonable safe operation of a vehicle can be maintained over a specific section of a road when conditions are so favorable that the design features of the road govern. Design speeds for the various classifications of roads may be found in Table 4.2 above.

4.6.D Horizontal Curves

For specific direction on the consideration of horizontal curves in designing roadways, AASHTO's *A Policy on Geometric Design of Highways and Streets,* latest edition should be reviewed for guidance. Specifically, the following should be noted:

- General controls.
- Superelevation rates.
- Superelevation transition.
- Sight distance.
- Appropriate consideration of "knuckles" on residential streets with right angle cures as needed to accommodate school bus design vehicles. This is important on roads with parking permitted on both sides of the street.

4.6.E Vertical Alignment

All design elements related to the vertical alignment shall refer to the current AASHTO A Policy on Geometric Design of Highways and Streets for guidance.

4.6.F Roadway Alignment

All design elements related to roadway alignment shall refer to the current AASHTO A Policy on Geometric Design of Highways and Streets, for guidance.

4.6.G Clear Zones, Guardrails, and Curbs

All design elements related to clear zones, guardrails and curbs shall refer to the AASHTO *Roadside Design Guide* for guidance. For design considerations related to curb returns, see City of Rio Rancho Standard Detail specifications.

4.6.H Sidewalks

Sidewalks shall be designed in accordance with the current City of Rio Rancho Standard Details. All newly constructed sidewalks and corresponding ramps shall be in compliance with the Americans with Disabilities Act (ADA) requirements and take into account Public Rights-of-Way Accessibility Guidelines.

4.6.I Grading in Parkway and on Private Property

If a cut or fill slope must extend onto private property, the top of the bank and the toe of slope shall be shown on plan view regardless of the depth of the cut or fill. The Developer must obtain sufficient topographic information and spot elevations to accurately determine the limits of the cut or fill. This may require survey beyond what is normally expected on private property if the road is located on a hillside slope.

A typical cross-section drawing showing the existing ground slope and the proposed cut or fill shall be shown on the same plan sheet. Any easements that are required to construct the proposed cuts or fills on private property shall also be shown on the plan views. The City shall be notified in writing of all easement requirements for cuts and fills. The drawing of proposed easement lines on the construction plan is not suitable notification.

If the difference in elevation between the back of a graded pedestrian walkway (or the back of a sidewalk) and the existing ground at that location is greater than one foot, the top of the bank and the toe of the slope shall be provided on the same plan sheet.

The maximum slope of the grading behind a graded pedestrian walk or sidewalk may be increased if the abutting property is undeveloped and if available right of way is not sufficient for a 4:1 slope without encroaching onto private property. This should be discussed with the City.

If existing fences, trees, or other structures lie in the area where cuts and fills are planned, their relocation, if necessary, shall be part of the design requirement. Trees must be relocated if the cut(s) or fill(s) will encroach upon them.

Retaining walls may be considered as an alternative to cuts and fills if development on private property would be adversely affected by a cut or fill, or if an easement is unobtainable. The goal is to achieve practical and economical solutions to problems generated by grade differentials.

4.7 Intersections

4.7.A General Controls

4.7.A.I. INTERSECTION ANGLE

Roads shall intersect each other at not more than 10 degrees from perpendicular.

4.7.A.II. INTERSECTION SPACING

For local roads, intersection spacing should maintain sight-distance requirements at a minimum. For all other roadways within the City of Rio Rancho, refer to NMDOT State Access Management Manual for guidance.

4.7.A.III. INTERSECTION LOCATION

Arterials and collectors shall have straight approaches of at least 330 feet between the intersection and horizontal curves.

4.7.A.IV. LIMITS OF IMPROVEMENTS

Intersecting major streets shall be improved to the limits designated. Tapers to match existing pavement shall be as designated in the geometrics. Care shall be taken to ensure smooth grades in both directions at the intersection of arterial streets, collector streets, and any other potentially signalized intersections.

Work at intersecting streets shall generally end at the terminus of the curb return. If an intersecting street is unpaved and ROW is available, the pavement (with curb and gutter) shall generally be extended 100 feet beyond the returns to prevent gravel accumulation and erosion at the intersection.

4.7.A.V. SIDEWALK RAMPS

All improvements shall be designed in accordance with current ADA guidelines and City of Rio Rancho Standard Details.

4.7.A.VI. CURB RETURNS AT STREET

Refer to City of Rio Rancho Standard Details.

4.7.A.VII. INTERSECTION SIGHT DISTANCE

Intersection sight distance shall be proved at all intersections. The procedure for calculating intersection sight distance may be found in the AASHTO Policy on Geometric Design of Highways and Streets.

4.7.A.VIII. LEFT TURN LANE STORAGE

The left turn storage length shall be determined by a TIA for both signalized and unsignalized intersections. The minimum storage length shall not be less than 75 feet for unsignalized intersections or 160 feet for signalized intersections, unless agreed upon with the City. If a TIA indicates that these minimums are not adequate, then the storage length shall meet the 95th percentile queue.

4.7.A.IX. RIGHT TURN LANE STORAGE

The right turn storage length shall be determined by a TIA for both signalized and unsignalized intersections. The minimum storage length shall not be less than 75 feet for unsignalized intersections or 160 feet for signalized intersections, unless agreed upon with the City. If analysis indicates that these minimums are not adequate, then the storage length shall meet the 95th percentile queue.

4.7.A.X. AUXILIARY LANE TRANSITION TAPERS AND DECELERATION REQUIREMENTS FOR AUXILIARY LANES

Refer to NMDOT State Access Management Manual for guidance.

4.7.A.XI. LANE REQUIREMENTS

The determination of functional classification is required to determine the number of lanes and the lane configuration for intersections. The outputs of a TIA should also be referenced in support of this determination. See section 2.8.A.III of Procedures chapter for analysis requirements.

4.7.A.XII. INTERSECTION TURN LANE DESIGN

At intersections where no specific left turn lane or a single left turn lane is to be provided, a truck turning template must be used to ensure the width of the receiving lane on the exit portion of the intersection is sufficient for the design vehicle. A left turning vehicle's sight distance shall not be obstructed by an opposing left-turning vehicle.

At intersections where double left turn lanes are to be provided, a truck turning template must be used to ensure the width of the receiving lanes on the exit portion of the intersection are sufficient for the design vehicle.

4.7.A.XIII. INTERSECTION CROSS SLOPE/GRADING

Intersections must be graded to provide characteristics consistent with the design speed of the through street. Intersection staking sheets through the intersection will be required for design review of major intersections involving arterial and collector streets. Alignment of arterial streets through intersections must be continuous without breaks in grade. Grades within the intersection need to be flat enough to minimize problems with turning vehicles and to keep stopping distances reasonable. Grades should also be steep enough to ensure that proper drainage occurs. Grades should be between 0.5% minimum and 3% maximum. Grades established for channelized turning roadways need to be compatible with superelevation for design.

Minor leg approach tangent gradients to intersections generally must not exceed 4% for a distance of at least 50' back from the projected curb flowline of the through street. Deviations from this standard will require concurrence from City staff.

Street crown should be reduced through signalized intersections of collector and major local streets of approximately equal classification to promote driver comfort. Crown reduction should not generally exceed one half of standard crown unless special circumstances govern, and concurrence of City staff is obtained. Grade breaks through major-major, major-collector, and any other signalized or potentially signalized intersections shall not exceed 2.0% desirable or 3.0% absolute maximum. Intersection grading must provide for appropriate drainage.

Grades intended to serve as drainage water blocks may only be designed on minor approach legs of intersections. Maximum height of such water blocks allowed will be 12" as measured vertically from the projected gutter flowline elevation of the major or through street to the gutter flowline elevation at the high point of the minor leg gutter. Vertical curves of a minimum length of 50' must be provided for water block configuration. The vertical curve needs to begin at the intersection flowline to preserve reasonable intersection visibility. Adequate stopping sight distance must be provided in the design.

Detailed drainage design must follow the requirements of Chapter 3.6; however, the designer should specifically investigate intersection design to assure that design flows will not overtop curbs resulting in damage outside the right-of-way.

Intersections should be located to avoid roadway segments that are highly superelevated. Intersection grading for superelevated roadways needs to consider the issues of grade compatibility, cross-over crown etc. to ensure that the intersection will operate properly.

4.7.B Roundabouts

4.7.B.I. GENERAL

Roundabouts shall be the preferred option for intersection control on all single lane minor arterials and collectors. They should also be considered as alternatives to signals on two lane minor arterials. The criteria to be used for selecting a roundabout over other forms of intersection control such as signals or stop signs include, but are not limited to:

1. Safety Improvements – This use would typically be used on locations where there were abnormally high crash rates associated with conflicts that would be reduced or eliminated with roundabouts.
2. Operational Improvements – This use would typically be used in locations where a roundabout would provide better performance than other traffic control modes such as stop signs or traffic signals.
3. Community Enhancement – This use is typically a gateway treatment to convey a change in environment or land use.
4. Special Situations – This use would be limited to areas where unique alignment and/or geometric constraints make it impractical to use traditional traffic control modes.

In addition, all Traffic Impact Analysis (TIA) should include a comparison of the theoretical intersection delay for a roundabout versus a signal at all warranted signal locations, where applicable and/or required. For more information regarding roundabouts, please visit the City's Roundabout Information webpage.

4.8 Access Control

With respect to driveways, road users have certain rights of access to abutting property as well as the right to travel on the road with relative safety and freedom from interference. Since these various rights sometimes conflict, the City is given the responsibility for reconciling and satisfying, to the extent feasible, the needs and rights of all road users with respect to driveway location, design, and operation. When conflicts cannot be fully resolved, preference will be given to the safe and efficient use of the road, particularly when traffic growth requires additional storage capacity of left-turning vehicles at signalized intersections. In such cases, the City reserves the right to change a nearby access point from full access to partial to ensure safe, efficient operations of the adjacent signal.

Existing accesses, even if not in use, must not be relocated, altered, or reconstructed without approval from the City of Rio Rancho. When an access to a roadway with a curb and gutter is abandoned, it must be replaced by a full height curb across the abandoned access and the depression behind must be filled. When an access to a roadway with a shoulder and ditch is abandoned, it must be replaced by a matching existing shoulder and ditch.

4.9 Access to State Highways

Access to State highways is regulated by the New Mexico Department of Transportation (NMDOT). The City of Rio Rancho will not review changes to an existing access or any new access which is in State right-of-way. Encroachment permits for access to State highways must be obtained directly from the NMDOT. The City shall review requests for new access where any portion of the access is in City right-of-way.

4.10 Access to City Roadways

All construction to connect or change driveways entering City right-of-way must first be authorized by a valid City of Rio Rancho Curb Cut Permit and a Right of Way Use Permit. These permits can be obtained through the Department of Public Works at the following website: https://rrnm.gov/1306/Public-Works.

The City currently follows the standards in the NMDOT State Access Management Manual (SAMM). No access points shall be approved without an acceptable project site plan indicating the location and number of access points. A Traffic Impact Analysis may be required to substantiate the need for access or any variances to the SAMM guidelines.

4.11 Driveways

4.11.A Driveway Characteristics

4.11.A.I. SINGLE FAMILY RESIDENTIAL DEVELOPMENT

Driveways serving single family residential units should be designed in accordance with Standard Detail DW-01, "Sidewalk and Driveway Transitions (Residential)" and DW-02, “Sidewalk and Driveway Transitions (Collector)." located on the City's Standard Details for Roads, Drainage, and Traffic webpage. If the driveway is to serve one single family unit, the maximum width should be 24 feet. For single family residential accesses, the width must equal the width of the garage opening if the garage is within 25 feet of the right-of-way line, up to a maximum of 30 feet. If one driveway is to serve two single family units, the maximum width should be 30 feet.

4.12 Driveway Design

4.12.A Restriction of Turning Movements

Where necessary for the safe and efficient movement of traffic, the City may require access points to be geometrically designed so as to provide for only limited turning movements. The restriction of turning movements should not affect the number and location of access points as specified elsewhere.

4.12.B Medians For Limited Movement Accesses

The ends of the medians should typically be provided with 2-foot back of curb radii.

Acceleration and deceleration lanes in accordance with SAMM will be required to be incorporated into the design. Medians must be provided with vertical curbs. Additional right-of-way or easement may be required to accommodate these designs.

4.12.C Design

Generally, all new private property access will be designed as driveway cuts. The design of accesses must also take into consideration the needs of truck traffic and must be checked using the appropriate turning template. Drainage patterns must also be taken into consideration in the design of accesses.

4.12.D Driveway Sight Distance

Adequate sight distance must be provided for vehicles exiting and entering a driveway. Driveway locations should be evaluated to determine whether a sight obstruction exists, such as buildings, signs, vegetation, parked vehicles, horizontal or vertical highway alignments, etc.

If the sight distance is not adequate, consideration should be given to the following options:

1. Removing the sight obstruction.
2. Relocating the driveway to a more favorable location along the frontage.
3. Prohibiting critical movements at the driveway.
4. Relocating access to another street, a frontage road, or a joint access location.

In all cases, stopping sight distance must be provided. AASHTO guidance and a design speed of posted speed plus at least 5 miles per hour should be used when determining site distance.

4.12.E Driveway Profiles

Adequate design of driveway grades should reflect consideration for basic functions of the adjacent street and the site that the access driveway serves. Generally, to enable safe ingress or egress maneuvers, driveway profiles should provide for sufficient clearance between the vehicle and the driveway surface.

4.12.F Driveway Angles

Two-way driveway should be as close to 90° to the roadway as possible (no less than 75°).

One-way driveway may be as flat as 75°. However, a minimum of an 85° angle is recommended for driveways in areas of high pedestrian or bicycle activity.

4.13 Large Developments

For large developments, the City may require the Developer to consolidate access to a single point which may be signalized. Driveway signals must be located to provide satisfactory signal progression for through traffic on the public road.

4.14 Driveway Locations

4.14.A Driveway Spacing

Refer to the NMDOT State Access Management Manual for guidance.

4.14.B Joint Access

Joint access will be required for two adjacent developments where a proposed new access will not meet the spacing requirements set forth in this section. Joint access must be approved by the City. Temporary joint access may be allowed.

4.14.C Driveway Corner Clearance

Corner clearance for driveways on collectors and arterials are governed by the NMDOT State Access Management Manual. Corner clearance for residential street driveways shall be coordinated with City staff.

4.14.D Driveway Location Restrictions

Driveway location on collectors and arterials are governed by the NMDOT State Access Management Manual.

4.14.E Driveway Location Coordination

It is necessary to coordinate the location of access for properties on opposite sides of the street so that they do not interfere with each other.

1. Driveways should be located directly opposite each other to ensure that they share a single access location.

2. Where lots are not large enough to allow accesses on opposite sides of the street to be aligned, the center of driveways not in alignment will normally be offset a minimum of 150 feet on all collector roads, and 330 feet on all industrial, major collector, and arterial roads. Greater distances may be required due to left turn storage lane requirements.

4.15 Driveway Storage

The design of a driveway should take into consideration the space necessary to store vehicles using the driveway. This applies to both vehicles making a left turn from the roadway and to vehicles stopped on the driveway waiting to enter the roadway. Adequate storage area is necessary to provide safe and efficient movement of vehicles and pedestrians on the public right-of-way.

The recommended vehicle storage area needed for the entire site may be spread over several accesses if more than one access serves the site. The recommended distance may be further adjusted by the City for accesses with two approach lanes and will be subject to traffic volumes and site layout.

When a development is located adjacent to a public road, the parking facility must have full internal vehicular circulation and storage. Vehicular circulation must be located completely within the property and vehicles within one portion of the development must have access to all other portions without using the adjacent road system.

4.16 Acceleration and Deceleration Lanes

Refer to NMDOT State Access Management Manual for guidance.

4.17 Bicycle Facilities Guidelines

4.17.A Basic Criteria

4.17.A.I. GENERAL

The City of Rio Rancho follows the nationally accepted guidelines, AASHTO Guide for the Development of Bicycle Facilities. In addition to the AASHTO guide, the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide may be referenced as appropriate.

The guidelines presented in this section primarily address the development of on-street bicycle facilities. All new roadways which are legal for bicycle use should be designed and constructed under the assumption that they will be used by bicyclists. Bicycle lanes will be included as part of the standard cross section on all arterial and collector streets when they are designed, constructed, reconstructed, or widened.

Specifications included in the City's Bicycle and Pedestrian Transportation Master Plan shall be utilized when incorporating bicycle and pedestrian infrastructure in a planned roadway.

4.17.A.II. DEVELOPMENT OF PLANS AND SPECIFICATIONS

Except where these standards provide otherwise, testing, report preparation, design, design details, workmanship, and materials shall be in accordance with the current editions of the following publications:

- Guide for the Development of Bicycle Facilities, The American Association of State Highway and Transportation Officials, ("AASHTO").
- Manual On Uniform Traffic Control Devices (MUTCD), U.S. Department of Transportation.
- Urban Bikeway Design Guide, National Association of City Transportation Officials (NACTO).
- ADA Standards for Accessible Design Guidelines, U.S. Department of Justice.

4.17.A.III. VARIANCES

Variances from these standards and procedures may be granted by the City upon evidence that such variances are in the public interest, that they are based upon sound engineering judgment, and that safety, function, appearance, and maintainability requirements are fully met. Variances must be requested and approved in writing.

4.17.A.IV. THE BIKEWAY SYSTEM

The bikeway system is intended to safely connect residential areas, employment, retail services, businesses, education centers, and recreational facilities. The bikeway System is also intended to include recreational bikeways. Consideration of connections and additions to the City's bikeway systems should be coordinated with the City's Bicycle and Pedestrian Transportation Master Plan.

4.18 Landscaping

4.18.A Landscape Design Standards

4.18.A.I. PURPOSE

These Landscape Design Standards have been written to serve as a guide to landscape architects and engineers for the purpose of designing and reviewing roadway landscape plans.

4.18.A.II. DESIGN CRITERIA

The surroundings in which the roadway is being designed will have a strong influence on the landscape design. The design shall be respectful of existing natural features such as landforms and vegetation. When the roadway traverses urban developed areas, the landscape design shall reinforce the adjacent landscape theme or character. The principles of low maintenance and low water use shall be incorporated into all landscape designs.

Under any circumstances the design shall not compromise on safety of all roadway users, including motorists, pedestrians, bicyclists, and construction and maintenance workers. Special consideration should be given to the placement of objects in medians and at corners to ensure safety is preserved for all roadway users.

4.18.A.III. PROCESS

Many elements need to be considered during development of the landscape design. The landscape design process shall begin with a thorough inventory and analysis of existing conditions including the natural landscape elements, topographic and physical characteristics, ecological factors, recreational potentials, residential qualities, historical features, and visual values. The results of the inventory/analysis shall be incorporated into a schematic or concept design submittal (typically included in the 30% submittal).

Subsequent steps in the design process will be determined by the size and complexity of the project. Relatively simple projects may require only schematic levels of design prior to preparation of construction documents. Typically, an intermediate design development stage - the preliminary design - is required between the conceptual design development and construction document preparation. On larger projects, additional design, and/or planning activities (i.e., visual studies, native plant surveys, land use evaluations, etc.) may be necessary.

Early in the project development stage, the landscape architect shall consult with the City of Rio Rancho Design Guidelines when published for guidance on the landscape design submittal requirements, including sheet size, order of drawings, standard notes and details, special provisions, etc.

4.18.B Design Considerations

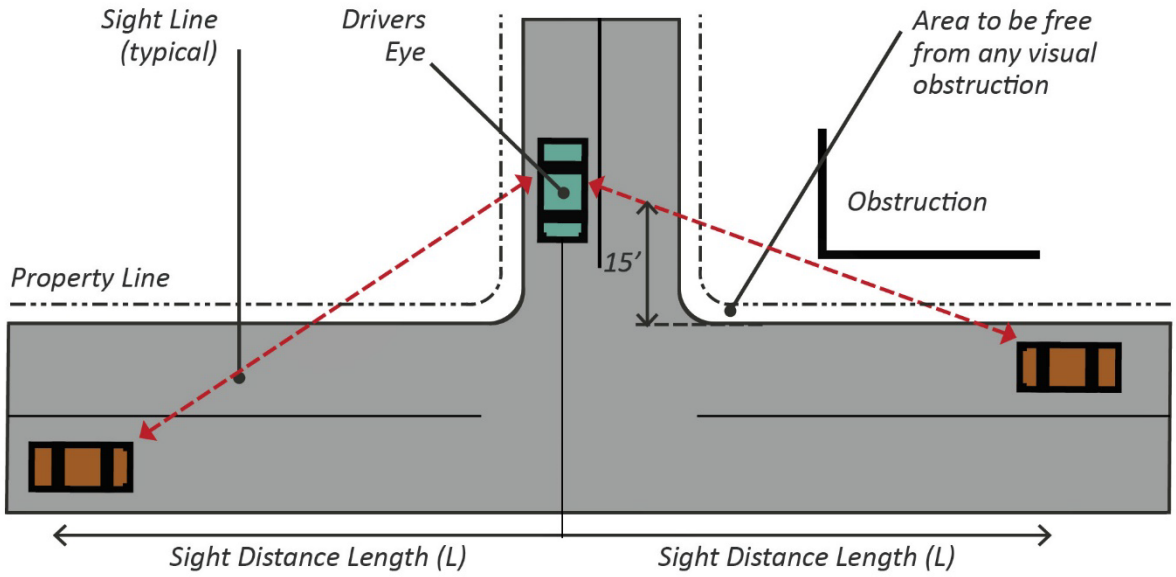
4.18.B.I. ALIGNMENT AND PROFILE–SIGHT DISTANCES AND SIGHT LINES/TRIANGLES

4.18.B.I.a. Sight Triangles

When designing landscaping around intersections, driveways, or other approaches onto a street, plant material placement and height restrictions must be observed. The purpose of these restrictions is to maintain visibility for the driver to turn safely at intersections.

Sightlines shall be maintained for all intersections. The roadway classification for the road being designed will be designated by City staff. The sight distance lines shall be shown, dimensioned, and labeled on the landscape plans.

Figure 5 Sight Triangle



An open view must be maintained up to 7-feet above grade for proper visibility within the sightline triangle. Plants cannot be planted within the sight triangle if they have a potential to reach a mature height greater than 2-feet above the roadway pavement. Trees must have a canopy that can be maintained 7-feet above the roadway pavement without extensive pruning and must be spaced at least 5 feet from an intersection. For specific guidance on maintaining sightlines within landscaping treatments, please see AASHTO. Plants may be considered by the City for use on a project-by-project basis. Vegetation shall not block sight lines to signs.

4.18.B.II. ROADSIDE DEVELOPMENT

4.18.B.II.a. Offset Distances For Trees

Trees, large shrubs, and cacti whose trunk diameter at maturity will exceed 4 inches shall not be planted within the clear zone. The diameter measurement shall be taken at 12 inches above grade. Refer to the AASHTO *Roadside Design Guide* – Current Edition, for information on clear zone width. The clear zone width is not to be considered a fixed single control dimension. Variations in cross section design and traffic speed may increase or decrease this distance. Shrubs and ground covers may be planted or retained within the clear zone for safety and aesthetic purposes as approved by the City of Rio Rancho. Existing trees may be retained under the following circumstances:

1. If they are on the high or cut side of the roadway beyond the clear zone distance.
2. If they are on the low or fill side, if protected by a guardrail or beyond the clear zone distance.

For 50 MPH or greater design speed, minimum clearances for newly planted trees, shrubs, and cacti with an ultimate trunk diameter of more than 4 inches shall be 30 feet unless one of the following reasons will allow for a lesser distance:

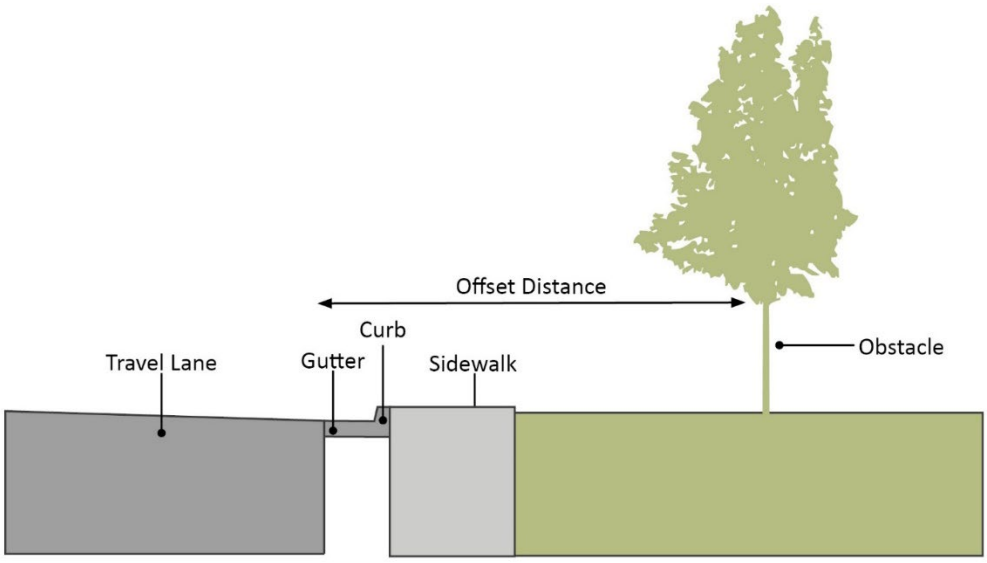
1. Where cut slopes are 3:1 or steeper; 10 feet behind the point of vertical intersection (PVI) at the toe of the slope.
2. Where concrete barriers, walls, abutments, or other rigid obstructions are used, 4 feet behind the obstruction.
3. Where there are barrier curbs near a traveled lane, 10 feet behind the face of the curb. (Except medians).
4. Where limited right-of-way or the necessity for planting would result in less clearance; all factors in the problem area shall be weighed to decide if a special exception is warranted.
5. The offset where there is bicycle traffic shall be a minimum of 7 feet from the edge of the bicycle facility and have a minimum 10 feet of clearance to the canopy. The travel lane illustrated below refers to the vehicle travel lane and does not assume a bicycle lane is present.

For design speed less than 50 MPH, minimum clearances for newly planted trees, shrubs, and cacti with an ultimate trunk diameter of more than 4 inches shall meet the clear zone requirements unless one of the reasons listed above will allow for a lesser distance.

On curves, adequate sight distance for the design speed of the roadway must be maintained.

Modification of the minimum clearance may be required by special considerations. For example, occasionally, special conditions may warrant planting closer to the pavement to fulfill a specified function or requirement. Plantings in the reduced clear zone shall consist of low-growing shrubs and groundcovers under 2 feet in height. Also, the characteristics of the plant material proposed for use will affect the amount of offset required.

Figure 6 Offset Distance Measurement



4.18.B.III. UTILITIES AND EQUIPMENT

No landscaping shall be installed within 10 feet of fire department equipment (i.e., fire hydrants, Fire Department Connections (FDC), and gate valves (PIV).

No landscaping shall be planted within 10 feet of water and sewer main lines.

4.18.B.IV. LANDSCAPE MEDIANS

Apart from improving roadway aesthetic, median landscaping also provides means to mitigate headlight glare and reduces potential for driver monotony. A landscaped median can also serve to reduce the perceived scale of the roadway.

The minimum clearance for trees in the median is six feet behind the face of a curb, provided that the location meets the sight line criteria. Trees, shrubs, or cacti that will exceed 4 inches in diameter at maturity shall not be planted in a median without curb.

Mature tree growth shall be maintained 2-feet behind the face of the curb line and at minimum five feet from an intersection.

4.18.B.V. GRADING, DRAINAGE, AND IRRIGATION

4.18.B.V.a. Grading

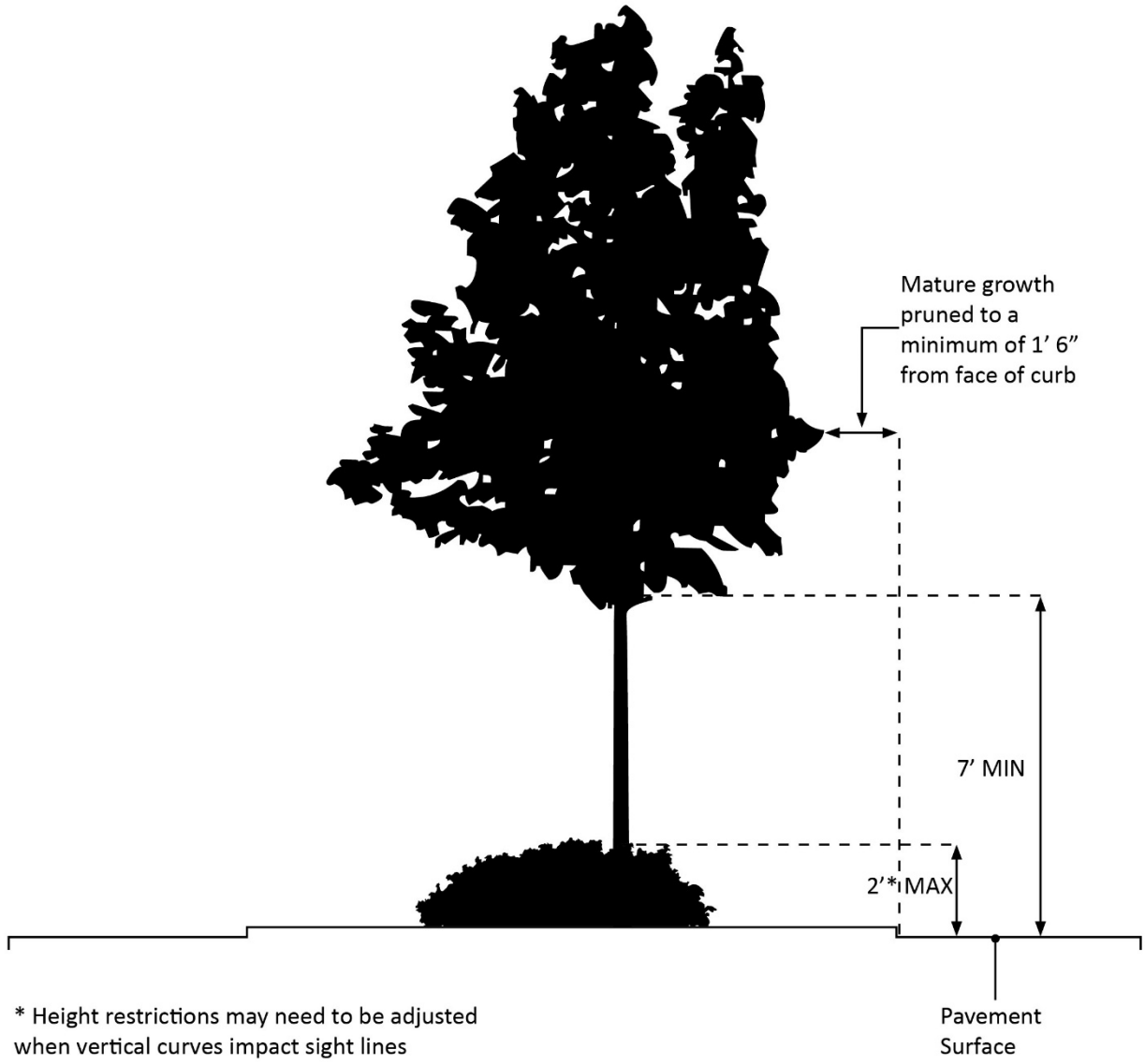
The proper shaping of slopes can benefit drainage, erosion control, aesthetic, and future maintenance. Grading plans shall be used wherever feasible. The grading shall always be smooth enough to meet safety requirements, permit easy maintenance, and adequately serve the needs of surface drainage. Grading shall integrate the hydrology, aesthetic and earthwork needs for the site and maximize use of storm water runoff to support the landscape development.

4.18.B.V.b. Erosion Control

In planting design, the following parameters shall be considered to control erosion:

1. Slopes with ratios of 3(h):1(v) and flatter favor the establishment of natural vegetation as protection against erosion. Slopes with ratios of 4(h):1(v) and flatter add to vehicular safety.
2. Plant along the contour of the slope. Avoid planting arrangements that would encourage erosion.
3. Stabilize soils at dip sections in both the right-of-way and the median where applicable. The use of decomposed granite in dip sections is prohibited.

Figure 7 Height Restrictions and Pruning Requirements Within The Sightline Triangle



4.18.B.V.c. Underground Irrigation

Irrigation systems are designed to promote water conservation, including prevention of water run-off and overspray. The City promotes the use of efficient irrigation methods and practices to reduce the demand on the City of Rio Rancho potable water system. The use of plants which, once established, can survive on minimal supplemental watering or natural rainfall is recommended for areas to be maintained by the City.

In areas where underground irrigation will be used to establish and maintain new plantings, the underground systems will improve the health of the plants and improve the overall appearance of the roadway. All required vegetated areas shall be irrigated by an automatic underground irrigation system, or drip irrigation.

It is important that the area to be landscaped is large enough to accommodate the plants and any associated irrigation components, if an irrigation system is planned for the area. Irrigation components such as valves and controllers shall be placed as close to the right-of-way limits as possible, and within a vault when possible. All underground landscape equipment within 5 feet of back of curb, or back of sidewalk, or within 15 feet of edge of pavement must have 36-inch minimum depth of cover.

4.18.B.VI. WATER HARVESTING

The City is interested in incorporating Passive and Active Water Harvesting Techniques when establishing underground irrigation systems.

Passive water harvesting techniques include:

- Surface collection such as swales, parking lot islands, bar ditches, detention ponds and constructed wetlands. These techniques shall be used for slopes.
- In ground storage: soil amendments, constructed rain gardens, French drains, permeable paving and collection structures with infiltration fields or galleries.

Active water harvesting techniques include:

- Storage and distribution systems including ground rain barrels, storage tanks and below grade cisterns that use gravity or pumps to distribute water to an irrigation system.
- Gray water irrigation can be appropriate for some landscape installations. Gray water is regulated by the New Mexico Environment Department (NMED) and may require a permit. Use of reclaimed water (treated sewage) may be used if by the City of Rio Rancho and signed to indicate non-potable water.

4.18.B.VII. XERISCAPING

Xeriscape landscaping is a transitional planting zone concept which may include several zones going from lush (or oasis) areas to drought tolerant planting areas. Oasis areas are not recommended for landscaping in conjunction with roadway improvements, due to high-water requirements within the City's right-of-way.

4.18.B.VIII. IRRIGATION PIPELINES

If provisions are being made for future irrigation, install sleeves under streets, drives and impervious surfaces with 6" schedule 40 PVC. The sleeves shall extend beyond the impervious surface to a length equal to the depth at which the sleeves are placed.

Pipelines carrying water under constant pressure will be buried to a minimum depth of twenty-four (24) inches. Those that are under intermittent pressure will be buried to a minimum depth of eighteen (18) inches. Polyethylene lines will be buried to a minimum depth of eight (8) inches, PVC lines will be buried to a minimum depth of twelve (12) inches unless they are under constant or intermittent pressure.

Shrub and bubbler heads located within twenty-four (24) inches of any paved surface will be installed with a system that allows the riser assembly to absorb impacts and return to normal position.

Temporary spray irrigation systems may be used to establish seeded areas for native grass and groundcover (see standard drawing BF-01).

Trees and shrubs will be irrigated with low-flow bubblers or emitters.

The irrigation system will be controlled by a digital controller and the appropriate backflow prevention assembly will be correctly installed per CORR standards.

4.18.C Use of Plant Materials

4.18.C.I. PRESERVATION OF EXISTING VEGETATION

In some cases, it may be necessary to maintain existing right-of-way plants in their present location and incorporate them into the final design. The plants to be protected in place will be determined by the City after the inventory and analysis has been completed. Plants to remain shall meet the clear zone requirements of this Section.

4.18.C.II. PLANT SALVAGE

On occasion, selected materials (including State-protected plants) will be analyzed for potential salvage and reuse on the project. The analysis will be accomplished using the results of a Plant Inventory as directed by the City during the course of the project. The species to be considered will depend on the project setting. For example, within urban areas, existing street trees important to the adjacent neighborhood could be candidates for salvage and reuse.

Several factors must be evaluated when plant salvaging is considered. First, the existing plants must be evaluated for age, health, overall condition, and their capability to survive the transplanting operation. Second, the cost of transplanting shall be assessed against the replacement with nursery grown plants of a comparable size; this shall be reviewed in terms of the project budget. Third, other factors such as schedule impacts from salvaging activities, the availability or lack of on-site temporary storage locations, temporary irrigation needs and the importance of the resource to affected local interests shall be evaluated. Based on the above factors, the decision for salvaging will be made by the City of Rio Rancho.

The bid documents shall state that prior to destroying State-protected plants, the contractor shall file a formal Notice of Intent to Clear Land with the New Mexico Department of Agriculture, if this Notice has not been completed during the design phase. The contractor shall obtain State permits prior to moving protected plants.

4.18.C.III. PLANTING RECOMMENDATIONS AND CONSIDERATIONS

Water use must be minimized by using water conserving plant materials. Native desert and xeriscape trees and shrubs must be used wherever possible.

Existing plant materials in the project area must be taken into consideration to provide design continuity. Impact on adjacent development must be mitigated. The existing landscape character must be evaluated, and landscape expectations obtained from citizens groups and the community. Community identities shall also be enhanced and regional character reinforced through the landscape design. Plant material must be appropriately selected and spaced to maximize visual continuity. The use of distinctive plant materials shall help clue drivers of upcoming intersections and decision points.

Some conditions may be unfavorable to plant growth in an urban area. Drainage conditions may be inadequate; there may be excess drainage or not enough. Air pollution is often a concern. Many plants cannot survive the polluted and dust-laden atmosphere of severe urban conditions. Reflected heat from pavements and adjacent buildings further limits the use of many desirable plants. Only those plants that

have proven themselves adaptable to the difficult growing conditions found in some urban situations shall be used in such locations.

Plants shall be used to buffer pedestrians from traffic. The climate for pedestrian comfort can be moderated with shade trees. Trees and shrubs shall be used predominantly, because of their longer life span as compared to groundcovers and herbaceous perennials.

There are specific plant types in and adjacent to the public right-of-way that are not allowed or whose use is not recommended. Trees and shrubs with thorns are to be carefully placed to avoid injury to pedestrians and others using the public right-of-way. Thorny plants must maintain a minimum setback of 2 feet from roadways, sidewalks, and the edge of a bicycle facility. Such plants will be allowed in a median island with vertical curb, provided a minimum of 2 feet is maintained from back of curb as a clear zone (measured from nearest part of plant). Whenever possible, thornless varieties shall be used. Refer to the Vision 20/20 Plan for an approved list of approved plants that can be planted within the right of way.

Plantings shall be kept a minimum of 6 feet back from the edge of roadway when no vertical curb is present. Plantings shall be kept away from walls and fences to allow for maintenance of those structures.

Trees and shrubs shall be planted so that at maturity they do not interfere with service lines and the property rights of adjacent property owners. The designer shall contact the appropriate utility company to obtain a list of trees acceptable for use over or under their utility lines.

Due to the risks of their falling over and dropping large limbs, trees having shallow root systems or a weak branch structure shall not be used within 20 feet of the right-of-way limit or traveled way.

The use of plants producing large volumes of wind-blown pollen shall be kept to a minimum.

4.18.C.IV. PLANTING TO SCREEN

4.18.C.IV.a. Headlight Glare

The value of screening for glare depends on road alignment, ground forms, existing vegetation, and the width of the median. Where needed, plantings shall be at least 4 feet high and form a continuous screen, to avoid intermittent glare.

4.18.C.IV.b. Undesirable Views and Objects

An effective method of obscuring undesirable views from and toward the highway is the use of fencing or other structural materials, or by planting. In some cases, effective screening with plants will take a period of years to achieve, but this shall not prevent the use of plants to achieve this objective. The sight lines from and toward the object to be screened shall be studied early in the design process to provide an appropriate solution and to preserve any existing plant material or structure that will contribute to the screening. Deciduous plant material shall be avoided if a year-round screening effect is desirable.

Vegetation shall not completely encircle lights, signs, or other roadside structures; access must be provided for maintenance purposes.

4.18.C.IV.c. Wind Control

In some instances where high winds are characteristic of a particular site, deep-rooting trees with a dense growth habit are beneficial in reducing wind velocity as well as in catching blowing dust and debris. Trees that are weak wooded shall be avoided in these areas.

4.18.C.IV.d. Shade

Shade effectiveness shall be carefully analyzed. The following criteria should be followed to create the desired effect.

1. Local streets: 1 canopy tree and 3 shrubs and groundcover, every 33 ft. located within 10 ft. behind the sidewalk.
2. Collector streets: 1 canopy tree every 33 ft. located behind the sidewalk and 3 shrubs and groundcover located in the 3 ft. wide buffer.
3. Arterial streets: 1 canopy tree and 3 shrubs and groundcover every 33 ft. located in the 5 ft. wide buffer between the curb and sidewalk.
4. Medians: 1 canopy tree or 2 accent trees, and 3 shrubs and groundcover every 33 ft. located in the 18 ft. wide median.

4.18.C.V. PLANTING FOR TRAFFIC INDICATION

Functional planting can help make it evident to the driver that a change in alignment of the road is imminent or that the driver is approaching an intersection. Such planting shall be designed with consideration for traffic safety and low maintenance.

4.18.C.VI. PLANT DENSITY

4.18.C.VI.a. New Vegetation

All bare ground on the site and/or landscape area shall be covered with live plant material, decorative aggregate, organic mulch, or other suitable material approved by the Development Services Department.

- 75% of the landscaped area at maturity shall be covered by live plant material.
- 50% of plant cover shall be low water use vegetation.

4.18.C.VI.b. Inert Materials

The use of inert materials for landscaping is recommended to minimize the dust associated with its use. Smaller gradation material tends to be absorbed into the surrounding material and does not provide adequate dust protection.

Boulders, river cobble or rock products can be utilized to provide textural contrast to decomposed granite, provided the material does not exceed 4 inches in any dimension within the clear zone.

A pre-emergent herbicide shall be applied to the ground prior to placement of inert materials and again following placement.

Decorative paving (stamped concrete, exposed aggregate concrete, pavers, etc.) shall be considered in place of plants for narrow median areas, such as at median noses.

4.18.C.VII. LANDSCAPE ACCENTS/STREETSCAPE

Strong landscape accents/streetscape should be provided to highlight major entries to commercial, multi-family and subdivision developments reviewed and approved by the City.

Street furniture is to be provided as part of the street frontage landscaping within collector and arterial street rights-of-way which may include such features as bus stop shelters, benches, pedestrian lighting, trash receptacles.

4.18.C.VIII. LANDSCAPE PLANS

Planting plans shall be clear and concise and the processes of achieving aesthetic objectives clearly understood. Specifications for nursery stock, planting, seeding, and other types of landscape construction shall be clear, concise, and embody the practice and quality of work best suited for the area. The landscape contractor shall be responsible for the condition of all plants during a specified establishment period. The bid documents shall be set up so that final acceptance and termination of the contract will not occur until expiration of the establishment period.

Refer to the City of Rio Rancho drafting standards for guidelines in preparing the Landscape plans.

4.18.C.IX. MAINTENANCE AND COSTS

4.18.C.IX.a. Considerations for Maintenance:

1. Species.
2. Size.
3. Location of the plant.
4. Accessibility of the plant.
5. Susceptibility to insects and disease.
6. Fertilization needs.
7. Removal and trimming needs (streetlight, traffic sign, signal, or vision obstruction).

Select trees with a naturally high canopy for use within sight distance triangles to avoid the need for continuous pruning. Some trees create a high quantity of leaf litter, flowers, beans, and/or seeds and shall therefore be avoided. Deciduous trees in the median shall also be avoided.

Masses shall be placed in “drifts,” arranged to allow access for maintenance and to provide a continuous screen or barrier where desired.

Maximum use shall be made of fast-growing shrubs that recover quickly from injury. Slow growers shall be reserved for use as accents.

Landscape plantings shall not encroach onto the roadway or driveway entrances. Landscapes that overhang off-site sidewalks must be maintained so that 7-foot-high clearance is provided at all times

4.19 Transportation Appendices

4.19.A Intersection Stop Bars/Yield Marks, Crosswalks, and Lane Designation Symbols

Intersection Stop Bars/Yield Marks, Crosswalks, and Lane Designation Symbols				
Functional Classification		**When to Mark**		
Major Roadway	Minor Roadway	Stop Bars / Yield Marks *	Crosswalks Markings*	Lane Designation Symbols (Arrows and ONLY)**
Principal Arterial	Principal Arterial to Major Collector	Stop Bars always at all stop controlled approaches	At signalized intersections where pedestrian signals are present;	Approaches should receive lane designations at multilane approaches and where through lanes become through-left or through right lanes; Dedicated turn bays on major and minor approaches should be marked with Arrow, Only, Arrow appropriately spaced and repeated as necessary through turn bay; Through left lanes should be marked with at least two designations; Through right markings should only be used as deemed necessary. Single lane approaches do not require lane designation symbols. The use of through arrows is discouraged unless required due to intersection alignment or lane shifts.
		Yield Marks at all roundabout approaches.	At roundabouts where pedestrian crossings exist; and	
			Stop controlled approaches where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist.	
Principal Arterial	Minor Collector to Residential/Local	Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections.	At signalized intersections where pedestrian signals are present;	
		Yield Marks at all roundabout approaches.	At roundabouts where pedestrian crossings exist; Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist.	
Minor Arterial	Minor Arterial to Major Collector	Stop Bars always at all stop controlled approaches	At signalized intersections where pedestrian signals are present;	
		Yield Marks at all roundabout approaches.	At roundabouts where pedestrian crossings exist; and	
			Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist.	
Minor Arterial	Minor Collector to Residential/Local	Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections.	At signalized intersections where pedestrian signals are present;	Turn bays on major and minor approaches at signalized intersections should be marked with Arrow, Only, Arrow appropriately spaced and repeated as necessary through turn bay; Approaches should receive lane designations at multilane approaches and where through lanes become through-left or through right lanes; Dedicated turn bays on major and minor approaches should be marked with a single designation/arrow at entrance of turn bay/approach lane adjacent to holding bar. Through-right markings should only be used as deemed necessary. Single lane approaches do not require lane designation symbols.
		Yield Marks at all roundabout approaches.	At roundabouts where pedestrian crossings exist; Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist	
Major Collector	Major Collector	Stop Bars always at all stop controlled approaches	At signalized intersections where pedestrian signals are present;	
		Yield Marks at all roundabout approaches.	At roundabouts where pedestrian crossings exist; and	

Intersection Stop Bars/Yield Marks, Crosswalks, and Lane Designation Symbols				
Functional Classification		**When to Mark**		
			Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist	The use of through arrows is discouraged unless required due to intersection alignment or lane shifts.
Major Collector	Minor Collector to Residential/Local	Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections.	At signalized intersections here pedestrian signals are present;	Turn bays on major and minor approaches at signalized intersections should be marked with Arrow, Only, Arrow appropriately spaced and repeated as necessary through turn bay; Approaches should only receive lane designation where there are multiple through lanes or where through lanes become left or right turn lanes. Dedicated turn bays on major and minor approaches should be marked with a single designation/arrow at entrance of turn bay/approach lane adjacent to holding bar. Minor approaches should only receive lane designations as needed at multilane approaches to the major street. Single lane approaches do not require lane designation symbols. The use of through arrows is discouraged unless required due to intersection alignment or lane shifts.
			At roundabouts where pedestrian crossings exist;	
		Yield Marks at all roundabout approaches.	Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist.	
Minor Collector	Minor Collector	Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections.	At signalized intersections where pedestrian signals are present;	
			At roundabouts where pedestrian crossings exist; and	
		Yield Marks at all roundabout approaches.	Only at stop controlled approaches within school zones only where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist	
Minor Collector to Residential/Local	Residential/Local	Crosswalks locations and multi-lane approaches.	Only at stop controlled minor approaches within school zones where pedestrian facilities (sidewalks or multi-use trails) and pedestrian ramps exist	Approaches should only receive lane designations as needed at multilane approaches.
*See also City of Rio Rancho Mid-block Crossing Policy				
** Excludes TWLTL, See MUTCD for use of bike lane and other symbols				

DEVELOPMENT PROCESS MANUAL

Chapter 5: Water and Wastewater



Rio Rancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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5. WATER AND WASTEWATER INFRASTRUCTURE DESIGN

5.1 Introduction

5.1.A Purpose

The purpose of this design standards manual is to provide guidelines and minimum design criteria for the design of water and wastewater systems in the City of Rio Rancho either as part of Capital Improvement Program projects or as private development projects that will construct and dedicate the systems to the City.

It is the intent of the City of Rio Rancho Utilities Department to adhere to all applicable Federal, State, and local regulations and guidelines for water and wastewater systems design.

The design manual applies to existing systems that are being expanded, modified, upgraded, and/or rehabilitated. Additionally, the manual applies to the construction of all new facilities. It should be noted that this document is not intended to be used as a replacement for construction specifications. It is the design criteria for engineers, developers, etc., to use when designing water and wastewater infrastructure within the City of Rio Rancho.

All units of measurement used in this manual are U.S. customary standard units unless otherwise noted.

5.1.B Applicability

The design standards set forth in this manual are promulgated by the Development Services Department or designee of the City of Rio Rancho pursuant to the authority granted to him/her in the City of Rio Rancho Code of Ordinances Title V: Public Works, Chapter 51 - Water and Wastewater Rules and Rates, Section 51.24 - Main Extension Policy, Including Subdivisions.

The administration of these standards including interpretation, enforcement, revision, waiver, and variance is hereby delegated to the Development Services Department or designee or an appointed representative.

Standards included in this manual do not supersede applicable Federal and State requirements. In addition, these standards shall meet the requirements of all local and regional authorities such as the Southern Sandoval County Arroyo and Flood Control Authority (SSCAFCA).

5.1.C Effective Date of Standards

These standards shall be effective immediately upon the Development Services Department or designee's signature and shall supersede all former applicable engineering standards for utilities design and construction.

5.1.D Revisions

These standards may be revised, amended, or added to periodically. Such revisions, amendments, and additions shall be binding and effective when published.

5.1.E City of Rio Rancho Utilities Department

These standards shall apply to the design, installation, operation, and maintenance of all water and wastewater facilities under the control of the City of Rio Rancho Utilities Department. Such control shall be exercised in accordance with all applicable ordinances of the City of Rio Rancho.

Adherence to these standards is required by any person, including any owner, operator, or agent of an owner or operator of any water or wastewater facility regarding any water or wastewater system related improvements. Variation or deviation from the standards herein is not allowed without permission of the Development Services Department or designee. All water and wastewater system construction (including connections, disconnections, repairs, new waterline and sewer line construction, or other such work) to the water and wastewater system operated by the City of Rio Rancho Utilities Department, in direct violation of any standards herein is subject to the enforcement of corrective action.

5.1.F Definitions

Alkalinity – The quantitative capacity of water or water solution to neutralize an acid. It is usually measured by titration with a standard acid solution of sulfuric acid and expressed in terms of its calcium carbonate equivalent. A moderate amount of alkalinity in water is desirable because it reduces the effect of corrosion.

Ammonia – A form of nitrogen that exists in aqueous solution as either the ammonium ion or ammonia, depending on the pH of the solution.

Average Day Demand or Flow – The average daily demand or flowrate occurring over a 24-hour period based on total annual demand or flowrate data.

Biochemical Oxygen Demand (BOD) – The amount of oxygen consumed in the oxidation of organic matter by biological action under specific standard test conditions. Widely used as a measure of the strength of sewage and wastewater.

"C" factor – Hazen-Williams' roughness coefficient describing the roughness of the pipe in which the flow occurs.

Chemical Oxygen Demand (COD) – The amount of matter, both organic and inorganic, in a water or wastewater, which can be oxidized by boiling with a strong oxidizing acid under standard test conditions and expressed as the equivalent amount of oxygen.

Crown – The highest point on a transverse section of conduit.

Duty Point – The intersection of the system curve and the pump curve which gives the operating point of the given pump for a given pipeline system.

Fire Flow – A volume of water required to provide fire protection.

Hazen-Williams' Formula – The most widely used empirical headloss equation.

Headloss – A decrease in water pressure during flow due to internal friction between molecules of water, and external friction due to irregularities or roughness in surfaces past which the water flows.

Infiltration - Water entering a sewer system, including sewer service connections, from the ground through such means as defective pipes, pipe joints, connections, or manhole walls.

Infiltration/Inflow (I/I) – Extraneous flows in sewers.

Inflow – Stormwater runoff entering the sewer system from sources such as roof leaders, yard and areaway drains, manhole covers, cross connections from storm drains and catch basins, and combined sewers.

Minimum Day Demand or Flow - The minimum demand or flowrate that occurs over a 24-hour period based on annual operating data.

Nitrate – A form of nitrogen that is the most highly oxidized. Nitrates are commonly found in well water from agricultural areas. It comes from fertilizers, industrial wastes, septic systems, and animal wastes. High amounts of nitrate affect the blood's ability to carry oxygen.

Nitrite – A highly unstable form of nitrogen which is easily oxidized to the nitrate form. It is an indicator of past pollution and is extremely toxic to most fish and other aquatic species.

Parts Per Million (ppm) – A common basis for reporting the results of water and wastewater analyses, indicating the number of parts by weight of a dissolved or suspended constituent, per million parts by weight of water or other solvent. In dilute water solutions, one part per million is practically equal to one milligram per liter.

Maximum Day Demand or Flow – The maximum demand or flowrate that occurs over a 24-hour period based on annual operating data.

Peak Hour Demand or Flow – The peak sustained hourly demand or flowrate occurring during a 24-hour period based on annual operating data.

Peaking Factor – The ratio of peak flowrate or demand to average flowrate or demand.

pH – The reciprocal of the logarithm of the hydrogen ion concentration. The pH scale is from zero to 14, and 7.0 is the neutral point, indicating the presence of equal concentrations of free hydrogen and hydroxide ions. pH values below 7.0 indicate increasing acidity, and pH values above 7.0 indicate increasing base concentration.

Phosphorus – An essential element to the growth of algae and other biological organisms.

Pump Curve – Also referred to as a pump characteristic curve or performance curve shows the relationship between head developed by the pump, its efficiency, its brake horsepower, and the rate of discharge.

Soffit – The bottom of the top of a pipe. In a sewer pipe, the uppermost point on the inside of the structure.

Springline – The line of the outermost points of the sides of the conduit.

Sulfate – Sulfate is a natural forming mineral found in water. Sulfate effects the taste of water and when combined with bacteria or heated may affect the odor.

Sulfide – A product of the biological reduction of sulfates under anaerobic conditions.

System Curve – A graphical relationship between system head (developed from ordinates which are the sum of the static lift and the pipe friction) at various discharge/flow conditions.

Total Kjeldahl Nitrogen (TKN) – Total of the organic and ammonia nitrogen.

Total Suspended Solids (TSS) – The suspended fraction of the solids in a water sample that can be removed through filtration.

5.1.G Abbreviations

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
ATS	Automatic Transfer Switch
AWWA	American Water Works Association
BMPs	Best Management Practices
BOD5	5-day Biochemical Oxygen Demand
C.F.R.	Code of Federal Regulations
COD	Chemical Oxygen Demand
D	Pipe Diameter
d	Partial Depth Of Flow In Pipe
DAR	Design Analysis Report
DIP	Ductile Iron Pipe
DU	Dwelling Unit
EPA	Environmental Protection Agency
ft	Feet
fps, ft/s	Feet Per Second
gal/ac-day	Gallons Per Acre Per Day
gpd	Gallons Per Day
gpm	Gallons Per Minute
HDPE	High Density Polyethylene Pipe
ID	Inside Diameter
MGD	Million Gallons Per Day
mpd	Minutes Per Day
NEMA	National Electrical Manufacturers Association

NGVD	Natural Ground Vertical Datum
NH4	Ammonia
NMAPWA	New Mexico Chapter – American Public Works Association
NMED	New Mexico Environment Department
NO3	Nitrates
NO4	Nitrites
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NPT	National Pipe Thread
OD	Outside Diameter
PC	Point Of Curvature
PRV	Pressure Reducing Valve
psi	Pounds Per Square Inch
PVC	Polyvinyl Chloride
Q	Full Pipe Flow Rate
q	Partial Flow Rate In Pipe
SCADA	Supervisory Control and Data Acquisition
SSCAFCA	Southern Sandoval County Arroyo and Flood Control Authority
SWPPP	Storm Water Pollution Prevention Plan
TKN	Total Kjeldahl Nitrogen
TSS	Total Suspended Solids
USGS	United States Geological Society
%	Percent

5.1.H Standard Specifications and Details

The standard specifications and standard details relating to water and wastewater systems that are referenced in this manual include the following:

- **New Mexico Standard Specifications and Details for Public Works Construction sponsored and distributed by the New Mexico Chapter – American Public Works Association (NMAPWA) Specifications Committee**. These specifications and details are herein referred to as NMAPWA

Specifications and Details. These specifications and details are revised and updated periodically and are available through the New Mexico Chapter of APWA.

- **City of Rio Rancho Supplements to New Mexico Standard Specifications and Details for Public Works Construction.** These specifications and details are herein referred to as Supplemental Details or Supplemental Specifications. These specifications and details are updated and revised periodically and are available through the Utilities Department.
- **Uniform Standard Details and Drawings developed by the City of Rio Rancho Utilities Department.** These details and drawings are herein referred to as Standard Details and Standard Drawings.
- **American Water Works Association (AWWA) Standards sponsored and distributed by the AWWA Standards Committee.** These standards are intended to represent a consensus of the water industry that the product described will provide satisfactory service. These standards are updated and revised periodically and are available through AWWA.
- **American National Standards Institute (ANSI) Standards sponsored and distributed by the ANSI Technical Committees.** These standards are intended to serve as a guide to aid the manufacturer, the consumer, and the general public in the use of various products, processes, and/or procedures. These standards are updated and revised periodically and are available through ANSI.
- **American Society for Testing and Materials (ASTM) Standards sponsored and distributed by the ASTM Technical Committees.** These standards are intended to provide a forum for producers, users, ultimate consumers, and those having a general interest to meet on common ground and write standards for materials, products, systems, and services. These standards are updated and revised periodically and are available through ASTM.
- **Code of Federal Regulations, 40 C.F.R. – Protection of Environment.** The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government.
- All other related standard specifications and details that are applicable but not listed here.

5.1.I General Notes

Water and Wastewater General Notes are available from the Utilities Department at the City's website: www.rrnm.gov.

5.1.J Standard Products List

An approved standard products list for water and wastewater facility system components can be found in on the City's website.

5.1.K Availability Statement Process

Availability statements shall be obtained in accordance with the Utilities Department. A copy of this document and a copy of the water and wastewater service availability information request form are included on the City's website.

5.2 Water Distribution and Transmission Systems

5.2.A General

The City of Rio Rancho's Water Utility Department has dual functions. It supplies potable water for industrial, commercial, and domestic use and supplies water for fire protection. This document in conjunction with the City of Rio Rancho's Standard Drawings provides guidance and minimum basic

design criteria and standards, as set forth by the Utilities Department, for providing and maintaining the public water utility distribution system of the City of Rio Rancho. It is intended for use in the planning and design processes. Where not specified in these standards, the Development Services Department or designee will specify the standards to be applied to the design and construction of public water utility improvements to protect the public health, safety, and welfare of all water users served by the City of Rio Rancho.

5.2.B Governing Regulations

Ordinances, policies, and planning documents related to the design and operation of water systems include the following:

- City of Rio Rancho Code of Ordinances Title V: Public Works, Chapter 51, Water and Wastewater Rules and Rates.
- Water System Comprehensive Planning Model for the City of Rio Rancho.
- Guidelines of Water Supply Systems and Treatment Works in New Mexico, Environmental Improvement Division.

5.2.C Line Sizing and Demand Requirements

5.2.C.I. GENERAL REQUIREMENTS

The following general requirements must be followed when commencing a water system design.

1. The sizing and routing of Master Plan lines must be coordinated with the "Water System Comprehensive Planning Model" for the City of Rio Rancho and approved by the Utilities Department. Specific requirements for providing water service to any parcel or development will be defined in a water (and sewer) availability statement/recommendation from the Utilities Department. The procedure for obtaining the availability statement is outlined in Section 5.1.K of this document.
2. Pressure zone boundaries must be considered in the design of all systems.

5.2.C.II. DOMESTIC DEMAND

Water infrastructure for all proposed commercial, industrial, and residential developments shall, at a minimum, be sized to provide Maximum Day Water Demand flows plus fire flow protection. The fire flow requirement shall apply to both private sprinkler systems and public fire hydrants. The average day water demand for residences within the Rio Rancho water utility is estimated at 300 gallons/day per residence. Using a peaking factor of 2.167, peak day water demands are calculated at 650 gallons/day per residence. Water demand estimations for non-residential applications are listed in Table 5.1. These average day demands are derived from the land-use sewer design flows. These values assume that water usage is approximately 133% of the estimated average sanitary sewer design flows. Although the list is not all-inclusive, it does serve to establish a general base line for system evaluation and analysis. It should be noted that in all non-residential development projects, specific water demand determinations should be calculated and provided to the Development Services Department or designee during the design and approval process. If a proposed development does not fit within the categories listed above, consult with Development Services Department or designee for determination of the appropriate water demand. The Development Services Department or designee may adjust average day demands based on the specific design of the development.

Table 5.1: Average Day Water Demands for Non-Residential Applications		
Development Type/Land Use	**Average Day Demand**	**Units**
Light Commercial	1,750	gal / ac-day
Heavy Commercial	8,500	gal / ac-day
Light Institutional	325	gal / ac-day
Heavy Institutional	2,550	gal / ac-day
Light Industrial	640	gal / ac-day
Medium Industrial	2,400	gal / ac-day
Heavy Industrial	13,320	gal / ac-day

5.2.C.III. FRICTION FACTOR

For line sizing and design purposes the Hazen-Williams formula should be used. A friction coefficient, "C" factor, of 120 should be used for all new DI water main design calculations. A friction coefficient, "C" factor, of 130 should be used for all new PVC and HDPE water main design calculations.

5.2.C.IV. PEAKING FACTORS:

Maximum day and peak hour demands are important in the sizing of various parts of the water system. Maximum day use is used to ensure that water production facilities are adequately sized to match maximum day use and is also used to size storage facilities. Peak hour use is the maximum amount of water used in any single hour of a day and is used in sizing storage facilities and transmission / distribution lines. Table 5.2 shows the water demand peaking factors that are to be used to determine the peak hour and maximum day water demands for residential and non-residential development types.

Table 5.2: Water Demand Peaking Factors		
Development Type/Land Use	**Average Day to Peak Hour**	**Average Day to Maximum Day**
Residential Development	3.5	2.167
Non-Residential Development	2.5	1.5

5.2.C.V. WATER DEMAND CALCULATION EXAMPLE

For clarification, the following example illustrates typical calculations performed to determine the design demands and quantities involved in a hypothetical system design.

EXAMPLE: Hypothetical Water Demand/Flow Evaluation

ASSUME: 100 Dwelling Unit Residential Subdivision Development

CRITERIA: Average day demand = 300 gallons/day/residence

Average demand for subdivision = 300 gallons/day x 100 = 30,000 gpd = 30,000 gpd/ 1,440 min/day = 20.8 gpm

Maximum Day demand for subdivision = 30,000 gpd x 2.167 = 65,010 gpd = 65,010 gpd/ 1,440 min/da = 45.1 gpm

Peak hour demand = 30,000 gpd x 3.5 = 105,000 gpd = 105,000 gpd/1440 mpd =

72.9 gpm

5.2.D General Water Main Design Criteria

5.2.D.I. GENERAL

All issues and elements presented in this section are typically included and must be addressed in all water distribution infrastructure projects.

5.2.D.II. JURISDICTIONAL AGENCY APPROVALS

One very critical task in the early stages of the project is the development of an agency approval list. These approvals and/or close coordination required by these agencies will impact the successful and timely completion of the project. All appropriate department levels affected within the City, County, State, and Federal agencies need to be contacted for their individual requirements.

5.2.D.III. ENVIRONMENTAL AND CULTURAL REGULATORY REQUIREMENTS:

This section is not intended to be all encompassing, rather provide an overview of the environmental and cultural requirements and the typical agency involvement. A thorough consideration of the environmental and cultural impact of the project at its specific location shall be evaluated to identify the various requirements. Private developers shall be responsible for regulatory compliance and for obtaining the required permits for their projects.

1. In specific areas where a project impacts Water of the United States, a Clean Water Act, Section 404 Permit shall be required from the U.S. Army Corps of Engineers.
2. Compliance is required with the U.S. EPA under the Stormwater National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges from construction sites. Coverage under the general permit is required for all operators of construction sites that disturb one (1) or more acres of soil through grading, trenching, or excavation.
3. Projects shall not adversely impact threatened or endangered species or their habitat and shall comply with the Federal Endangered Species Act. To address any biological requirements, an assessment report of the project may be required by the U.S. Fish and Wildlife Service and the New Mexico Fish and Game Department.
4. Projects shall not adversely impact historic or prehistoric properties. Projects shall comply with the National Historic Preservation Act and the State Historic Preservation Act.

5.2.D.IV. COMMUNITY NOTIFICATION AND PUBLIC INVOLVEMENT

The City is committed to early citizen notification and involvement. Identifying neighborhood concerns is a priority and good communication is required throughout the public involvement phase of all projects.

5.2.D.V. ALIGNMENT AND EASEMENT REQUIREMENTS

The following alignment and easement requirements shall be followed for water line designs.

1. Water lines are to be located within the public right-of-way and aligned in accordance with the "Typical Plan View for Streets" drawings in Section 5.4.I.I. . Water lines shall be located so they can be maintained without disturbing any sidewalk, curb, gutter, structure, or any other utility.
    - If it is not possible to utilize designated public right-of-way or align in accordance with the Utility Locations, alternate alignments will be considered by the Development Services Department or designee.
2. If not in a public right-of-way, the water line must be located in a permanent easement. A permanent easement must be granted and dedicated to the City of Rio Rancho for the exclusive use of water and sanitary sewer unless shared use with other utilities is coordinated and approved in advance by the Utilities Department. A minimum easement width of 20 feet (or more) is required for a single utility and 25 feet (or more) for water and sewer both within the same easement.
3. Water and sewer easements shall be free of all obstructions and shall at all times be accessible to City service equipment. No buildings, sport courts, walls, fences, shade structures, nor permanent structures of any kind shall be constructed upon, over, or under and water line easements. Since water mains can be damaged by tree roots, trees shall not be planted within 10 feet of the centerline of the water main. No landscaping shall be placed and/or planted within the easement that would render the easement inaccessible by equipment. The Utilities Department has the right to have any obstruction removed without notice to the property owner and all cost associated with the removal shall be the property owner's responsibility. The maintenance of all landscaping in water line easements is the responsibility of the property owner.

5.2.D.VI. ACCEPTABLE PIPE MATERIALS

The type of pipe to be installed shall comply with these standards, meet NMAPWA specification, and shall be based upon applicable design flows, pressures, site conditions, corrosion protection, and maintenance requirements. Water lines shall be either polyvinyl chloride pipe (PVC), ductile iron pipe (DIP) or High-density polyethylene pipe (HDPE).

5.2.D.VII. RADIUS OF CURVATURE

The minimum radii of water line curvature are shown in Table 5.3.

Table 5.3: Minimum Radius of Curvature			
Pipe Type	**Pipe Diameter**	**Joint Length (ft.)**	**Minimum Radius (ft.)**
DIP	4-12	20	300
PVC	8	20	250
PVC	10	20	310
PVC	12	20	370

Minimum radius of curvature for C-906 smooth-walled HDPE pipe shall be based on manufacturer's recommendations but as a minimum shall be based on the following Table 5.4 and equation:

Table 5.4: Minimum Allowable Bending Radius for AWWA C-906 HPDE Pipe	
DR Ratio	**Minimum Radius Factor, Kmrf**
32.5	40
26	36
21	32
17	26
13.5	24
11 or Lower	20

By multiplying the minimum radius factor, $\boldsymbol{K_{mrf}}$, by the outside diameter, $\boldsymbol{D}$, of the pipe being installed the minimum bending radius, $\boldsymbol{r_m}$, may be calculated using Eq. 24-1

(Eq. 24.1) $\boldsymbol{r_m} = \boldsymbol{D} \times \boldsymbol{K_{mrf}}$

Where $\boldsymbol{r_m}$ is in inches.

5.2.D.VIII. WATER MAIN EXTENSIONS

The City's policy on water main extensions is contained in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.24 Main Extension Policy, including Subdivisions:

1. For the purposes of irrigation, if purple pipe/effluent/reuse lines are available within 200 feet of the development, in-place infrastructure is required to be extended and used for irrigation purposes within the development.
2. Exception: if the City determines there is not enough effluent water available for irrigation purposes on the property, the City may waive this requirement.

When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall:

1. Be sized appropriately for the anticipated future development of the adjacent property.
2. Extend from the main to the property line.
3. Be properly capped and documented on as-built drawings.
4. Include all necessary easements for future access and maintenance.
5. Be installed in accordance with Standard Drawing W-06 and related service connection details.

5.2.D.IX. HYDRAULIC REQUIREMENTS

The Utilities Department may require a hydraulic modeling analysis be conducted at the cost of the developer. This requirement may be in addition to the analysis that was part of the availability statement submittal. This analysis will identify any new requirements or connection alternatives and will help determine the appropriate size of the infrastructure.

5.2.D.X. THRUST RESTRAINT

Joint restraint shall be used at all valves and fittings and/or where joint restraint devices are specified by the approved construction plans. Restrained joint calculations shall be prepared and submitted when necessary.

5.2.D.XI. CORROSION PROTECTION

Corrosion protection will be required for all water system improvements where corrosive soil conditions are encountered.

5.2.D.XII. SEPARATION FROM SANITARY SEWER MAINS

To minimize the potential for cross contamination, water mains shall have at least 10 feet horizontal separation from any existing or proposed sewer line or water reuse line. In situations where it is not feasible to maintain a 10-foot separation the design engineer may propose a reduced distance. Such reductions may only be approved and granted by the Development Services Department or designee and may be allowed provided the water main is laid in a separate trench or an undisturbed earth shelf located on one side of the sewer line at an elevation so that the bottom of the water main is at least 18 inches above the top of the sewer line.

1. Water mains crossing sewer lines shall be laid to provide a minimum separation of 18 inches between the outside of the water main and outside of the sewer line. This separation shall be maintained where the water main is either above or below the sewer line. Where possible the water main should always be above the sewer line. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the sewer line.
    - Where it is impracticable to obtain proper horizontal and vertical separation, the sewer line shall be designed and constructed equal to the water main and shall be pressure tested to assure watertightness. Encasement of the water line may also be required by the Development Services Department or designee.
2. Water mains shall not pass through or come in contact with any part of a sewer manhole.

5.2.D.XIII. SEPARATION FROM STORM DRAINS AND CULVERTS

Water mains shall maintain six (6) feet horizontal and two feet vertical separation from storm drains and culverts. Water mains crossing less than two (2) feet below a storm drain or culvert shall require additional protection such as the use of a pipe casing. Whenever possible the water line should be placed above the storm sewer.

5.2.D.XIV. SEPARATION FROM OTHER UTILITIES

Water mains shall maintain a minimum six (6) feet horizontal separation and one (1) foot vertical separation to any underground dry utility where possible; all measurements are clear distance measurements. Conflict review may be required.

5.2.D.XV. CROSS CONNECTIONS AND BACKFLOW PREVENTION

No physical connection shall be made between potable and non-potable sources. Any such connection is considered a cross connection. Refer to the City of Rio Rancho's Building Code for specific provisions regarding cross connections and backflow prevention. Backflow preventers shall be installed in accordance with Standard Drawings available on the City's website.

5.2.D.XVI. START-UP AND COMMISSIONING PERIOD

The construction project is functional only after demonstrating the completion and approval of pressure testing, bacteriological testing, and final inspections in accordance with AWWA, etc. Then, an acceptable flushing schedule and chlorine residual monitoring plan must be prepared to maintain and demonstrate an acceptable level of turnover during the early period of new project commissioning. Once this body of work has been completed, start-up and demonstration period are ready to begin. The start-up details and duration of commissioning shall be identified 30 days prior and listed in the project scope of work.

5.2.E Water Services

5.2.E.I. GENERAL

The following general requirements pertain to water services. All requirements and standards are as set forth in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.08 Service Connections, and the City of Rio Rancho's Standard Drawings.

When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall:

1. Be sized appropriately for the anticipated future development of the adjacent property.
2. Extend from the main to the property line.
3. Be properly capped and documented on as-built drawings.
4. Include all necessary easements for future access and maintenance.
5. Be installed in accordance with Standard Drawing W-06 and related service connection details.

5.2.E.II. STANDARDS

Water services are water system extensions that are tapped onto the distribution system to provide water to consumers. Water services are subject to the requirements set forth and described in these standards and as shown in the Standard Detail Drawings.

5.2.E.III. POINT OF SERVICE

The Utilities Department shall determine the point of service to any premises. All lots shall have access to water service line. The Utilities Department shall be called upon for exact information regarding the service line location.

5.2.E.IV. WATER SERVICE CONNECTIONS

Water service connections shall adhere to the City's policy as described in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.08.B Water Service Connections.

5.2.E.V. WATER SERVICE LATERALS

All water service laterals shall be installed in accordance with the Standard Detail Drawings in Section 5.4.I.I.

5.2.E.VI. BACKFLOW PREVENTION

Backflow preventers shall be required in the construction of all new commercial, industrial, and public authority services where water is used in any process which, in the opinion of the Utilities Department, could constitute a cross connection or health hazard. Backflow preventers shall be installed in accordance with Standard Drawings, refer to the City's website.

5.2.F Distribution Mains – Design Criteria

5.2.F.I. GENERAL

Distribution mains are typically 8 inches through 12 inches in diameter. Project designs shall make every effort to loop water mains throughout the development.

5.2.F.II. INSTALLATION

Construction of water-related public improvements shall be in compliance with these standards and the Standard Drawings available on the City's website.

5.2.F.III. PIPE SIZING

The design engineer shall size all distribution system pipes and appurtenances in accordance with the provisions of this manual and applicable ordinances. Distribution mains shall be a minimum of 8-inches in diameter.

The following is a generalized pipe size guideline that is subject to refinement in the design analysis. Distribution mains shall be sized such that:

1. Velocity does not exceed whichever is limiting of the following:
   a. three (3) feet per second (fps) for maximum day flow or
   b. ten (10) fps for fire flow plus average day, or
   c. head loss does not exceed 10 feet/1000 feet.
2. Under normal operating conditions, the range of system pressures is between 30 psi and 125 psi.
3. Pressure and flow capacity data for both existing and future conditions in the City's major water distribution system is to be obtained from the Utilities Department for use in the design and analysis of all proposed system improvements.

5.2.F.IV. LOCATION/ALIGNMENT:

A six (6) foot minimum horizontal and one (1) foot minimum vertical exterior surface separation from any parallel underground dry utility is required. In all major streets and other active utility corridors, a utility conflict review is required.

5.2.F.V. DISTRIBUTION MAIN COVER:

Distribution mains shall adhere to the minimum cover requirements shown in Table 5.5 and the Standard Drawing available on the City's website.

Table 5.5: Minimum Cover Requirements

Condition	Depth of Bury (Ft.)
Paved Street (Top of Pavement)	4
Unpaved and Maintained Street	5
Unpaved and Un-maintained Street	6

5.2.F.VI. TAPS

All taps approved onto a main shall be installed under "wet tap" conditions, using a tapping tee and valve, which allows the distribution main to always remain in service.

5.2.F.VII. VALVES

Valves on mains 12-inch and smaller shall be gate valves and shall be the same size as the main lines. Gate valves shall be iron-bodied, resilient seat or epoxy coated double disc, with non-rising stem conforming to AWWA C-500 or C-509. Valves shall open counterclockwise and shall be rated for a design working pressure of 200 psi or 1½ times the working pressure whichever is greater. Double disc type valves shall be bronze mounted with parallel seats. All buried valves shall have one 2-inch square operating nut. Mechanical or push-on joints appropriate for buried installations shall be provided.

Table 5.6: Valve Spacing

Type of Development/Land Use	Maximum Valve Spacing (Ft)
Residential	750
Commercial and Industrial Development	500

1. Extension stems with a 2-inch square operating nut and a support for the upper end of the extension shall be provided for all valves installed more than 4 feet deep. The operating nut shall be located within 4 feet of the finished grade. Extension stems shall be mechanically connected to the operating nut. Extension stems shall be fabricated from solid steel shafting not smaller in diameter than the stem of the valve or from galvanized steel pipe having an inside diameter (ID) not smaller than the outside diameter (OD) of the valve stem. Extension stems shall be connected to the valve by a flexible socket type coupling. All connections shall be pinned, keyed, or socket type. Pipe couplings will not be acceptable. Each extension stem for a buried valve shall extend within 6 inches of the ground surface, shall be provided with spacers that will center the stem in the valve box, and shall be equipped with a wrench nut.
2. A valve shall be located on each side of a canal, arroyo, railroad, and freeway crossing.
3. Avoid valve locations in curbs, sidewalks, driveways, multi-use paths, on-street bike lanes, and valley gutters.
4. Isolation valves for fire hydrant assemblies shall follow the Standard Drawing, refer to City website.
5. Valves shall be located at the point of curvature (PC) of the curb return at street intersections and should be aligned with extensions of property lines or right-of-way lines where possible.
6. Valve boxes and covers shall be provided for all buried distribution system line valves in accordance with Standard Drawings provided on the City's website. Valve boxes shall be adjustable cast iron type with a deep skirted lid. Valve boxes shall be a minimum of 4 inches in diameter and shall have a minimum thickness at any point of 1/16 inch and shall be provided with suitable cast iron bases and stay-put covers. Covers shall have cast thereon "WATER" on the top. They shall be as manufactured by Parkson, Tyler, APCO, or approved equal.
7. The valve box shall have at least 6 inches adjustment above and below specified depth of cover over pipe.
8. Valves shall be located to provide maximum accessibility for emergency access. Valves shall not be placed in locations that may be subject to routine parking or storage operations.

5.2.F.VIII. RESTRAINT SYSTEMS

All valves and fittings shall be restrained by using a joint restraint system compatible with the type of pipe. The Utilities Department shall approve all restraint systems. The length of the restraint system shall be shown on the construction plans and complete supporting data on the restraint system design shall be submitted to the Utilities Department for review and approval. Refer to Standard Detail Drawings on the City's website for typical joint restraining lengths for various size of pipe.

1. Joint follower gland-type restraint systems may be used for 12-inch diameter pipe and smaller, including the following devices:
   a. "EBAA Iron, Inc." Megalug – PVC and DI compatible series.
   b. "Uniflange" – PVC and DI compatible series.

5.2.F.IX. LOOPING AND TERMINAL MAINS

System looping and terminal main requirements are summarized below:

1. Where possible, all distribution mains shall be looped into the existing and proposed water distribution system to ensure at least two feed sources and to maintain system pressure.
2. Where allowed, terminal or dead-end distribution mains shall not be more than 600 feet long, measured along the entire centerline length of the terminal main from the connection main to the terminus. The City of Rio Rancho reserves the right to reduce the length if conditions warrant in order to maintain fire flows.
3. All terminal mains shall have a fire hydrant at the terminus. Fire hydrant installations shall be offset from the terminus to ensure that the hydrant can be removed for maintenance while the terminal main remains in service. Fire Hydrants shall be installed in accordance with the Standard Drawing available on the City's website.
4. Service taps along terminal mains shall not be located closer than 3 feet to the terminus nor located between the fire hydrant connection and the terminus.

5.2.F.X. EXTENSIONS

Water mains shall extend to the far edge of the property being served plus 10 feet or to the edge of the platted subdivision, whichever is greater, to ensure perpetuation of the water distribution system. The location, size, and configuration of the proposed development or subdivision, with respect to the existing water distribution system, may dictate that water mains be extended to the far edge of more than one property or subdivision boundary to accommodate system perpetuation.

5.2.F.XI. FUTURE CONNECTIONS

When future main extensions are provided for by "stub-out" or terminal connections, the stub-out or terminal main extension shall extend 20 feet beyond the pavement and be valved so that only one valve must be closed when the future main is extended. The valve shall be restrained to the existing distribution main to allow closure of the stub-out or terminal main section without creating a pressure separation of the valves from the in-service distribution main. When future connections are made, the entire main beyond the stub-out or terminal main extension shall be flushed, chlorinated, and pressure tested.

5.2.G Transmission Mains – Design Criteria

5.2.G.I. GENERAL

Transmission water mains are typically 16 inches in diameter and larger. No service taps are permitted on transmission mains. 14-inch waterlines are not acceptable to the City.

5.2.G.II. PIPE SIZING:

Transmission mains shall be sized to carry the designed maximum day flow required without exceeding the velocities and headlosses shown in Table 5.7 below:

Table 5.7: Allowable Velocity/Headloss

Pipe Size (in.)	Max. Allowable Velocity (ft/s)	Max. Allowable Headloss (ft/1000 ft)
16	5	2
20	5	1.5
24 and larger	5	1

Note: The above table is based on a Hazen-Williams pipe roughness coefficient of C = 120.

5.2.G.III. LOCATION/ALIGNMENT

A stationed horizontal alignment of the proposed transmission main is required to define the route with lines, angles, and curvatures referenced to land corners and other official survey control points when available. Negative stationing will not be allowed. Vertical alignment must be carefully considered in the design of transmission mains. A profile shall be provided for all transmission main designs.

1. To facilitate City review of a proposed main, a profile of the entire main shall be provided on a single sheet in condensed form.
2. A roller coaster type of vertical alignment shall be avoided to minimize air pocket formation at the high points of the profile. Design of the main shall provide for a minimum number of high and low points consistent with economic feasibility.

5.2.G.IV. TRANSMISSION MAIN COVER

Transmission mains shall adhere to the minimum cover requirements shown in Table 5.8 and pipe bedding per Standard Drawing on the City's website, required by the City of Rio Rancho. As the transmission main size increases, the minimum cover requirements may increase. If finished grade cannot be identified a minimum of 18-inches additional cover is required.

Table 5.8: Minimum Cover Requirements

Condition	Depth of Bury (ft)
Paved Street (Top of Pavement)	4
Unpaved and Maintained Street	5
Unpaved and Unmaintained Street	6

5.2.G.V. TAPS

No main extension or fire hydrant taps smaller than 6 inches in diameter shall be installed in any main 16-inches or greater. Service line taps shall not be installed in any transmission main. Unless otherwise approved by the Development Services Department or designee, all taps installed onto a transmission main shall be made under "wet tap" conditions, using a tapping tee and valve, to allow the transmission main to remain in service.

5.2.G.VI. VALVES

Valves on 16-inch mains and larger shall be butterfly valves. Valves on transmission lines larger than 16 inches shall be full size butterfly valves with flanged end connections. Valve boxes shall be placed over valve operators as shown in Standard Drawing on the City's website.

1. Butterfly valves shall be rubber-seated conforming to the AWWA C504 and designed for buried service.
2. The valves shall be designed to operate as open or closed with a design velocity of 8 fps.
3. The valves shall have a cast iron body with mechanical joint ends conforming to ANSI 21.11, AWWA C111 and shall be rated for a design working pressure of 150 psi or 1½ times the working pressure whichever is greater.
4. Valves shall be manufactured by Keystone or approved equal.
5. Discs shall be cast or ductile iron with stainless steel, type 304, either stub or one-piece shafts.
6. Shaft bearings shall be the bushing type of nylon or Teflon.
7. Seats shall be rubber vulcanized to the body and designed to provide bubble tight shutoff.
8. The valve operator shall be traveling-nut type in an enclosed body, sealed to prevent the entrance of groundwater up to 5 feet above the valve.
9. Table 5.9 below shows the maximum spacing for valves on transmission mains.

Table 5.9: Valve Spacing

Pipe Size (inches)	Maximum Valve Spacing (ft)
16-30	2500
Greater than 30	5000

10. If the Utilities Department requires the installation of electronic monitoring and remote operation equipment, the line valve must be a butterfly valve with a rectangular vault, housing the valve operator and telemetry equipment. Each installation will require individual details. The design engineer shall check with the Utilities Department on acceptable equipment and specific design requirements.
11. In addition to the valve spacing requirements listed above, valves shall be installed at the following locations:
    a. At all connections with transmission mains. Where a distribution main connects with a transmission main, a valve shall be installed on the distribution main at the transmission main.

b. Where possible, valves shall be aligned with extensions of property lines or right-of-way lines. Valves shall not be placed in locations that may be subject to routine parking or storage and shall not be placed within public sidewalks, multi-use paths, or on-street bike paths.
c. On all legs of tees or cross.

5.2.G.VII. RESTRAINT SYSTEMS

All valves and fittings shall be restrained by using a joint restraint system compatible with the type of pipe. The Utilities Department shall approve all restraint systems. The length of the restraint system shall be shown on the construction plans and complete supporting data on the restraint system design shall be submitted to the Utilities Department for review and approval. Refer to Standard Drawings on the City's website for appropriate joint restraining lengths for various size of pipe.

1. Joint follower gland-type restraint systems may be used for 16-inch diameter pipe and larger including the following devices:
   a. "EBAA Iron, Inc." Megalug - PVC and DI compatible series.
   b. "Uniflange" - PVC and DI compatible series.

5.2.G.VIII. BYPASS ASSEMBLIES

Transmission mains between valves shall be treated as an independent unit with provisions for dewatering, filling, removing air and adding air as appropriate for the transmission main construction and maintenance. In all transmission mains, a bottom tangent flanged outlet shall be provided at all profile low points, and a top tangent flanged outlet shall be provided at all profile high points.

5.2.G.IX. AIR/VACUUM VALVE ASSEMBLIES

All air/vacuum valve assemblies for transmission mains require individual approval by the Utilities Department. Air/vacuum relief valve assemblies shall be installed in accordance with Standard Drawing available on the City's website at high points in the transmission main at locations approved by the Utilities Department.

5.2.G.X. PRESSURE BLOW-OFF ASSEMBLIES

All blow-off assemblies/flushing valves for transmission mains require individual approval by the Utilities Department. Pressure blow-off/flushing valves assemblies shall be installed in accordance with the Standard Drawing available on the City's website at low points in the transmission main at locations approved by the Utilities Department. Pressure blow-off assemblies/flushing valves are to be used only when it is determined that a fire hydrant is not appropriate. Blow off hydrants to be clearly identified to not be confused with a fire hydrant for fire protection.

5.2.G.XI. DESIGN SURVEY REQUIREMENTS

To establish the vertical profile of the transmission main, an existing and finished ground surface profile of the proposed alignment based on City of Rio Rancho datum and tied to at least two survey benchmarks is required. Additional semi-permanent benchmarks shall be established every 1500 feet along the route by closed loops of third-order accuracy. The existing ground profile shall consist of

ground surface elevations along the proposed transmission main centerline at every 100-foot station and at pronounced grade breaks.

1. Topographical features within the street or right-of-way and any topographic feature outside the right-of-way, which may interfere with the operation or installation of the transmission main, shall be accurately surveyed and depicted on the plans. Topographic features may be compiled by aerial photogrammetry or field survey methods.
2. In areas where the ground slope perpendicular to the centerline of the transmission main exceeds 5%, cross sectional data shall be surveyed at all 100-foot station profile points and shall extend at least 25 feet to each side of the centerline.
3. All utility crossings or close utility interference shall be located and exposed by potholing. The design survey shall record the size, nature, and location of the potential interference by station, offset, and elevation.

5.2.H Fire Hydrant Criteria

5.2.H.I. GENERAL

The purpose of this section is to clarify City of Rio Rancho requirements for fire hydrants. Adherence to these requirements is necessary to provide a usable, readily accessible water supply for maintenance and firefighting purposes. Fire hydrants shall be installed in accordance with Standard Drawing W-15 available on the City's website.

5.2.H.II. ORDINANCE REQUIREMENTS

All fire line installations shall conform to the specifications of NMAPWA, and all requirements and standards are as set forth in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates and Standard Drawing W-13 on the City's website.

5.2.H.III. FIRE FLOW DEMAND

The required fire flow and maximum day flow rate shall be available in the system. The municipal fire flow required by the City for any one particular location varies depending on the land use and/or the building type or use. The number of hours that the required fire flow shall be available also varies depending on the land use. Table 5.10 outlines required fire protection flows. It should be noted that this table is not all-inclusive for every type of development and/or land use. It is the responsibility of the design engineer or architect to coordinate all fire flow requirements with the Development Services Department or designee and Fire Marshall, as the Utilities Department and/or the Fire Department may require a fire flow greater than those shown in Table 5.10.

Table 5.10: Minimum Fire Flow Requirements

Type of Development/Land Use	Fire Flow Demand (gpm)
Single-Family Residential Development	1500
Multi- Family Residential Development	1500
Commercial Development	3000
Institutional Development	3000
Industrial Warehouse Development	4000

5.2.H.IV. GENERAL DESIGN STANDARDS

Fire hydrants must be located where they can be quickly found and easily used by fire engines arriving at an incident. Standardized location criteria are based on predictability, visibility, unobstructed accessibility, the type of development, Fire Department tactical needs, and the expected route fire engines will travel to the site.

Determining proper fire hydrant location requires application of engineering judgment and common sense to the specific conditions found in each project. Minor variances in the locations or spacing of individual hydrants may be approved provided the functional intent of these design standards is achieved.

1. All fire hydrants shall be Kennedy Guardian Model K-81 or Mueller Super Centurion 200, conforming to AWWA C502, the City of Rio Rancho Standard Drawing W-3 15 on the City's website, and the standard products list.
2. Locate fire hydrants where they are readily visible by fire engines traveling along the street or approaching on intersecting streets. Never obscure or obstruct hydrants behind fences, gates, walls, or landscaping.
3. Existing fire hydrants on major streets, collector streets, or any other street having four (4) or more lanes of traffic, which are not divided by raised median islands can be included in the coverage analysis. If the streets are divided by raised median islands, then the existing hydrant can only be included in the coverage analysis if its location is on the same side as the new development.
4. When designing a fire hydrant layout, the "first" hydrant is to be located at street intersections and at the main entrance(s) into a subdivision, apartment complex, or commercial development. Additional hydrants must then be spaced approximately evenly between these points at a distance not to exceed the maximum spacing between hydrants (see Table 5.11). Spacing is measured along route of travel of a fire engine.
5. Fire hydrants separated from a subdivision, building, or other development by continuous fence, wall, or other obstruction cannot be counted as providing protection to that subdivision or development.
6. A fire hydrant shall be placed within 30 feet of the end of all dead dead-end water mains greater than 100 feet to facilitate flushing and maintenance of the water main (including all cul-de-sacs). Refer to Standard Drawing W-3 15 on the City's website.

5.2.H.V. RESIDENTIAL SUBDIVISION HYDRANT LOCATION STANDARDS:

Fire hydrant locations will be reviewed and approved as part of the subdivision approval process and the following general design standards apply:

1. Start by locating a fire hydrant at the intersection of each public and/or private street entrance into the subdivision unless an existing fire hydrant meets spacing requirements.
2. Then space additional fire hydrants approximately 500 feet apart along all public and/or private streets within the subdivision and along all perimeter streets.
3. For cul-de-sacs, a fire hydrant shall be placed within 30 feet of the dead dead-end water main. If dead end lines lengths are such that additional hydrants are required, assure that a minimum of 30 feet along the line is required between the fire hydrant and the line termination.

5.2.H.VI. COMMERCIAL AND MULTI-FAMILY HYDRANT LOCATION STANDARDS:

Fire hydrant locations will be reviewed and approved as part of the site plan/building permit approval process. Provide a site plan showing all existing and proposed fire hydrant locations, all designated fire lanes, and all fire department connections for building standpipe or sprinkler systems for comment and approval by the Fire Marshal.

5.2.H.VII. FIRE HYDRANT SPACING

Table 5.11 shows the maximum spacing for fire hydrants. Spacing distance shall be measure along the centerline of the street or route, which the fire truck will most likely travel.

Table 5.11: Fire Hydrant Spacing

Type of Development/Land Use	Maximum Fire Hydrant Spacing (ft)
Single-Family Residential	500
Single- Family Residential Cul-de-sac	350
Two story Townhouses and Apartments	300
Commercial and Industrial Development	300
Institutional Development	300

Fire hydrants shall not be placed within six (6) feet of an above ground obstruction and shall have a minimum of 15 inches of clearance between ground and the lowest hydrant outlet cap and shall be as approved by the Fire Marshal. If required by the Utilities Department, hydrants shall be located within water easements providing at least six (6) feet of clearance on all sides of the hydrant, including protective bollards as directed.

5.3 Water Production Facilities

5.3.A General Requirements

5.3.A.I. GENERAL

This document in conjunction with City of Rio Rancho's Standard Drawings, located on the City's website, provides guidance and minimum basic design criteria and standards, as set forth by the Utilities Department for water production facilities within the City of Rio Rancho. It is intended for use in the planning and design process. Where not specified in these standards, the Development Services Department will specify the standards to be applied to the design and construction of water production facility improvements in order to protect the public health, safety, and welfare of all those served by the water system in the City of Rio Rancho.

5.3.A.II. PROJECT SITE REQUIREMENTS

Prior to beginning the design of the facility, a detailed project site study and/or report shall be completed. This analysis should be conducted with input from the Utilities Department to ensure that the lot or land area that is being considered is an adequate size and that the location has a functional hydraulic gradient. A hydraulic modeling analysis shall be performed on each project consistent with the

City's master plan. If appropriate the report must address the existing water source to provide adequate flow, static pressure, and fire flow. Consideration should also be given to electrical power supply to the facility.

5.3.A.III. SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)

All facilities shall include installation of full SCADA current technology meeting the City's equipment requirements and specifications. The system is intended to provide continuous system status allowing operations staff to respond in a timely fashion to operational needs and emergency equipment failures. Installation of SCADA equipment is not limited to the following but includes testing, startup, and commissioning of the RTU, antenna, radio cable and all required accessories. The facility shall be interfaced and coordinated with the City's system host location. All equipment required to be installed at the facility shall be SCADA compatible.

5.3.A.IV. ELECTRICAL POWER SUPPLY

The electrical design will include the service entrance, switch gear, motor control system, VFD cabinets system (if required), standby power system, conduit, wiring, lighting systems, SCADA, instrumentation systems and air-conditioned cabinets where necessary.

5.3.A.V. ON SITE SODIUM HYPOCHLORITE GENERATION

All production facilities shall expect to incorporate on-site sodium hypochlorite generation. The following requirements are not all inclusive but are intended to establish a benchmark for design to begin considering individual project needs. This process will require the installation of a building capable of maintaining a controlled environment for efficient equipment operation. The building needs to be large enough to house the salt (brine) tank, electrolytic cell / electrolyzer unit, hypochlorite solution tank, a water softener unit, a water chiller and to keep direct sunlight away from sensitive equipment. A waste connection to the sanitary sewer system or an on-site holding tank is also required.

5.3.A.VI. VALVES

Valves shall be specified that are appropriate for potable water use from proven manufacturers. A piping/valve schedule shall include the valve size, type, class, flow range, actuator type, etc. Design consideration shall locate and install all valves in a manner that they can be operated without entering a vault to mitigate confined space regulations.

5.3.A.VII. ELECTROMAGNETIC FLOW METER

Each production facility requires the installation of a site production electromagnetic flow meter system with isolation valves for maintenance and repair. The meter design shall be an above ground installation with a rate of flow and totalizer read head. If a meter is designed below grade, it shall be equipped with a signal converter which can be mounted inside the facility and read by an operator without entering a confined space.

5.3.A.VIII. OPERATIONS AND MAINTENANCE MANUAL

An engineering consultant shall complete the preparation of operation and maintenance manuals and present them to the project manager before final project completion. A draft submittal of the manuals is

to be submitted to the project manager for approval prior to start-up and commissioning. An electronic copy of the O & M document in the current approved software shall be included.

5.3.A.IX. START-UP AND COMMISSIONING PERIOD

The construction project is functional only after demonstrating the completion of pressure testing, bacteriological testing, and a final inspection. An acceptable flushing schedule and chlorine residual monitoring plan must be prepared to maintain and demonstrate an acceptable level of turnover during the early period of new project commissioning. Once substantial completion has been satisfied, the start-up and commissioning period is ready to begin. The start-up details and duration of commissioning shall be identified early on and listed in the project scope of work by the design engineer.

5.3.B Pressure Reducing Stations

5.3.B.I. GENERAL

Pressure Reducing or Regulating Valves (PRV) are utilized to control services pressures between pressure zones within the distribution system. When water main extension plans are submitted for review and water availability analysis, the need for a PRV installation will be determined and located based on existing pressure zone boundaries and the existing distribution system layout by the Utilities Department on a case-by-case basis.

5.3.B.II. PILOT CONTROLS

Unless otherwise directed by the City all PRV installations shall include a valve control system, which includes pilot controls for pressure reducing and pressure sustaining functions. The pilot controls shall be field adjustable to accommodate any setting resulting in a customer pressure between 50 psi and 100 psi.

5.3.B.III. DESIGN STANDARDS

New sites will be designed to meet capacity requirements using a dual or multiple valve arrangement. Bypass piping shall be ductile iron. A gate valve shall be installed both upstream and downstream of each PRV. Sizing of a PRV shall be based on the manufacturer's recommendations as determined by the design flow. PRVs and vaults shall be constructed in accordance with Standard Drawings available on the City's website.

5.3.B.IV. TELEMETRY

In certain situations, the Utilities Department shall require monitoring of the valve(s) via SCADA equipment.

5.3.C Pumping Facilities

5.3.C.I. GENERAL

Water pumping facilities and booster stations shall conform to the requirements as set forth in NMED's Recommended Standards for Water Facilities and these design guidelines.

5.3.C.II. PUMPING UNITS AND SIZE

Pumping stations shall consist of a combination of pumps with the capacity to provide fire demand plus maximum day demand. Pumps meeting peak hour demand will be required for any closed loop configurations. Special care shall be exercised in the selection of pumping units and associated components to prevent pressure surges and ensure the suitability, flexibility, and adaptability of the units to the hydraulic conditions of the system from which water is taken and the system into which water is pumped.

1. The horsepower rating of each pump motor shall be such that the motor will carry continuously the maximum load that is possible to develop at any point on the pump curve without exceeding 95 % of the motor nameplate rating and without using the service factor.

5.3.C.III. DESIGN CRITERIA

The minimum requirements by the Utilities Department for pumping facilities and booster stations are as follows:

1. Pump station shall be secured against unauthorized entry.
2. Building architecture shall be aesthetically pleasing and compatible with the surrounding area and meet current building codes.
3. For new facility sites, provide an eight (8) foot tall masonry perimeter wall with locked entrance enclosing the compound. The wall shall be compatible with the surrounding environment, including landscaping. For existing facility sites improvements should include screen walls for exposed equipment such as surge tanks.
4. The facility entrance shall have a heavy-duty cantilever slide access gate with an electric operator with battery backup and at least 20 feet clear entry space.
5. The station shall have a paved or graveled access road at least 12 feet wide with maximum slope not to exceed 12%. A 42-foot radius turn-around shall be provided if the access road exceeds 50 feet in length.
6. The interior of the compound shall be surfaced with 4-inches compacted aggregate base.
7. Pump station shall be located and designed to provide service vehicle access to major station components for maintenance and inspection purposes. This includes access and parking for several vehicles on pump station site.
8. Down cast facility lighting shall be provided with at least one photocell-operated light. A manual light switch shall be located next to the access gate in the interior of the compound.
9. A backup/emergency power supply capable of operating the pump station for eight hours during power outages shall be supplied. Specific criteria for backup generation type and capacity shall be given during the design process by the Utilities Department.
10. Provide a spare pump and motor for backup capability.
11. Heavy equipment access for a boom crane or pump rig shall be incorporated in the site layout.
12. The site shall be graded to provide adequate drainage away from structures and to prevent water from backing up into the pump station from other sources.
13. Provide a frost proof gravity line or sump pump for pump station drainage.
14. Provide ventilation, heating, and cooling in the pump station.
15. **Supervisory Control and Data Acquisition (SCADA):** All facilities shall include installation of full SCADA current technology meeting the City's equipment requirements and specifications. The system is intended to provide continuous system status allowing operations staff to respond in a

timely fashion to operational needs and emergency equipment failures. Installation of SCADA equipment is not limited to the following but includes testing, startup, and commissioning of the RTU, antenna, radio cable and all required accessories. The facility shall be interfaced and coordinated with the City's system host location. All equipment required to be installed at the facility shall be SCADA compatible.

16. Ample clearances between equipment shall be provided for operation and maintenance activities. Sufficient space shall also be provided for future pump(s) and piping.
17. Piping configurations shall include the following minimums:
    a. All piping within the pump station shall be lined and provided with restrained joints and be either DIP or fabricated steel.
    b. Isolation valves shall be provided for each pump assembly.
    c. Discharge piping shall include:
        i. End spools.
        ii. Flow control or check valve.
        iii. Spool with NPT tapped outlets or welded couplings to accommodate a flow sensor and pressure gauge, etc.
        iv. Hand wheels for all above ground gate or butterfly valves.
        v. Reducing wye at the manifold.
        vi. Restrained flexible closure section for access.
18. Pump discharges shall be joined to a common header, which shall pass through an electromagnetic flow meter with isolation valves and a valved bypass.
19. A pressure relief/surge anticipator valve shall be provided between the discharge header and the supply line.
20. Depending on the motor size and electrical power system, provide soft start/soft stop motor starter that provides a wider range of rotor torque control at start up and shut down.
21. Surge protection and control shall be provided.
22. Electric power controls.
23. Corrosion protection for underground steel and iron.
24. On-site sodium hypochlorite generation system (if applicable).
25. All equipment exposed to weather shall be capable of operating under the local exposed conditions. This shall include meeting the appropriate NEMA rating and temperature ranges expected or as established by the Utilities Department.
26. Provide local and remote instrumentation for monitoring the following:
    a. Discharge valve positions.
    b. Discharge header pressure and flow.
    c. Digital readout of Reservoir level (if applicable).
    d. Upstream pressure (if applicable).
    e. Suction header pressure (if applicable).
    f. Pump status (on-off).
    g. Gas engine stand-by generator status (on-off).
    h. Total kilowatt demand (station).
    i. Pump motor amperage and voltage with motor overload failures.
    j. Flowrate (through flowmeter).
27. Provide sensors and alarms to detect the following local and remote:
    a. Water on the floor.
    b. Bearing RTD for each pumping unit bearing.

c. Motor windings RTD for each pumping unit.
d. Building doors intrusion and interior motion detection.
e. High and low room temperature.
f. Electrical ground fault.
g. Low accumulator pressure (if applicable).
h. Power failure.
i. High and low reservoir level (if applicable).
j. Fire and/or smoke.
k. Tank minimum level (if applicable).
l. Tank overflow (if applicable).

28. All facilities require site plan and building safety review and approval by the Utilities Department. Such review may result in additional requirements that must be satisfied.

5.3.D Wells

5.3.D.I. GENERAL

Wells shall conform to the requirements as set forth in NMED's Recommended Standards for Water Facilities and these design guidelines. A drilling permit from the New Mexico State Engineer's Office shall be obtained. A design report of system capabilities and production influence will be required.

5.3.D.II. DESIGN CRITERIA

The minimum requirements by the Utilities Department for wells are as follows:

1. For new facility sites, an eight (8) foot tall masonry perimeter wall with locked entrance enclosing the compound. The wall shall be compatible with the surrounding environment, including landscaping. For existing sites, an eight (8) foot tall masonry screen wall shall be installed around exposed facilities such as pump and motor assemblies.
2. The facility entrance shall have a heavy-duty cantilever slide access gate with an electric operator with battery backup and at least 20 feet clear entry space.
3. The station shall have a paved or graveled access road at least 12 feet wide with maximum slope not to exceed 12%. A 42-foot radius turn-around shall be provided if the access road exceeds 50 feet in length.
4. The interior of the compound shall be surfaced with 4-inches compacted aggregate base.
5. Service vehicle access to major station components shall be incorporated in the station design.
6. Down cast facility lighting shall be provided with at least one photocell-operated light. A manual light switch shall be located next to the access gate in the interior of the compound.
7. A backup power supply capable of operating the pump station for eight hours during power outages shall be supplied. Specific criteria for backup generation type and capacity shall be given during the design process by the Utilities Department.
8. Heavy equipment access for a boom crane or pump rig shall be incorporated in the site layout.
9. The site shall be graded to provide adequate drainage away from structures.
10. On-site sodium hypochlorite generation system.
11. Well casing (sizing, below grade placement, material, etc).
12. Screen (sizing, below grade placement, material, etc).
13. Column pipe (sizing, below grade placement, material, etc).
14. Discharge piping plus head.
15. Check valve on discharge line.

16. Hose bib type sampling tap on well side of check valve.
17. Well vent.
18. Pump plus motor (type and configuration – turbine/in-line, pitless adapter).
19. Sanitary well seal (air and watertight).
20. Pump base concrete slab.
21. Air release valve between the pump and check valve.
22. After placement of the pump, wells shall be disinfected.

5.3.D.III. ADDITIONAL DESIGN REQUIREMENTS

The following are additional design criteria as required by the Utilities Department.

1. Well casings shall be made of steel, be continuous and watertight from top to bottom except for well screens. The casing shall extend a minimum of 24 inches above the 100-year flood level of record.
2. Well vents shall be made of steel and terminate a minimum of 24 inches above the final ground elevation and not less than 24 inches above the 100-year flood level of record, whichever is higher. The vent shall be covered with a number 16 mesh screen. Any equipment that will permit direct open access to the well shall also meet the height requirements and shall be sealed or screened to prevent entrance of foreign matter, surface water, or contaminants into the well.
3. The pump base concrete slab shall extend a minimum of three (3) feet from the center of the well, be 6-inches thick and slope away from the well head a minimum of ¼ inch per foot. The site shall drain away from the well and be protected against erosion and surface runoff from entering the well.
4. The well screen diameter shall be the minimum size permitted that will maintain an aperture entrance velocity of 0.1-0.5 feet per second (fps) and a vertical velocity within the screen barrel of five (5) fps or less. The screen length, aperture size, and construction shall be in accordance with AWWA A100.
5. The well shall be sealed and protected from the entry of contaminants or water from any source other than the selected aquifers. Sealing of the well shall consist of grouting the following:
    a. The annular space between the casing and the bore hole to a minimum depth required to exclude pollution, or 50 feet, whichever is greater.
    b. All zones containing water of undesirable quality or zones to be protected but excluded from the final well completion. These areas shall be grouted from at least five (5) feet above the zone to at least five (5) feet below the zone.
    c. All passages or formations that pollutants may enter such as outcrops, old wells, excavation, limestone, sandstone, fractured rocks.
6. Joints between screen sections and blank casing spacers shall be welded or threaded and be watertight, straight, and strong as the screen.
7. The top of the well shall be constructed so that no foreign matter or surface water can enter during or after construction. On completion of the well, the well shall be temporarily capped to prevent surface pollutants from entering until pumping equipment is installed.
8. Below ground pits to house pumping equipment are prohibited.
9. Wells shall be constructed round, plumb, and true to line within the following tolerances:
    a. Maximum allowable horizontal deviation from the vertical shall not exceed 2/3 of the smallest inside diameter of the part of the well being tested per 100 feet of depth.

b. The alignment must be satisfactory for the successful installation and operation of the permanent pumping equipment.
c. Wells shall be tested for alignment and plumb in accordance with AWWA A100, Section 8.

10. New wells shall be performance tested to acquire water samples and to determine well capacity, draw down, and production on a long-term basis. Testing methods shall be in accordance with AWWA A100, Section 10.
11. All facilities require site plan and building safety review and approval by the Utilities Department. Such review may result in additional requirements that must be satisfied.

5.3.E Water Storage Facilities

5.3.E.I. GENERAL

Water storage facilities shall conform to the requirements as set forth in NMED's Recommended Standards for Water Facilities and these design guidelines. All storage facilities shall have built-in provisions to drain, access, and clean the storage tank including a suitable source of water. The overall objectives of finished water storage are to:

1. Assist in meeting peak hour requirements.
2. Equalize system pressures.
3. Provide emergency water supply in case of component failure.
4. Provide for fire flows.
5. Provide additional treatment (if needed).
6. Permit high service pumps at treatment plants to operate at a relatively uniform rate.

5.3.E.II. DESIGN CRITERIA FOR STORAGE CAPACITY

Storage facilities shall have sufficient capacity to meet allocated domestic demands, fire flows, and emergency flows. Domestic demands are established using the criteria set forth in these standards. The Utilities Department requires that storage facilities accommodate the following. The minimum requirements by the Utilities Department for water storage facilities are as follows:

1. An eight (8) foot tall masonry perimeter wall with locked entrance enclosing the compound. The wall shall be compatible with the surrounding environment, including landscaping.
2. The facility entrance shall have a heavy-duty cantilever slide access gate with an electric operator and battery backup with at least 20 feet clear entry space.
3. The station shall have a paved or graveled access road at least 12 feet wide with maximum slope not to exceed 12%. A 42-foot radius turn-around shall be provided if the access road exceeds 50 feet in length.
4. The interior of the compound shall be surfaced with 4-inches compacted aggregate base.
5. Service vehicle access to major station components shall be incorporated in the station design including driving the perimeter of the tank.
6. Down cast facility lighting shall be provided with at least one photocell-operated light. A manual light switch shall be located next to the access gate in the interior of the compound.
7. The site shall be graded to provide adequate drainage away from structures.
8. On-site sodium hypochlorite generation system (if applicable).
9. On-line free chlorine analyzer with SCADA output.
10. Steel Storage Tank shall be designed to AWWA D-100 Standards and Concrete Storage Tanks shall be designed to AWWA D-110 Standards.

11. Storage tank with acceptable interior and exterior coating systems for potable water.
12. Concrete foundation ring.
13. Inside and outside steel ladders.
14. Outside stairway with locking security gate at base.
15. Probe bottles.
16. Exterior water level indicator.
17. Intruder resistant tank vent housing.
18. Thirty-six-inch square-hinged roof access openings with inside ladder.
19. Cathodic protection.
20. Overflow pipe and splash pad.
21. Overflow weir.
22. 24-inch flanged inspection hatch centered over weir.
23. Hinged shell manhole.
24. Altitude valves, isolation valves, bypass line, and vault (as necessary).
25. Tank outlet line.
26. Tank inlet line.
27. Booster station suction line (where applicable).
28. Tank drain.
29. Disinfection system.
30. Electrical and telemetry system.
31. Pressure transmitter for telemetry.
32. A clear area around reservoir to allow vehicle passage. Clearance width shall be sized in consultation with the Utilities Department.

5.3.E.III. CHLORINATION SYSTEM REQUIREMENTS

Due to the nature of storage projects, no set design criteria can be maintained for all sites. A general set of criteria has been developed to provide guidelines for the design of each site. Based on previous analysis, the following is a list of these general guidelines:

1. Monitor the chlorine residual in a continuous sample taken from a location that will be representative of the chlorine level in the reservoir.
2. If the chlorine residual falls below a set point of 0.2 ppm, for example, then the chlorine additive system is activated.
3. When the chlorine system is activated, a recirculation pump starts, and a chlorine solution is added to the water to raise the free chlorine level in the recirculation water to approximately 0.8 ppm (with the capacity to go to 1.0 ppm or higher).
4. The recirculation pumps will be sized to turn the full volume of the reservoir over in a maximum of three (3) days. Each site will have somewhat different points from which the recirculation pump will draw suction. The typical discharge point will be approximately 180 degrees from the inlet/outlet piping. Using this piping system, the chlorinated water will be dispersed into the stored water and eventually turn the volume of reservoir over with chlorinated water.
5. When the chlorine residual in the continuous sample reaches a set point of about 0.8 ppm, the recirculation pump and the chlorine feed facilities will stop.
6. When the chlorine residual in the continuous sample reaches a set point of approximately 0.4 ppm, the recirculation pump, without the chlorination system, will be started. This will help to circulate

any newly added water with adequate chlorine residual and maintain a minimum chlorine level in the reservoir.

Table 5.12: Chlorine Facilities Minimum Design Criteria	
Item	**Design Criteria**
Low Level Chlorine	0.2 ppm
High Level Chlorine	0.8 ppm
Design Chlorine Dosage	1.0 ppm
Volume Turnover Maximum Time Required	3 days
Chlorine Monitoring	Constant, amperometric method

5.3.F Well Abandonment

1. Production and monitoring wells no longer in use shall be plugged in such a manner as to prevent migration of surface runoff or ground water along the length of well casing as required by the Office of the State Engineer. Where possible, this shall be accomplished by removing well casing and pumping expanding cement from the bottom to top of well using a tremie pipe. If casing cannot be removed, the casing shall be ripped or perforated, and pressures grout its entire length.
2. Filling with bentonite pellets from the bottom to the top is an acceptable alternative to pressure grouting.
3. After abandonment, written notification must be submitted to the NMED GWPPS (New Mexico Environment Department Ground Water Pollution Prevention Section) with date and method of abandonment.

5.4 Wastewater Collection System

5.4.A General Requirements

This document in conjunction with City of Rio Rancho's Standard Drawings, located on the City's website, provides guidance and minimum basic design criteria and standards, as set forth by the Utilities Department, for providing and maintaining the public sewage collection system of the City of Rio Rancho. It is intended for use in the planning and design process. Where not specified in these standards, the Development Services Department or designee will specify the standards to be applied to the design and construction of public sanitary sewer improvements to protect the public health, safety, and welfare of all those served by the sewer system in the City of Rio Rancho.

5.4.B Submittals

A design or Utility Engineering report shall be completed and submitted to the Utilities Department unless waived by the Development Services Department or designee. The requirements and format of this report are outlined and detailed in Chapter 2 of the DPM.

5.4.C Wastewater Design Flows

5.4.C.I. GENERAL

Wastewater design flows utilized in the preparation of engineering design reports, plans, and specifications shall as a minimum conform to the criteria set forth in this section. Alternate methods for determining design flows will be considered by the Utility Systems Engineer on a case-by-case basis.

5.4.C.II. POPULATION DENSITIES

The City of Rio Rancho uses a population equivalent of 2.78 persons/dwelling unit (DU) for the determination of wastewater flows.

5.4.C.III. AVERAGE DAILY FLOWS

Average daily flow estimates based on land development/use shall conform to Table 5.13. The average day values indicated in the table represent minimum estimates for determining design flows. Where a proposed development is known (based on specific applications and/or use), and the anticipated wastewater flows exceed the minimum forecast demands, the greater flow shall be used to determine the design flows. Where the project land does not fit within the tabulated categories, an average daily unit flow of 210 gallons per dwelling unit per day shall be used.

Table 5.13: Average Daily Wastewater Flow Estimates

Type of Development/Land Use	Average Daily Flow
Residential	175 gpd/DU
Light Commercial	1,230 gal/ac-day
Heavy Commercial	5,968 gal/ac-day
Light Institutional	226 gal/ac-day
Heavy Institutional	1,788 gal/ac-day
Light Industrial	447 gal/ac-day
Medium Industrial	1,680 gal/ac-day
Heavy Industrial	9,266 gal/ac-day

5.4.C.IV. PEAKING FACTORS

All gravity sewers, lift stations, and force mains shall be designed for peak flow conditions. Peak dry weather flow is calculated as the product of the peaking factor and the average daily flow. For all sewer main diameters, a peak dry weather factor of 3.0 shall be used unless otherwise approved by the Utilities Department.

5.4.C.V. WASTEWATER COLLECTION MAIN DESIGN FLOW CRITERIA

The following is a list of the major design flow criteria for wastewater collection lines.

1. Wastewater collection mains shall be designed to convey the peak flow.
2. Wastewater collection mains shall be designed to meet minimum slope and velocity requirements as set forth in these design standards, see Table 5.14.
3. Wastewater collection mains designs shall avoid exceeding maximum slope and velocity conditions as set forth in these design standards, see Table 5.14.
4. The peak flow shall be determined using average day flows adjusted by a peaking factor and including the allowed and any existing system infiltration or inflow.
5. Flow capacity and loading data of existing and future conditions for the City's major wastewater collection system shall be obtained from the Utilities Department for use in designing and analyzing proposed improvements.
6. Average day and ultimate/final design flow estimates shall be well documented and shall include calculations for the following: the ultimate service area, population density, existing and anticipated wastewater flow, existing and anticipated industrial/commercial discharge, and projected infiltration/inflow.
7. Surface water, ground water, or cooling water shall not be discharged into the wastewater collection system. Prohibited connections include roof drains, storm inlets, foundation perimeter drains, area drains for open patios or driveway entrances to parking structures, and ground water sump systems.

5.4.D Gravity Sanitary Sewer Lines – Design Criteria

5.4.D.I. GENERAL

All issues and elements presented in this section are typically included and must be addressed in all wastewater infrastructure projects. The design and construction of gravity sanitary sewer mains shall conform to the design standards in this manual and Standard Drawings on the City's website.

5.4.D.II. JURISDICTIONAL AGENCY APPROVALS

One very critical task in the early stages of the project is the development of an agency approval list. These approvals and/or close coordination required by these agencies will impact the successful and timely completion of the project. All appropriate department levels affected within the City, County, State, and Federal agencies need to be contacted for their individual requirements.

5.4.D.III. ENVIRONMENTAL AND CULTURAL REGULATORY REQUIREMENTS

This section is not intended to be all encompassing, rather provide an overview of the environmental and cultural requirements and the typical agency involvement. A thorough consideration of the environmental and cultural impact of the project at its specific location shall be evaluated to identify the various requirements. Private developers shall be responsible for regulatory compliance and for obtaining the required permits for their projects.

In specific areas where a project impacts Water of the United States, a Clean Water Act, Section 404 Permit shall be required from the U.S. Army Corps of Engineers.

Compliance is required with the U.S. EPA under the Stormwater National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges from construction sites.

Projects shall not adversely impact threatened or endangered species or their habitat and shall comply with the Federal Endangered Species Act. To address any biological requirements, an assessment report of the project may be required by the U.S. Fish and Wildlife Service and the New Mexico Fish and Game Department.

Projects shall not adversely impact historic or prehistoric properties. Projects shall comply with the National Historic Preservation Act and the State Historic Preservation Act.

5.4.D.IV. COMMUNITY NOTIFICATION AND PUBLIC INVOLVEMENT

The City is committed to early citizen notification and involvement. Identifying neighborhood concerns is a priority and good communication is required throughout the public involvement phase of all projects.

5.4.D.V. ACCEPTABLE PIPE MATERIALS

The type of pipe to be installed shall comply with these standards, meet NMAPWA specifications, and shall be based upon applicable design flows, pressures, site conditions, corrosion protection, and maintenance requirements. Gravity sewer mains shall be either polyvinyl chloride pipe (PVC), or high-density polyethylene pipe (HDPE).

5.4.D.VI. ROUGHNESS COEFFICIENT

The wastewater collection system shall be designed for gravity (open channel) flow conditions, using a Manning's roughness coefficient, "n factor," of 0.009 for HDPE (smooth wall), 0.011 for PVC pipe.

5.4.D.VII. PIPE SIZING

Gravity sewer lines shall be sized to accommodate the peak design flow subject to the following limitations:

1. At the peak dry weather flow condition, the following shall be maintained for gravity sewer pipes:
    a. d/D ratio shall be no greater than 0.75.
    b. q/Q ratio shall be no greater than 0.85.
2. The minimum pipe size shall be 8 inches.
3. All changes in pipe size shall require a manhole at the size change. The design shall call for differing pipe sizes to match soffits at the entrance and exit of the manhole. The soffit is the bottom of the top of the pipe or the uppermost point on the inside of the structure.

5.4.D.VIII. DEPTH/COVER

Gravity sewer lines shall be sufficiently deep to ensure gravity drainage of service connections and avoid conflicts of service connections with water mains and dry utilities. Sewer lines shall be installed at the depth required to serve the ultimate gravity drainage area, which may include areas outside of the development project.

5.4.D.IX. MINIMUM COVER:

All collection mains shall have a minimum depth of cover of four (4) feet, measured from the top of the pipe to the final surface grade.

5.4.D.IX.a. Shallow Cover Protection

Where collection main depths are less than four (4) feet, and the main is located under a right-of-way, street, driveway, parking lot, or areas where live loading is a concern, special pipe materials (such as ductile iron pipe) or other structural measures (such as concrete or steel encasement) shall be provided in accordance with Standard Drawing S-5 on the City's website.

5.4.D.IX.b. Provision for Basements:

Proposed collection mains shall be designed with adequate depth to provide wastewater service to basements, where possible and appropriate.

5.4.D.X. SLOPE AND VELOCITIES

Sewers shall be laid with a constant and uniform slope between manholes. All changes in slope shall require a manhole at the slope change connection. Collection mains shall be designed with an adequate slope to achieve flow velocities of at least 2.0 ft/s when flowing full. Design velocities shall not exceed 10 ft/s. Table 5.14 shows the minimum and maximum slopes required in different size gravity sewer pipes.

Table 5.14: Minimum and Maximum Design Slopes

Pipe Size in inches	Minimum Design Slope %, (ft/ft)	Maximum Design Slope 5, (ft/ft)
8	0.500 (0.0050)	8.50 (0.0850)
10	0.280 (0.0028)	6.25 (0.0625)
12	0.220 (0.0022)	5.00 (0.0500)
15	0.150 (0.0015)	3.75 (0.0375)
18	0.120 (0.0012)	2.80 (0.0280)
21	0.100 (0.0010)	2.40 (0.0240)
24	0.080 (0.0008)	2.00 (0.0200)
27	0.068 (0.00068)	1.70 (0.0170)
30	0.060 (0.0006)	1.50 (0.0150)
36	0.048 (0.00048)	1.15 (0.0115)

5.4.D.XI. ALIGNMENT AND EASEMENT REQUIREMENTS

The following alignment and easement requirements shall be followed for gravity sewer line designs. Note that these requirements will be different for sanitary sewers that are HDPE.

1. Sewers shall be laid with straight alignments between manholes.
2. Sewer alignment shall not meander across the street centerline.
3. Sewers shall be located in street rights-of-way and the alignments shall be parallel to property lines or street centerline, or as close as possible.
4. Sewer lines are to be located within the public right-of-way and aligned in accordance with the Utility Locations as shown in the Typical Plan View for Streets" drawings in Section 5.4.I.I. . Sewer lines shall be located so they can be maintained without disturbing any sidewalk, curb, gutter, structure, or any other utility.
    - If it is not possible to utilize designated public right-of-way or align in accordance with the Utility Locations, alternate alignments will be considered and must be approved by the Development Services Department or designee.
5. If not in a public right-of-way, the sewer line must be located in a permanent easement. A permanent easement must be granted (and dedicated to the City of Rio Rancho) for the exclusive use of sanitary sewer and water unless shared use with other utilities is coordinated and approved in advance by the Utilities Department. A minimum easement width of 20 feet (or more) is required for a single utility and 25 feet (or more) for sewer and water both within the same easement.
6. Sewer and water easements shall be free of all obstructions and shall at all times be accessible to City service equipment. No buildings, sport courts, walls, fences, shade structures, nor permanent structures of any kind shall be constructed upon, over, or under and water/sewer line easements. No landscaping shall be placed and/or planted within the easement that would render the easement inaccessible by equipment. The Utilities Division has the right to have any obstruction removed without notice to the property owner and all cost associated with the removal shall be the property owner's responsibility. The maintenance of all landscaping in sewer line easements is the responsibility of the property owner.

5.4.D.XII. SEWER MAIN CONNECTIONS AT MANHOLES

Gravity sewer main connections (not services) at a manhole are described as the upstream pipe connection, the downstream pipe connection, and the intersecting pipe connections. Gravity sewer main connections shall be in accordance with Standard Drawings available on the City's website. There shall be no more than four main connections at a manhole.

1. Flow will not be permitted to change horizontal flow direction by more than 90 degrees in a manhole. Under the following conditions, the maximum horizontal change in flow direction permitted will be 50 degrees although special design considerations will be made where the situation warrants:
    a. All lines larger than 36 inches.
    b. Any lines with design flow greater than 3.0 MGD and a design velocity of 5.0 ft/s or greater.
    c. Any junction of two flows, each with design flow greater than 3.0 MGD, where one line has a design pipe velocity of 5.0 ft/s or greater.
2. The upstream pipe shall be the same or smaller diameter than the downstream pipe. The design shall call for differing pipe sizes to match soffits at the entrance and exit of the manhole.

3. Where onsite sewage collection systems from developments connect to mains on arterial streets, the invert of the intersecting pipe should be at or above the crown elevation of the downstream pipe. Intersecting pipes shall be of equal or smaller diameter than the downstream pipe.
4. In all cases, the invert of the downstream pipe shall be at least 0.1 feet lower than the invert of the upstream pipes and intersecting pipes and shall be low enough to maintain the energy gradient across the manhole.

5.4.D.XIII. CROSS CONNECTIONS

There shall be no physical connections between a public or private potable water supply system or storm drainage system and a sanitary sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply or storm drainage system. No water pipe shall pass through or come into contact with any part of a sanitary sewer manhole.

5.4.D.XIV. SEPARATION FROM WATER MAINS

To minimize the potential for cross contamination, gravity sanitary sewer mains and force mains shall be laid at least 10 feet horizontally from any existing or proposed water line. In situations where it is not feasible to maintain a 10-foot separation the design engineer may propose a reduced distance. Such reductions may only be approved and granted by the Development Services Department or designee and may be allowed provided the sewer main is laid in a separate trench or an undisturbed earth shelf located on one side of the water line at an elevation so that the bottom of the water main is at least 18 inches above the top of the sewer line.

1. Gravity sanitary sewer mains and force mains crossing water lines should be laid to provide a minimum separation of 18 inches between the outside of the sewer main and outside of the water line. This separation should be maintained where the sewer main is either above or below the water line. Where possible the water main should always be above the sewer line. The crossing should be arranged so that the water main joints will be equidistant and as far as possible from the sewer line.
    - Where it is impracticable to obtain proper horizontal and vertical separation, the sewer line should be designed and constructed equal to the water main and should be pressure tested to assure water tightness. Encasement of the water line may also be required by the Development Services Department or designee in accordance with Standard Drawing S-5 on the City's website.

5.4.D.XV. SEPARATION FROM STORM DRAINS AND CULVERTS

Sewer mains shall maintain six (6) feet horizontal and two (2) feet vertical separation from storm drains and culverts as measured between the crown of the lower and invert of the upper where possible. Sewer lines crossing less than two (2) feet below a storm drain or culvert will require pipe encasement. Whenever possible, the sanitary sewer should be placed below the storm sewer.

5.4.D.XVI. SEPARATION FROM OTHER UTILITIES

Sewer mains shall maintain a minimum six (6) feet horizontal separation and two (2) feet vertical separation to any underground utility where possible, all measurements outside to outside.

5.4.D.XVII. LOCATOR TAPE AND TRACER WIRE

Install detectable marking tape continuous over the top of the pipe. The marking tape shall be buried eighteen (18) inches over the top of the buried gravity or force main. If curvilinear, a 12-gage tracer wire shall also be buried along with the pipe.

5.4.D.XVIII. BUOYANCY

Buoyancy of sewers shall be considered, and flotation of the pipe shall be prevented with appropriate construction where high groundwater conditions are anticipated.

5.4.D.XIX. TRENCHING, BEDDING, AND BACKFILL

Trenching, bedding, and backfill for shall conform to NMAPWA standards and Standard Drawing S-4 on the City's website.

5.4.D.XX. TESTING PROCEDURES

Air testing, exfiltration testing, vertical deflection testing, and televising of sanitary sewer pipes shall follow and adhere to the requirements and protocols as outlined in the NMAPWA specifications.

5.4.E Manholes – Design Criteria

5.4.E.I. GENERAL

The design and construction of gravity sanitary manholes shall conform to the design standards in this manual and Standard Drawings S-1, S-2, and S-3 on the City's website.

5.4.E.II. MANHOLE LOCATIONS

Manholes shall be installed at the following locations:

1. Changes of grade or slope.
2. Changes of pipe size.
3. Changes of horizontal or vertical alignment.
4. Changes in pipe material.
5. Pipe intersections except with service connections less than 8-inches in diameter.
6. Service connections 8-inches in diameter and larger.
7. The end of each public sewer line.
8. At distances not to exceed the spacing shown in Table 5.15.

Where feasible, manholes are to be installed at street intersections. Manholes should also be located outside of bike lanes, sidewalks, or multi-use paths whenever possible. Manholes shall not be located in areas subject to immersion during storm events, such as gutters and ponding areas.

Direct access by maintenance vehicles shall be provided to each manhole. The access drive shall be a minimum of 10 feet in width and shall be an all-weather surface, such as asphalt or concrete paving, or adequate gravel base and shall be capable of supporting maintenance vehicles weighing up to 14 tons.

5.4.E.III. MANHOLE SPACING

Manholes shall be required along collection mains at distances not greater than the maximum manhole spacing as shown in Table 5.15 below.

Table 5.15: Maximum Manhole Spacing	
Pipe Size (in)	**Maximum Manhole Spacing (ft)**
≤ 21	450
≥ 24	500

5.4.E.IV. MANHOLE DIAMETER

The minimum manhole diameters and standard frame and cover sizes for various pipe sizes are shown in Table 5.16 below.

Table 5.16: Minimum Manhole Diameters			
Pipe Diameter (in)	**Manhole Dept (ft)**	**Minimum Manhole Diameter (in)**	**Minimum Frame and Cover Diameter (in)**
≤ 15	≤ 12	48	30
≥ 15	> 12	72	30

5.4.E.V. CLEAN OUTS

Shall conform to the design standards within this manual and Standard Drawing available on the City's website. Clean outs are not permitted on mains.

5.4.E.VI. MANHOLE STUB OUTS

Manholes on the boundaries of subdivisions and at other locations directed by the Development Services Department or designee shall include full line size stubs with shaped inverts, oriented to accommodate future connections or extensions. All 20-foot stub outs shall be plugged.

5.4.E.VII. MANHOLE SEPARATION FROM WATER MAINS

No water pipe shall pass through or come into contact with any part of a sewer manhole or connection structure.

5.4.E.VIII. DROP MANHOLES

Drop manholes shall be required where the invert of the upstream pipe section entering the manhole is greater than two (2) feet above the invert of the downstream pipe section exiting the manhole. Drop manholes shall be designed and constructed in accordance with Standard Drawing S-10 on the City's website.

5.4.E.IX. FLOW CHANNEL

Flow channels shall be required in all manholes, connecting the inverts of the upstream and downstream pipe sections. The flow channel straight through a manhole shall be made to conform as closely as possible in shape, and slope to that of the connecting sewers. Flow channel height and slope requirements are shown in Tables 5.17 and 5.18 below.

Table 5.17: Minimum Flow Channel Heights

Pipe Diameter (in)	Minimum Flow Channel Heights
< 15	½ of the pipe diameter (to pipe centerline)
≥ 15	¾ of the pipe diameter

Table 5.18: Minimum Flow Channel Slopes

Type of Manhole/Flow Channel	Minimum Flow Channel Slope
Manholes on continuous slope, straight alignment pipelines	2.5% slope from entrance to exit
Manholes at changes in pipe size	Match soffits at entrance and exit of manhole

5.4.E.X. BENCH

A bench shall be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter. The bench shall be sloped to provide a minimum 3-inch fall from the top of the bench to the crown of the pipe or one-half inch per foot (1/2”/ft), whichever is greater. No lateral sewer, service connection, or drop manhole pipe shall discharge onto the surface of the bench. Refer to Standard Drawing S-3 on the City’s website.

5.4.E.XI. WATER TIGHTNESS

Manholes shall be of the pre-cast concrete or cast-in-place concrete type. Manhole lift holes and grade adjustment rings shall be sealed with non-shrinking mortar. Inlet and outlet pipes shall be joined to the manhole with a gasketed flexible watertight connection or any watertight connection arrangement that allows differential settlement of the pipe and manhole wall to take place. Refer to Standard Drawing S-3 on the City’s website. Other materials may be used for specific applications as approved by the Development Services Department.

5.4.E.XII. COVERS

Where manholes must be located within the 100-year floodplain, or in a location where runoff may accumulate and pond, the manhole shall be installed with a watertight, bolting-type cover to prevent inflow/outflow. The manhole ring shall be bolted to the manhole cone to prevent possible damage due to surcharge. Locked manhole covers with bolting-type covers may be desirable in isolated easement locations or where vandalism may be a problem. Manhole frames and covers shall be designed and constructed in accordance with Standard Drawings S-1 and S-2 on the City’s website.

5.4.E.XIII. TESTING

Manholes shall be tested for leakage in accordance with NMAPWA specifications.

5.4.E.XIV. CORROSION PROTECTION FOR MANHOLES

Where corrosive conditions due to septicity or other causes are anticipated, consideration shall be given to providing corrosion protection on the interior of the manholes.

5.4.F Service Connections

5.4.F.I. GENERAL

Service connections to the City of Rio Rancho wastewater system shall conform to Article 51.08 of Chapter 51 of the Rio Rancho Code of Ordinances and Standard Drawings S-6, S-7, and S-8 on the City's website.

When new sanitary sewer main extensions are required, sewer service connections shall be provided to all adjacent properties. These service connections shall:

1. Be sized appropriately for the anticipated future development needs of the adjacent property.
2. Extend from the main to the property line.
3. Be installed at an appropriate depth to serve future gravity flow from the adjacent property.
4. Be properly capped and documented on as-built drawings.
5. Include all necessary easements for future access and maintenance.
6. Be installed in accordance with Standard Drawings S-6, S-7, and S-8.

5.4.F.II. TAPS

Wastewater service connections to newly constructed collection mains shall require the installation of a tee or wye, in conformance with these standards. A directional fitting shall be used at all tap connections.

5.4.F.III. SEPARATE SERVICE TO LOTS

All platted lots, whether existing or proposed as part of a subdivision, shall front on, and have a separate wastewater service connection to a collection main without crossing adjacent lots.

5.4.F.IV. SERVICE ALIGNMENT

Wastewater services shall be installed perpendicular to the collection main, for that portion of the service line that is located in the public right-of-way or easement. Where this is not possible, the wastewater service alignment shall be subject to determination by the Development Services Department or designee.

5.4.F.V. SERVICE CONNECTION SIZES

Table 5.19 below shows the service connection sizes based on the development type.

Table 5.19: Service Connection Sizes	
Development Type	**Service Connection Size (in)**
Residential Lots	4 or 6
Commercial Lots	Minimum 6
Multiple Family Lots	Minimum 6
Industrial Lots	Minimum 6

5.4.F.VI. SEPARATION FROM WATER SERVICE

Wastewater services shall maintain a minimum horizontal separation of ten (10) feet from water services.

5.4.F.VII. MAXIMUM MAIN SIZE FOR TAPS

Service connections shall not be directly made into sewer mains 30-inches in diameter and larger. Service connections shall require a minimum 8-inch public sewer main extension, which shall be constructed from the nearest downstream manhole to the point of service.

5.4.F.VIII. PROHIBITED CONNECTIONS

No surface water or ground water may be discharged into the wastewater service. Prohibited connections include roof drains, storm inlets, foundation perimeter drains, area drains for open patios or driveway entrances to parking structures, and ground water sump systems.

5.4.F.IX. MANHOLE CONNECTIONS

Service connections to manholes shall be avoided, except where:

1. The service size is 8 inches in diameter or larger (which requires the installation of a manhole).
2. The service connection is tied to a terminal manhole, located at the end of a cul-de-sac or easement, and there is no possibility of extending the collection main in the future.
3. The service connection elevation cannot be tapped above the springline of the sanitary main.

5.4.F.X. SERVICE CONNECTION INSTALLATION

Service connections to the sewer main shall be watertight and not protrude into the sewer. Saddle type connections shall not be used. All materials used to make service connections shall be compatible with each other and with pipe materials to be joined and shall be corrosion proof.

1. Normally taps extend at right angles to the main. When a tap is made at a manhole the tap may be installed at an angle to the main providing the installation does not restrict flow. The invert of the service connection shall be at or above the crown of the sewer main.

5.4.G Wastewater Lift Stations

5.4.G.I. GENERAL

Shall be designed according to the NMED, Construction Programs Bureau, "Recommended Standards for Wastewater Facilities, latest version."

5.4.G.II. DESIGN ANALYSIS REPORT (DAR)

In addition to meeting the requirements set forth in the "Recommended Standards for Wastewater Facilities, latest edition," the design engineer shall submit a DAR to the City of Rio Rancho, Utility Department, for review.

1. Table 5.20 summarizes the minimum requirements of a lift station DAR.

Table 5.20: Lift Station DAR Requirements

Item	Description
1	Average Influent Station Flow, gpm
2	Peaking Factor
3	Wet Well Volume, gallons, and cubic feet
4	Average Flow Fill Time, minutes
5	Peak Flow Fill Time, minutes
6	Diameter of Proposed Force Main, inches
7	Velocity in the forcemain under normal operating conditions (if multiple pumps are used, velocity for each multiple pump operation condition should be shown)
8	Pump and System Curve with Duty Point, including the Duty Point for parallel pump operation if applicable.
9	Pump Time based on Average Flow, minutes
10	Pump Time based on Peak Flow, minutes
11	Number of Pump Cycles per Hour
12	Surge Analysis and Recommendations
13	4 floats – "stop", "lead", "lag", and "high"
14	Grading and Drainage Plan – Slope site for accessibility of a vactor truck (<3%)
15	Instrumentation and Control considerations including SCADA, alarms, etc. Provide a transducer with digi-gauge output to SCADA

Table 5.20: Lift Station DAR Requirements	
Item	**Description**
16	Site Layout including emergency generator (ATS) location and overflow prevention location, a 12-foot all weather access road, and a security fence with a 14-foot-wide rolling gate for service vehicles.

2. All new lift stations shall be provided with an on-site, permanently installed, emergency generator sized to provide emergency electrical service to the site. Calculations justifying the size of the generator shall be provided. In addition, the lift station shall have a spare pump and site lighting.

5.4.H Force Mains

5.4.H.I. GENERAL

All force mains shall be designed according to the NMED, Construction Programs Bureau, "Recommended Standards for Wastewater Facilities, (latest version)."

5.4.H.II. CLEANOUTS

Cleanouts will be installed at a maximum spacing of every five hundred (500) feet or not to exceed a volume of wastewater over three thousand (3,000) gallons between cleanouts whichever is shorter. Special consideration will be given to cleanout spacing where the required force main diameter is larger than twelve (12) inches. The cleanouts will be constructed in accordance with the City of Rio Rancho Standard Drawing, unless otherwise specified by the City of Rio Rancho Development Services Department or designee.

5.4.H.III. LOCATOR TAPE AND TRACER WIRE

Install detectable marking tape continuous over the top of the pipe. The marking tape shall be buried eighteen (18) inches over the top of the buried force main. 12 gage tracer wire shall also be buried along with the pipe.

5.4.H.IV. LEAKAGE TESTING

All force mains within the City of Rio Rancho wastewater service area shall be hydrostatic tested at a minimum of fifty (50) psi above the design working pressure.

5.4.I Appendices

5.4.I.I. WATER / WASTEWATER STANDARD DETAILS AND DRAWINGS

The most current standard details and drawings are available from the Utilities Department at the City's website: www.ci.rio-rancho.nm.us

S-1	Sewer Manhole Cover Type "C"
S-2 (1 of 2)	Sewer Manhole Frames and Covers
S-2 (2 of 2)	Sewer Manhole Frames and Covers
S-3 (1 of 2)	Standard Concrete Manhole
S-3 (2 of 2)	Standard Concrete Manhole
S-4	Pipe Bedding
S-5	Pipe Encasement
S-6	Standard Sewer Service Connection
S-7	Typical Sewer Lateral Connection
S-8	Existing Main - Typical Sewer Lateral Connection
S-9	Standard Air Test for Sewer Mains
S-10	Drop Manhole Connection
S-11	Cradling and Encasement
S-12	Service Line Cleanout
S-13	Chimney Pipe and Base
S-14	Electronic Marker Disk
S-15	Force Main Discharge Manhole
S-16	Force Main Cleanout
S-17	Sanitary Sewer Air Release Valve (ARV)

Water – Standard Details and Standard Drawings

W-1	Reduced Pressure Principle Backflow Prevention Assembly (RPBA)
W-2	Enclosures
W-3	Fire Hydrant Assembly
W-4	Valve Box Assembly
W-5	1"-2" Service Laterals (w/ Curb) Compression
W-6	Concrete Thrust Blocks
W-7	Pipe Bedding
W-8 (1 of 2)	Standard PRV Station
W-8 (2 of 2)	Standard PRV Station
W-9	Standard PRV Station – Structural Details
W-10	Thrust Tie Detail
W-11	Meter Installations 3" or Larger
W-12	Meter Installation Larger than 2" (Double Meter)
W-13	Fire Line Reduced Pressure Valve Assembly
W-14	2" Pressure Vacuum Breaker
W-15	Flushing Valve
W-16	Anchor Block for Vertical Bends
W-17	Retrofit 2" to 1-1/2" Meter
W-18	Retrofit 2" to 1" Meter
W-19	Restrained Joint Lengths (Example)
W-20	Restraining Joint Lengths (Example)

Water Meter Details

WMD-1	Single Service with Curb (Profile)

WMD-2	Single Service Material List/Notes/Diagram
WMD-3	Double Service with Curb Profile
WMD-4	Double Service Parts Diagram
WMD-5	Typical Profile Layout for Paved Streets with Curb
WMD-6	Typical Plan View for Paved Streets with Curb
WMD-7	Unimproved Road Profile with No Curb
WMD-8	Unimproved Road Plan View with No Curb
WMD-9	Service Line Diagram
WMD-10	Meter Can Lid Details
WMD-11	Meter Can Details

DEVELOPMENT PROCESS MANUAL

Chapter 6: Parks and Trails Design



Rio Rancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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6. Parks and Trails Design

6.1 Introduction

Parks, trails, and recreation facilities are a source of community connections and greatly enhance quality of life. They allow residents to engage in their community and the natural environment while increasing the value of neighborhoods and subdivisions in both quantitative and qualitative ways.

The City of Rio Rancho works to ensure the community's current and future parks and recreation needs are met. The Department of Parks, Recreation and Community Services (PRCS Department) work with the development sector to create and maintain quality spaces and activities that grow a greater sense of community and enhance the quality of life in the City of Rio Rancho. The PRCS Department has used the Master Planning process to better identify the wants and needs of the community and has reflected these community priorities through the Design Guidelines that follow.

6.2 Applicability

1. Any park equal to or less than 3 acres in size must be owned and maintained by a Homeowners Association (HOA).
2. Private parks must submit a park permit application outlined in Section 2.6.B of Chapter 2 Development Procedures.
3. Privately owned and maintained parks, trails, and recreation facilities should be coordinated with the City PRCS Department and are subject to the minimum safety requirements of International Play Equipment Manufacturers Association (IPEMA), Consumer Product Safety Commission's (CPSC), and the Americans with Disabilities Act (ADA).
4. The design standards of this chapter apply to all parks, trails, and recreation facilities owned or maintained by the City of Rio Rancho.
5. The design review and approval of public parks and recreation facilities shall follow the requirements and process outlined in Section 2.6.B. of Chapter 2 Development Procedures.
6. Inspections of completed parks shall follow the requirements and process outlined in Section 2.6.B of Chapter 2 Development Procedures.

6.2.A Definitions

Activity Element- Refers to a feature designed for active recreation, such as playgrounds, splash pads, sport courts, skate parks, exercise equipment, or active sport systems like disc golf, aimed at promoting physical activity and engagement.

Developed Area - The developed area is the portion of park land designated for active recreational use. Specifically designed and maintained to support various recreational activities, this area includes amenities such as sports fields, playgrounds, picnic areas, trails, and other facilities intended for public enjoyment and physical activity.

Elevated Play Component - A play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create an integrated unit providing more than one play activity.

Community Park (CP) - The Rio Rancho Parks and Recreation Master Plan defines community parks as larger than neighborhood parks, serving a broader purpose with multiple facilities. They typically range from 10 to 20 acres, although size can vary based on location and functionality. The optimal service area is within a 10-minute drive, with a recommended service level of one facility per 20,000 people.

HOA Pocket Park – A parks three acres or less in size that is owned and maintained by a Homeowners Association.

Maintenance Access - Vehicle access to park elements necessary for on-going maintenance. Maintenance access areas must be free of obstacles.

Multi-Purpose Recreation Center (RC) - Defined by the Rio Rancho Parks and Recreation Master Plan as structures designed to accommodate a variety of recreational activities and events. These centers typically feature spaces such as general-use auditoriums, gymnasiums, and specialized facilities like swimming pools. They serve an optimal area within a 10-minute drive, with a service level of one facility per 20,000 people.

Neighborhood Park (NP) - The Rio Rancho Parks and Recreation Master Plan defines neighborhood parks as the basic unit of the park system and serve as the recreational and social focus of the neighborhood. Typically ranging from three to ten acres, these parks have a service area of a 10-minute walking distance, with a recommended service level of one facility per 20,000 people.

Nonfunctional Turf - Turf areas that are less than 10 feet wide, smaller than 100 sf, exceed a slope of 3%, and not functionally sized for unorganized or organized play or recreation.

Open Space / Natural Resource Area (NRA) - The Rio Rancho Parks and Recreation Master Plan defines natural resource areas are lands set aside for the preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering. These can range in size depending on the resource and location. Major Natural Resource Areas (greater than 20 acres) have a service area of a 20-minute drive or less and have a level of service of 5 acres per 1000 people.

Parks, Recreation and Community Services (PRCS) – City of Rio Rancho Parks, Recreation and Community Services department.

Picnic Shelter - A structure that is partially or fully open-sided, equipped with picnic tables.

Shade Structure - A structure with a temporary or permanent roof or covering design to provide shelter from the heat or glare of the sun.

Special Use Park (SUP) - The Rio Rancho Parks and Recreation Master Plan defines special use classification to cover a broad range of parks and recreation facilities oriented towards single-purpose use with the area being determined by the use, for example from dog parks, skate parks and pools less than 1 acre to balloon parks and RV parks greater than 20 acres. The optimal service area for these facilities should be 20-minute drive or less with a level of service at 1 facility per 30,000 people.

Sports Complex (SC) - The Rio Rancho Parks and Recreation Master Plan defines these facilities as consolidating heavily programmed athletic fields and associated facilities at larger and fewer sites strategically located throughout the community. The minimum size is 40 acres, with 80 to 150 acres

being optimal, with a 10-minute drive as the optimal service area. Level of service for Sports Complex is 1 facility per 30,000 people.

Passive Area - The undeveloped area is the portion of park land preserved in its natural state for conservation, wildlife habitat, and educational purposes. It encompasses features like forests, wetlands, open spaces, and other natural landscapes protected from active development. This acreage serves as a resource for environmental conservation, ecological study, and passive recreation.

Usable space or area - Areas specifically designed or designated to support functions that enhance visitor experiences, facilitating both passive (e.g., sitting, picnicking, enjoying views) and active (e.g., recreation, group activities, or pet-friendly engagement) interactions with the physical environment. These spaces are intended to be accessible and functional for a variety of activities that promote community use and enjoyment.

6.3 Design Standards

6.3.A General Standards

1. All commercial, municipal, and private parks, trails, and recreation facility projects shall be designed by a Landscape Architect licensed in the State of New Mexico who shall stamp the appropriate construction documents for the project.
2. It is the responsibility of the project Landscape Architect and/or Engineer, licensed in the State of New Mexico, to ensure that these Codes and any additional City of Rio Rancho adopted Codes, Ordinances, and Standards are followed in the design of parks and trails.
3. It is the responsibility of the Licensed Contractor to ensure these codes and standards are followed during construction, that all necessary permits are obtained, and that the project is inspected as required.
4. International Building Code and New Mexico Administrative Code requirements shall be followed for all design, construction, and improvements made to parks, trails, and related facilities.
5. The U.S. Access Board's Guide to Accessibility Standards, as well as any other applicable ADA standards, shall be followed.
    a. All parks must ensure that internal park pathways are ADA compliant.
    b. All parks must provide ADA compliant connections from adjacent sidewalks of the subdivision to the internal park pathways.
    c. All parks must ensure that benches, picnic tables, and shade structures are ADA compliant, and APA compliant connections must be provided to these elements.
6. In order to meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional standards and park elements.
7. Park developers shall work with PRCS Department staff to use optimal usable space and open space.
8. Parks over 3 acres in size shall provide 1 parking spot and 1 ADA spot for the first 3-4 acres and an additional 3 spots for **each additional acre** for parks greater than 4 acres, dependent on elements and programming.
9. All parks must have an area designated as maintenance access. PRCS Department staff will work with the park developer to determine the best location and construction criteria including a gate, roll curb, post and cable fence, and/or removable bollards for access.

10. Active usable space or areas shall be buffered from parking lots, adjacent roadways, and internal vehicular circulation routes using passive areas by a minimum 15' buffer that incorporate trails, natural vegetation, and landscaping features.
11. Disturbance to terrain and vegetation to undeveloped open space areas shall be minimized to the maximum extent practicable. Disturbed areas shall be reseeded or planted with low-water, low maintenance, native, or naturalized plant materials and irrigated and maintained for a minimum of 1 year or until the vegetation is established.
12. The park developer shall ensure that electrical power is provided to the future park property during subdivision or site development. At a minimum, this power supply must support the irrigation controller and heat tape for the irrigation system backflow preventer.

6.3.B Parks

6.3.B.I. PARK TYPOLOGY STANDARDS

The Rio Rancho Park system is classified into five distinct park typologies based on size, purpose, features, location, and service areas. The five typologies are listed in the table below.

Table 6.1: Park Typologies

Park Type	Size
HOA Pocket Park	0-3 acres
Neighborhood Park	3-10 acres
Community Park	10-20 acres
Regional Park	Minimum 10 acres
Special Use Facility	Determined by use
Recreational Open Space	Varies, typically larger than 20 acres

When planning a new park, the typology is determined in coordination with the PRCS Department based on park dedication requirements within the City of Rio Rancho Municipal Code and based on the park size, serviceable area, anticipated user groups, community needs, and location. The assigned typology dictates the elements and features included in the park. Within each typology defined in this section there is a defined purpose, serviceable area, size guidelines, location criteria, and elements:

1. The purpose statement outlines the intent of each typology which should be considered during design and development.
2. The serviceable area is the area defined by the residential population anticipated to use a particular facility.
3. The location criteria defines the desired location for each typology to ensure adequate access, appropriate level of visibility, and desired function.
4. The elements are the amenities to be included in the park design and are categorized as basic elements and optional elements. Basic elements are required, and optional elements may be provided at the discretion of the developer and the PRCS Department.

Parks less than three acres in size are anticipated to be pocket parks that serve smaller geographic areas and must be owned and maintained by an HOA. The design and construction of these parks should be coordinated with PRCS Department staff to ensure minimum safety standards are utilized.

6.3.B.I.a. Neighborhood Park

6.3.B.I.a.i. Purpose

1. Provides a space for informal recreation and social needs of the surrounding neighborhood.
2. Promotes a sense of neighborhood and a sense of community.
3. Is connected via pedestrian and bicycle network.

6.3.B.I.a.ii. Service Area

Neighborhood parks aim to provide recreational spaces within a 10-minute walking distance or 1/2 mile of most homes within the neighborhood.

6.3.B.I.a.iii. Size Guidelines

3 to 10 acres.

6.3.B.I.a.iv. Location Guidelines

1. Located as centrally as possible to the neighborhood it serves.
2. Conveniently accessible within a half mile.
3. Located along bikeway and trail connections.
4. Located on at least one public road.
5. In close proximity to schools.

6.3.B.I.a.v. Elements

The typical amenities of a neighborhood park include a grass area, activity elements (which include playgrounds, splash pads, sports courts, skate parks, exercise equipment, active sport systems such as disc golf), shade structure, picnic tables, benches, and sport courts as laid out in the Comprehensive Plan. The basic required elements and optional elements for Community Parks are laid out in Table 6.2: Neighborhood Park Elements. If park dedication results in parks less than 3 acre, required elements may be waived by PRCS Department staff. To meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional park elements or vary required elements.

Table 6.2: Neighborhood Park Elements

Required Elements*	Optional Elements
Activity element	Sports courts
2 benches per acre	Bicycle racks
3 tables per acre	Fenced Dog Park
2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion.	Picnic shelter
1 dog waste station in conjunction with trash receptacles	Basketball court with a minimum of 1 goal
Minimum shade structure area of 400 sf per park unit,	Drinking fountain
8 trees per acre	Splash pad
3 shrubs per required tree	

Table 6.2: Neighborhood Park Elements	
Required Elements*	**Optional Elements**
Park rules sign	
Maintenance access	
Quick coupler hose connection per parts list located centrally and near the play and shade structures.	
Irrigated Turf Area a minimum 1 acre for a 3-acre sized park.	
Parking lot. Parks over 3 acres in size shall provide 1 parking spot and 1 ADA spot for the first 3-4 acres and an additional 3 spots for each additional acre for parks greater than 4 acres, dependent on elements and programming	
*At least 1 of the required components must be ADA accessible	

6.3.B.I.b. Community Park

6.3.B.I.b.i. Purpose

1. Provides space for recreational activities that serve a wider population than the adjacent neighborhood.
2. Provides opportunities for a wide array of passive and active recreation activities.
3. Accommodates facilities and activities that require greater amounts of land, attract a high number of people, and requires off-street parking.

6.3.B.I.b.ii. Service Area

Community parks aim to provide recreational spaces within a 10-minute drive of most homes within the neighborhood.

6.3.B.I.b.iii. Size Guidelines

10 to 20 acres.

6.3.B.I.b.iv. Location Guidelines

1. Located centrally to the area it serves.
2. Located with visibility and access from arterial streets.
3. Sports fields separated or buffered from residential uses.
4. Subjected to the existence and availability of historic or cultural resources.
5. Collocated in proximity to middle schools, high schools, and community centers.

6.3.B.I.b.v. Elements

The typical amenities of a community park include grass area, activity elements, shade structure, picnic tables, benches, multiple sport courts, skate park, parking lot, and paths as laid out in the Comprehensive Plan. The basic required elements and optional elements for Community Parks are laid out in Table 6.3:

Community Park Elements. To meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional park elements or vary required elements.

Table 6.2: Community Park Elements	
Required Elements*	**Optional Elements**
Play / activity equipment	Skate park
2 benches per acre	Disc golf
3 tables per acre	Fenced Dog Park
2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Directors' discretion	Sport courts
1 dog waste station min, in conjunction with the trash receptacles	Picnic shelter
Minimum Shade structure area of 500 sf per park unit	Basketball court with a minimum of 2 goals
Drinking fountain	Splash pad
Turf play area to accommodate athletic competitions	
8 trees per acre	
3 shrubs per required tree	
Quick coupler hose connection per parts list located centrally and near the play and shade structures	
Parking lot. Required spaces for parks over 3 acres in size parking lots is 1 spot and one ADA spot for the first 3-4 acres and an additional 3 plus spots for each additional acre for parks greater than 4 acres, dependent on elements and programming	
Park rules sign	
Maintenance access	
*At least 1 of the required components must be ADA accessible	

6.3.B.I.c. Regional Park

6.3.B.I.c.i. Purpose

1. Provides space for recreational activities that serve the entire community.
2. Provides opportunities for a wide array of passive and active recreation activities.
3. Accommodates facilities and activities that require greater amounts of land, attract a high number of people, and require off-street parking.

6.3.B.I.c.ii. Service Area

Regional parks aim to serve the entire community.

6.3.B.I.c.iii. Size Guidelines

Minimum size is 10 acres.

6.3.B.I.c.iv. Location Guidelines

1. Located with direct vehicular access from a major arterial.
2. Located with access to public transit.
3. Connected to bikeways, trails, and pedestrian circulation networks.
4. Located centrally to conveniently serve the entire community.

6.3.B.I.c.v. Elements

The City of Rio Rancho will provide a specific program for expected uses of regional parks. Uses will be intended to maximize recreation activities while optimizing water use. Generally, a regional park will contain all elements of a neighborhood park plus a minimum of 2 acres of playing fields or courts for organized sports. Regional parks will also have appropriate parking lot and field or court lighting to support organized sports. The basic required elements and optional elements for Regional Parks are laid out in Table 6.4: Regional Park Elements. To meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional park elements or vary required elements.

Table 6.4: Regional Park Elements

Required Elements*	**Optional Elements**
Play equipment	Softball and Baseball fields
2 benches per acre	Fenced Dog Park
3 tables per acre	Disc Golf Courses
Trash receptacles	Horseshoe pits
Dog waste station	Tennis/ Pickleball
Shade structure a cumulative total of 600 sf coverage	Racquetball
Drinking fountain	Volleyball
Play area	Cricket
12 trees per acre	Bocce Courts
3 shrubs per required tree	Basketball court with minimum of 1 goal
Quick coupler hose connection per parts list located centrally and near the play and shade structures.	Splash Pad
Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming	
Park rules sign	
Maintenance access	
*At least 1 of the required components must be ADA accessible	

6.3.B.I.d. Special Use Facility

6.3.B.I.d.i. Purpose

1. Provides recreation facilities oriented towards single-purpose use, such as dog parks, skate park, stages and amphitheaters, Class I arboretums, pools, multi-purpose recreation centers, senior centers, and balloon parks.
2. Provides opportunities for a sense of place, community, and identity to form through providing a gathering, recreation, and meeting place.

6.3.B.I.d.ii. Service Area

Special use complexes aim to serve the entire community.

6.3.B.I.d.iii. Size Guidelines

Determined by the use.

6.3.B.I.d.iv. Location Guidelines

1. Located with direct vehicular and public transit access from a major arterial.
2. Connected to community bikeway, trail, and pedestrian circulation networks.
3. Depending on the identified need and the specific use, special use complexes may be strategically located to serve specific geographic segments of the community.

6.3.B.I.d.v. Elements

The City of Rio Rancho will provide a specific program based on the targeted use of the special use facility.

6.3.B.I.e. Recreational Open Space

6.3.B.I.e.i. Purpose

1. Preserves significant natural resources, remnant landscapes, and open space.
2. Provides buffering.
3. Provides passive recreation, wildlife habitat, and stormwater management.
4. Accommodates sustainable landscape treatments and water use reduction.
5. Provide educational experiences.

6.3.B.I.e.ii. Service Area

Recreational open spaces aim to provide recreational spaces within a 20-minute drive of most homes within the community.

6.3.B.I.e.iii. Size Guidelines

Facilities range in size depending on the resource and location and are typically larger than 20 acres.

6.3.B.I.e.iv. Location Guidelines

1. Located in natural areas, such as the Bosque and along the Rio Grande.
2. Located along right-of-way corridors when significant natural resources are present.
3. Connected to bicycle, pedestrian, and trail networks.

6.3.B.I.e.v. Elements

Open space elements should be identified in collaboration with the PRCS Department. Typical amenities within an open space should include undisturbed natural resources and associated buffer land.

6.3.B.II. PARK ELEMENT STANDARDS

6.3.B.II.a. General Standards

1. The park element standards listed below apply to elements within all park typologies.
2. All provided amenities shall be installed per manufacturer's instructions or as described in the Drawings.
3. The PRCS Department and the Parks and Recreation Commission reserve the right to require additional elements in the design of the park.
4. Review of park elements will follow the procedures of Section 2.6.B. Park Permits.

6.3.B.II.b. Paving

1. Work under this section consists of preparing all paved areas for parking lots, sidewalks/paths, courts, and skate parks according to the specifications.
2. Paved surfaces shall follow all applicable codes and the paving standards of the Department of Public Works.
3. Asphalt surfaces including parking lots, walkways, and sport courts, shall follow the City Standard for "paved pedestrian trail or parking lot" through the Department of Public Work's standard sheet "Pavement Sections– DWG. No. PS-01."
4. Concrete surfaces such as sidewalks and concrete pads shall follow the City Standard for sidewalks through the Department of Public Work's standard sheet "Sidewalk and Residential Driveway – DWG. NO – DW-01." Note that additional standard sheets related to driveways, curb and gutter and other improvements may apply.
5. Grading and sub grade preparations for all paved surfaces shall follow the Public Works standard specifications for concrete sidewalks and asphalt paving.
6. All paved surfaces shall be designed to ensure that surface ponding is negligible. Park developer will submit concrete pads, courts, and skate parks to a ponding test where water will be sprayed on the surface and runoff and/or ponding observed.

6.3.B.II.b.i. Parking Lot Standards

1. Paved parking lots shall follow the City Standard for "paved pedestrian trail or parking lot" through the Department of Public Work's standard sheet "Pavement Sections – DWG. No. PS-01."
2. Permeable paving may be used within onsite parking lots. Low Impact Development parking lots shall follow the SSCAFCA standard specifications and construction details, as specified by staff.

3. Accessible parking shall be provided as required by the federal Americans with Disabilities Act Guidelines for Buildings and Facilities (ADAAG), the New Mexico Statutes Annotated, and the Rio Rancho Municipal Code.
4. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.

6.3.B.II.b.ii.Paving Guarantee

All asphalt and concrete paved surfaces shall be in compliance with City specifications and found free of any safety hazards or defects for twelve months following the date of final acceptance by the City.

6.3.B.II.c. Lighting

Lighting of park elements can provide a sense of safety. Lighting of sports facilities can be utilized to extend usable hours.

6.3.B.II.c.i. Lighting Standards

1. The preferred lighting and form of lighting control (timer, light sensor, etc.) shall be selected in collaboration with the PRCS Department.
2. Lighting systems and materials shall be designed and constructed in accordance with all local codes.
3. If lighting is required per PRCS Department, a complete site lighting plan including the locations of all transformers, lighting fixtures, fixture descriptions, lamp type and wattage, and lighting coverage or photometric plan shall be prepared and stamped by a licensed engineer.
4. Lighting shall comply with the maximum height, wattage, and shielding requirements for fixtures as stated in Rio Rancho Municipal Code Chapter 159 Outdoor Lighting.

6.3.B.II.c.ii. Parking Lot Lighting

1. Parking lot lighting should promote a safe environment and increase visibility for pedestrians and motorists using the facility during evening and night hours.
2. Parking lots shall be lit uniformly to an average brightness of 1 foot-candle.

6.3.B.II.c.iii. Sport Facility Lighting

1. Playing fields and sport courts shall follow the approved national lighting standards required for rules for evening or lighted play for the adult and/or youth sport or sports intended to utilize the fields or facility (including but not limited to Little League, softball, baseball, soccer, flag football, YAFL, cricket).

6.3.B.II.c.iv. Lighting Guarantee

The lighting system shall be in compliance with City specifications and local codes and found free of any safety hazards or defects for twelve months following the date of final acceptance by the City. Materials replaced due to workmanship or mechanical failure shall be replaced by the developer's contractor with material of the same brand and quality as that which is being replaced.

6.3.B.II.d. Fencing

Fencing serves to provide access control, security, and screening. The following standards apply to fencing that will be constructed by the City or constructed by others and dedicated to the City.

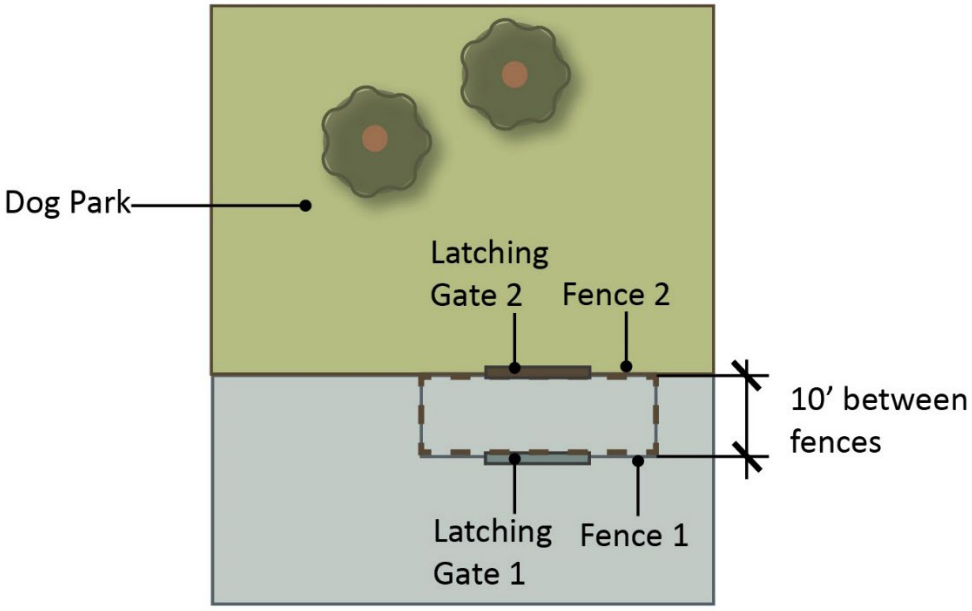
6.3.B.II.d.i. Fencing Standards

1. The following specifications are the minimum requirements. Fencing with greater aesthetic or structural attributes may be required by the PRCS Department on a case-by-case basis.
2. Where ponds are part of a park facility and are required to be fenced, SSCAFCA and the Public Works Department must review and approve any proposed fencing.
3. Chain link fences shall follow the City standard for "chain link fences" through the PRCS Department's standard sheet "10 CHAIN LINK FENCE".
4. Chain link gates shall follow the City standard for "chain link gates" through the PRCS Department's standard sheet "11 CHAIN LINK GATE".
5. Fences shall meet the standards of Table 6.5 Fence Requirements. Fence design will vary in height and detailing per the specific site uses and requirements.

Table 6.5 Fence Requirements

Fence Typology	Minimum Height	Fence Materials	Post	Entry Points	Other Requirements
Dog Park Fencing	4 ft	Vinyl coated chain link with a bottom rail	Steel posts with caps, anchored in a concrete footing.	Double gated with latching gates with a minimum separation of 10 ft.	Large and small dog areas shall be separated by 4 ft chain link fence with a bottom rail. A minimum 8 ft wide hinged or rolling maintenance gate, shall be provided.
Post and Cable Fencing	Determined on a site-by-site basis		Metal posts with caps, anchored in a concrete footing.	Locked "drop" section where the cable has been cut, looped and terminated to allow for a lock	
Drainage Pond and Open Space Fencing	4 ft	5 strands of barbless wire fencing	4"x4" wooden or metal posts set at least 3' in the ground	A pipe maintenance gate at least 8' wide.	

Figure 1 Dog Park Fencing



6.3.B.II.d.ii. Fencing Guarantee

Fencing shall be in compliance with City specifications and found free of any safety hazards or defects for 12 months following the date of final acceptance by the City. Materials replaced during the 12-month period due to workmanship or material failure shall be replaced with material of the same brand, type and quality as that which is being replaced.

6.3.B.II.e. Playgrounds

Playground structures provide opportunities for children to interact, learn, and play. These promote muscle development, motor coordination, social interaction, creativity, exploration, and a variety of different types of skills. Playground structures and play elements may be tailored to serve a specific subset of the community and should be unique to each site. All playground structures and elements must meet the following standards to promote inclusive access and safety.

6.3.B.II.e.i. Playground Standards

1. Play equipment and surfacing shall be International Play Equipment Manufacturers Association (IPEMA) certified to meet all requirements of American Society for Testing and Materials (ASTM), Consumer Product Safety Commission's (CPSC), and Americans with Disabilities Act (ADA).
2. Playgrounds shall include equipment and features that provide a variety of play opportunities for both the 2–5-year-old and 5–12-year-old age ranges. Play equipment for these disparate age ranges shall be separated into two or more distinct areas to minimize conflict. The PRCS Department may consider installation of combined 2–12-year-old play equipment at its discretion.
3. Playground elements shall include equipment to build gross and fine motor skills, enhance core strength, and develop body awareness. Elements may include sensory play components, music

features, sounds and lights, tactile play elements, swings, spinning elements, slides, climbing elements, and elements that encourage social and imaginative play.

4. Play areas shall be signed appropriately for intended age ranges. Age-appropriate playground signs from the manufacturer of the playground equipment shall be installed.
5. All equipment shall be installed according to the manufacturer's instructions, by a certified NPSI and Manufacturer-Certified Installer. The Park developer shall provide the City with a letter attesting to this. Any constructed playground must have and pass a third-party playground audit. The Park developer shall provide the City with a letter and backup documentation attesting to this and stating compliance with ASTM, IPEMA, ADA, and CPSC.
6. Play structures must be approved by PRCS Department, installed according to manufacturer's instructions, and carry a minimum 5-year warranty.
7. Play structures and play elements must be placed over playground surfacing as required and dictated by their safety zones.
8. Shade shall be incorporated into the play area. Freestanding shade structures shall comply with the standards of this chapter.
9. Seating shall be incorporated directly adjacent to play areas.

6.3.B.II.e.ii. Prohibited Playground Equipment

The following materials and play elements are prohibited for use in City of Rio Rancho parks.

1. Mirror or window panels.
2. Bulb panels.
3. Wooden structures.
4. Steel and tube slides.
5. Tile Safety Surfacing.
6. Expanded Metal Decks.
7. Decks with holes larger than 3/8".
8. Structures with decks that do not use a clamping system.
9. Structures with decks higher than 48" with posts smaller than 5".
10. Rotationally molded plastic panels.
11. Products that do not conform to ASTM and CPSC Standards.

6.3.B.II.e.iii. Playground Surfacing Standards

1. Surfacing shall be selected and coordinated with the PRCS Department.
2. Depth of surfacing required is dependent on fall heights associated with the play equipment selected and shall be coordinated with the playground equipment manufacturer.
3. Final installation details shall conform to the manufacturer's recommendations.
4. Playground surfacing shall be bordered by a concrete turndown edge, concrete header curb, or standard concrete sidewalk perimeter, installed flush to the concrete ADA accessible ramp and path associated with the playground area, as defined by ASTM and CPSC. Alternatively, the PRCS Department will consider the use of Playground Manufacturer's borders on a site-by-site basis. The depth of this border shall be coordinated with the depth of the playground surfacing.
5. Playground surfacing must be playground certified manufactured wood fiber and/or poured in place rubber surfacing.

6.3.B.II.e.iv. Playground Guarantee

1. All equipment shall be in compliance with a playground audit and found free of any safety hazards or defects for twelve months following the date of final acceptance by the City.
2. The following warranties (manufacturer or otherwise) shall be provided for specified equipment unless stated otherwise herein. Letters or warranty certificates for installed equipment shall be provided to the City for the following minimum periods of time, at the time of final acceptance of the facility.
    a. Posts – 25-year warranty.
    b. Plastic and Steel Components – 15-year warranty.
    c. Play Equipment Coatings – 15-year warranty.
    d. Moving Parts – 3-year warranty.
3. The Park developer shall obtain and provide Certificates of Liability Insurance for the following amounts, to the City to be placed on file, prior to the start of work.
    a. Playground Manufacturer - $5,000,000.
    b. Playground Sales Representative/Distributor - $1,000,000.
    c. Playground Installer - $1,000,000.

6.3.B.II.f. Site Amenities

6.3.B.II.f.i.Furniture

1. Benches, trash receptacles, and picnic tables shall be made of vinyl coated steel, powder-coated. steel, perforated metal, concrete, or recycled plastic. Wood material is not acceptable.
2. Site furniture colors shall be selected in coordination with PRCS Department.
3. Picnic Tables with a single pedestal or central support will not be accepted by the PRCS Department.
4. Picnic tables, benches and trash receptacles shall be in-ground mounted in hardscape or paved surface, or vandal proof surface mounted when located on concrete pads.
5. Site furniture shall not be placed within turf areas.
6. At new parks, benches, tables, and trash receptacles shall be of the same aesthetics for continuity in appearance.
7. Concrete pads for picnic tables, benches, trash receptacles, and shade structures shall follow the concrete paving standards of the City's Public Works Department.

6.3.B.II.f.i.1. Trash Receptacles

1. Trash receptacles shall be located where most park activities are intended to occur (such as a at gathering areas with shade structures, tables, or at playgrounds) and/or near the parking lot.
2. Trash receptacles shall have dome lids with closing doors unless otherwise approved.
3. The PRCS Department will not accept trash receptacles with locking doors.
4. Trash receptacles shall be placed at locations easily accessible for regular maintenance and outside of the public right-of-way.

6.3.B.II.f.i.2. Dog Waste Stations

1. Dog waste station shall have a unit(s) for waste bags and imbedded waste collection. The unit shall be able to dispense bags that are 8" x 13" on rolls, and the waste collection receptacle shall accommodate a 10-gallon bag or larger and have a lid.

6.3.B.II.f.i.3. Fitness Stations

1. Fitness stations shall be purchased from certified manufacturers.
2. Stations must be highly durable and intended for outdoor use.
3. All stations shall be installed per the manufacturer's recommendations.
4. Each station must be accompanied by instructional signage.
5. Surfacing associated with fitness stations shall be ADA accessible.

6.3.B.II.f.ii. Shade Structures

1. Shade structures shall be purchased from NPSI certified playground or shade structure manufacturers or their representative and shall be off-shelf products not custom assembly.
2. Shade structures are acceptable for construction if they can be justified for the region with an Evaluation Service Report or a registered, State of New Mexico Engineer's structural calculations.
3. Surfacing associated with shade structures shall be ADA accessible.
4. Engineered drawings are required for permitting and inspection of shade structures or similar structures 200 square feet or larger. These drawings shall include structural calculations.

6.3.B.II.f.iii. Drinking Fountains

1. Drinking fountains must be ADA accessible.
2. The manufacturer and model shall be reviewed and approved by the PRCS Department.
3. Dog fountains may be incorporated into the drinking fountain.
4. A drainage sump suited to accommodate the level of anticipated fountain use shall be installed per a detail on the plans.
5. Drinking fountain site preparations and installation shall follow local codes and ensure proper drainage if the fountain drain should be clogged and the trough overflow.
6. The concrete pad providing accessibility to the fountain shall follow the concrete paving standards of the City's Public Works Department. Any unpaved area surrounding the base of the drinking fountain not required for accessibility shall be filled with crusher fines or other permeable paving, at 3" depth and made level to adjacent concrete paving.

6.3.B.II.f.iv.Tennis and Pickleball Courts

1. Pickleball court total surface area should be sized 34' x 64' with a playing surface of 30' x 60'.
2. Tennis courts total playing area is 27' x 78' for a singles court and 36' x 78' for a doubles court.
3. Tennis and Pickleball courts should be oriented in a north-south orientation to minimize sun glare wherever possible.
4. At a minimum, courts shall be paved with asphalt. If a court is constructed of concrete, it shall follow the specifications for concrete and asphalt courts below.
    a. Asphalt courts: Hot mixed asphalt shall be 4" thick with two lifts, the first a lower layer with ¾ inch to ½ inch minimum aggregate size, gradations No. 3 or 4 to a compacted thickness of not less than 2-1/4 inches or 1-3/4", with an upper layer installed for a smooth surface with fine-graded mixture of a maximum aggregate size of ½ inch to 3/8", gradations No. 4 or 5 to a compacted thickness of 1-3/4 inch or 1-1/4 inch. Surface shall be leveled, smoothed and finished to prevent ponding of water. Asphalt shall be laid over an aggregate base course layer of 4 inches compacted to 95% and six-inch prepared sub grade compacted to 95%.

b. Concrete courts: Concrete poured in place shall be 5” thick, 4000 psi with post-tension reinforcement, medium broom finish, over 95% compacted sub grade.

5. 100% acrylic coating are recommended for surfacing courts. Colors to comply with USAPA.
6. Layout of lines and colors to comply with USAPA. Lines should be white with the boundary line to be contrasting from the court’s surface color.
7. Court shall have a max of 1% slope or cross-slope.
8. Finish grade of either asphalt or concrete shall match finish grade of surrounding area.
9. Tennis and Pickleball Courts shall be made ADA accessible via pathways to the parking lot and to neighborhood sidewalks wherever possible.
10. A permanent net should be installed with appropriate footings and removable posts with sleeves. The net can be made of any mesh material that will not allow a ball to pass through. It should be at least 21 feet 9 inches long, stretching from post to post; from the bottom edge to the top, it should be at least 30 inches wide. The posts should be 22 feet apart, and no more than 3 inches in diameter. Once the net is suspended from the posts across the center of the court, it should be 36 inches tall at the sidelines, and 34 inches tall in the center. The top edge of the net should have a cord or cable, and it should be covered with a 2-inch tape.

6.3.B.II.f.v. Basketball Courts

1. Courts shall be sized and striped to meet High School or College court dimensions.
2. Basketball goals and courts shall be oriented as a half court if one goal is required and oriented as a full court if two goals are required.
3. At a minimum, basketball courts shall be paved with asphalt. If a basketball court is constructed of concrete, it shall follow the specifications for Concrete basketball and asphalt courts below.
    a. Asphalt basketball courts: Asphalt shall be 2” thick with a smooth finish. Surface shall be leveled, smoothed and finished to prevent ponding of water. Asphalt shall be laid over a prime coat applied over six-inch prepared sub grade compacted to 95%.
    b. Concrete basketball court pads shall be 4” thick, 4000 psi with 6” x 6” welded wire mesh (WWM). WWM to be supported by keyway joints or 2” high chairs and tied at all intersections, over 95% compacted sub grade.
4. Courts shall have a max of 2% slope or cross-slope.
5. Finish grade of either asphalt or concrete shall match finish grade of surrounding area.
6. Basketball Courts shall be made ADA accessible via pathways to the parking lot and to neighborhood sidewalks wherever possible.

6.3.B.II.f.vi. Skate and Bike Parks

1. Skate parks shall include a minimum of eight (8) elements and a minimum surface area of 10,000 square feet.
2. Modular Skate Park elements and signs shall be installed by Manufacturer or certified installer. The Park developer shall provide the City a letter attesting to this.
3. Skate & Bike park elements may be concrete or modular. All elements must be constructed for weather, UV radiation, and other conditions of outdoor use without a cover. Modular elements should have metal frames and metal panels. The City will consider use of recycled plastic panels. Actual elements should be chosen with the PRCS Department.
4. Anti-vandal hardware is required, and anti-vandal surfacing is preferred wherever possible.

5. Skate Park Rules sign is required. Sign text shall have name of park, hours of operation, required protective equipment, prohibited activities, and "Skate at your own risk" statement. The PRCS Department will work with the Park designer to determine appropriate sign language on a site by site and manufacturer basis.
6. All Skate Parks will have a concrete skate pad per the following specifications:
    a. The concrete pad shall be 4" thick, 4000 psi with 6" x 6" welded wire mesh (WWM). WWM to be supported by 2" high chairs and tied at all intersections, over 95% compacted sub grade.
    b. The 4000-psi concrete will have a hard trowel finish (12 passes), with no broom finish, unless otherwise directed by the PRCS Department.
    c. Saw cut joints shall be 1/8" wide by ½" deep and shall be located as shown on the Drawings.
    d. Expansion joints shall be placed where they will not impede skate wheels. Joints between pours in the middle of a slab shall be keyed or doweled cold joints.
    e. Finish surface shall not have deviations greater than 1/8" as measured with a 10' long straight edge. Grading is not acceptable for remedying deviations.
7. Skate Parks shall be made ADA accessible via pathways to the parking lot and to neighborhood sidewalks.

6.3.B.II.f.vii. Site Amenity Guarantee

1. All equipment shall be in compliance with a playground audit where applicable, and all equipment shall be found free of any safety hazards or defects for twelve months following the date of final acceptance by the City.
2. The following warranties (manufacturer or otherwise) shall be provided for specified equipment unless stated otherwise herein. Letters or warranty certificates for installed equipment shall be provided to the City for the following minimum periods of time, at the time of final acceptance of the facility.
    a. Skate Park modular components and hardware – 15-year warranty.
    b. Tables, benches and trash cans – 15-year warranty.
    c. Steel shade structure – 10-year warranty.
    d. Steel frame and cloth topper shade structure – 10-year warranty steel frame, 5-year warranty on fabric.
3. The Park developer shall obtain and provide Certificates of Liability Insurance for the following amounts, to the City to be placed on file, prior to the start of work.
    a. Manufacturer - $5,000,000.
    b. Sales Representative/Distributor - $1,000,000.
    c. Installer - $1,000,000.

6.3.B.II.g. Landscape and Plantings

Landscape plantings enhance the quality of parks and recreational facilities and provide services such as habitat, sense of place, heat reduction, and carbon sequestration. Plantings can also enhance stormwater retention and infiltration.

6.3.B.II.g.i. Landscape and Planting Standards

1. Landscape areas shall be designed for passive water harvesting and stormwater infiltration.
2. Species of trees, shrubs, and ground cover shall follow the list of approved and prohibited species found in the City's Landscape Ordinance and or Vision 2020 Plan with emphasis on native or naturalized well adapted species. Exceptions to this list may occur at the direction or approval of the

PRCS Department. The preferred tree species are listed within the City of Rio Rancho Administrative Policies and Procedures Tree Preservation and Maintenance Policy.

3. All trees, shrubs, ground covers, seeded turf, and sodded turf shall be planted in amended soil and irrigated by automated underground irrigation system unless otherwise approved by the PRCS Department.
4. Irrigation system shall be designed to prevent off-site run-off or overspray of irrigation water and so that there is no fugitive water from the irrigation over-spray.
5. All trees shall be 2"caliper or larger.
6. The following trees and shrubs shall not be planted in City Park property:

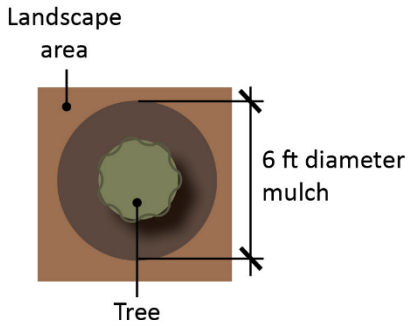
Table 6.6: Prohibited Trees and Shrubs

Common Name	Scientific Name
Green Ash	Fraxinus Pennsylvanica
White Ash	Fraxinus Americana
Siberian Elms all species, varieties, or cultivars of the genus except Dioecious Ulmus parviflora	Ulmus Species
Hackberry	Celtis Occidentalis
Black Locust	Robinia Pseudoacacia
Sugar Maple	Acer Saccharum
Silver Maple	Acer Saccharinum
Box Elder	Acer Negundo
Poplars, including aspens and the female cottonwood	Most Populus species
Spruces	Picea species
Weeping Willow	Salix Sepulcralis
Globe Willows	Salix Matsudana
Russian Olives	Elaeagnus Angustifolia
Pyracantha	Most Pyracantha species
Ponderosa Pine	Pinus Ponderosa
Fruiting Trees	
Cypress	Genus Cupressus
Juniper and Cedar all species, varieties, or cultivars of the genus except male plants that do not exceed two (2) feet tall when mature and any size plant that is female.	
Mulberry	Genus Morus
Cottonwoods and Poplars all species, varieties or cultivars of the genus except Populus fremontii variety Wislizenii	Genus Populus

7. Plant material quality, size, and condition shall be in accordance with American Standard for Nursery Stock, 1980, as published by the Committee on Horticultural Standards of the American Association of Nurserymen, Inc.
8. All plants shall be typical of their species or variety. All plants shall have normal, well-developed branches and vigorous root systems. They shall be sound, healthy, vigorous, and free from defects, disfiguring knots, abrasions of the bark, sunscale injuries, plant diseases, insect eggs, borers, and all other forms of infections.

9. Unless otherwise stated on the landscape plan or approved by PRCS Department, all plants shall be nursery grown and shall be tagged with nursery labels indicating species and variety. Nursery tags should be removed at planting.
10. Container grown plant material shall have been grown in its delivery container for not less than six (6) months, but for not more than two (2) years. Any root-bound material will not be accepted.
11. Balled and burlapped plant material shall have a solid ball of earth of minimum specified size and held in place securely by burlap and a stout twine or rope. Broken or loose balls will not be accepted. When inspecting trees, the PRCS Department staff shall check for girdling roots by removing soil from top of root ball. The Park developer will also verify that all metal wire and burlap has been removed from the root ball prior to planting.
12. Unless specifically noted on the landscape plan, all trees shall have a single trunk that is strait and free of “dog legs”, “crooks”, “Y-crotches”, or other disfiguring shapes. The central leader of all trees shall not have been pruned. Trees with double leaders are not acceptable.
13. All plant material shall have a uniform shape around its complete circumference. Plant material with irregular branching patterns or with branching patterns more highly developed on one side than on the other sides shall not be accepted.
14. Bark mulch, if used as a ground cover, shall be a shredded mixture of wood cambium and bark nuggets, be free of other materials, and shall be free of obvious pests.
15. Soil analysis for all landscape and plantings shall be submitted showing pH, soil texture analysis, soluble salts, and sodium. An interpretation of the soil test and recommendation on soil amendments by a professional soil scientist certified by A.R.C.P.A.C.S shall be submitted to the PRCS Department.
16. Planting shall meet the following requirements:
    a. The Contractor shall take care when backfilling planters to provide adequate compaction of the fill material in order to prevent settling.
    b. Prepare all planting holes and install plants as shown on the PRCS Department’s standard sheets “14 SHRUB PLANTING DETAIL” and “15 TREE PLANTING DETAIL”. Plants shall be set plumb and straight.
    c. Backfill for planting holes shall be positioned in the hole and backfilled. The backfilling shall be completed, and materials tamped. When hole is nearly filled, water thoroughly and allow water to soak away. If settling of backfill occurs after watering, add more backfill to bring to finish grade.
    d. All trees shall have tree wells unless otherwise directed by the PRCS Department. Trees within parks shall not be planted within a hard surface with a narrow pedestrian corridor. Tree wells located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6’ x 6’ of covered bark mulch. Tree wells located within soft (i.e. Turf Area) surface areas shall have a 6’ diameter tree ring with bark mulch. The purpose of such is to keep mowers, trimmers, and small equipment from coming in contact with the tree’s base or root system.

Figure 2 Tree Wells



e. After completion of planting, all trees shall be pruned at the direction of the PRCS Department.
f. Trees other than those less than thirty (30) feet in height at maturity shall not be planted within ten (10) lateral feet of any utility lines, within 10 feet of fire department equipment (i.e., fire hydrants, Fire Department Connections (FDC), and gate valves), or within 10 feet of water and sewer main lines.

17. Mulching shall be completed as indicated on the Drawings or at the direction of the PRCS Department. Bark mulch shall be used, unless otherwise approved.
18. All disturbed areas shall be covered in mulch.
19. Trees shall be staked as indicated on the standards specifications. Tree stakes shall be removed within one growing season.

6.3.B.II.g.ii.Landscape Plans

1. Landscape plans are required for all parks and should be provided with preliminary construction plans. Conceptual plans provided during the Concept Planning stage, as described in Section 2.6.B. Parks and Recreational Facilities Development Procedures, should include conceptual landscape plans.
2. Complete plant list, including quantities, install sizes shall be included on the landscape plan.
3. The botanical and common names used for the plants called for on the landscape plan shall be generally in conformity with standardized plant names, or in conformity with the names accepted in the nursery trade.

6.3.B.II.g.iii. Plant Materials Guarantee

All plant materials shall be guaranteed to be in a live, healthy, and normal growing condition following the date of final acceptance by the City through one calendar year. Plant materials that are dead or in an unhealthy, impaired growth condition shall be removed and replaced by the Park developer as directed by the City at no additional cost after the end of growing season. Replacement material shall be of equal quality, size, and species as that which is being replaced and shall be approved by the City prior to planting. Any plants replaced after the first six months of the guarantee period shall also be under warranty for six months after the replanting date.

6.3.B.II.g.iv. Turf Grasses

Turf grasses are an integral component of play fields within parks. Turf grass fields provide opportunities for organized team sports and informal play. Turf fields may be designed as a multi-use field or striped to accommodate a specific sport. Standards for turf grasses ensure the proposed grasses are appropriate for the climate and growing conditions and easily maintained to create safe, play fields.

6.3.B.II.g.v. Turf Grass Standards

1. Turf play areas sized for athletic competition, shall have a slope of 1% minimum and 2% maximum. All developed play, field and activity areas must be leveled without significant holes or bumps. The grade of other turf areas within the park may vary only at the discretion of the PRCS Department.
2. Turf shall not be installed on slopes of 3% or greater.
3. All turf shall be irrigated with underground automated irrigation systems.
4. Turf with no intended active use is prohibited in City parks.
5. Turf areas shall have full head-to-head irrigation coverage, designed per the standards of Section 6.3.B.II.h. Irrigation.
6. If seed is used to establish turf for a playfield or an athletic field, the turf area shall be fenced off until sufficient establishment is achieved. The PRCS Department may withhold final approval/acceptance of a park until seeded fields are established.
7. No turf grass shall be planted within 8'-0" of the back of any street curbs.
8. A concrete mow curb or sidewalk shall be installed at the edge of all turf grass. Concrete mow curbs shall follow the PRCS Department's standard sheet "#8 CONCRETE MOW CURB".
9. Drought-tolerant grass mix for seed and for sod areas shall be approved by the PRCS Department prior to completion of project design. Grass mixes shall be specified on the Drawings based on soil test results and not in the Specifications. Cool weather grasses and Bermuda grasses are prohibited.
10. The Contractor shall include PRCS Department staff in project inspections, reviews for substantial completion and final completion.
11. Soil bed preparation shall meet the following requirements:
    a. Prior to soil preparation, all finish grades shall be established and approved per the grading plan. The finish grade of the area to be seeded or sodded shall be free of irregularities, humps, ridges, depressions, or low areas.
    b. Apply a uniform 2" layer of organic amendment and 4lbs. of starter fertilizer per each 1,000 square feet to the entire area to be seeded or sodded. After application of organic amendment and starter fertilizer all areas to be seeded or sodded shall be ripped to a depth of twelve inches and thoroughly rototilled to a minimum depth of 6 inches. After rototilling is complete at cross directions, drag to an even grade, then roll for firmness.
    c. After applying amendments and before seeding or sodding, the finish grade shall be brought to a firm, even surface, free from stones or lumps, in excess of one-inch diameter, and shaped to provide drainage.
    d. Fertilizer shall be a granular form starter fertilizer with a guaranteed analysis of 18-24-16, unless otherwise directed by the PRCS Department.
    e. Park developer shall submit soil analysis showing pH, soil texture analysis, soluble salts, and sodium. Provide an interpretation of the soil test and recommendation of improvements or changes to the soil by a professional soil scientist certified by A.R.C.P.A.C.S.
12. Sodding shall meet the following requirements:

a. The ASPA (American Sod Producers Association) Guideline Specifications to Sodding are recommended as guidelines for turf grass sodding.
b. The City reserves the right to require that a sample of sod and a written submittal of the seed mix shall be submitted a minimum of fifteen (15) days prior to laying sod or placing seed.
c. Sod shall be vigorous, well-rooted healthy turf free from disease, insect pests, weeds, other grasses, stones and other harmful or deleterious matter.
d. Sod shall be cut by an approved mechanical sod cutter to a thickness of not more than 1" or less than ½". Sod pieces shall be cut a maximum of 18" wide. Handling of sod shall be done in a manner that will prevent tearing, breaking, drying or any other damage. Sod shall be installed in place on the site not more than 24 hours after cutting.
e. Sod shall have no more than ½" of loose thatch. The sod shall be dense enough so that an entire strip can be lifted by the top 10% without breaking.
f. Lay sod over moistened soil, lightly raking the soil ahead of each sod strip. Sod shall be laid parallel to the direction of slope and shall have staggered joints. Pieces shall be fitted together tightly so that no joint is visible, and sod tamped firmly and evenly by hand. Stake as required on slopes.
g. Water all sodded areas immediately after final rolling with fine spray to a depth of 4". Irrigate by means of the automatic underground irrigation system all sodded areas as often as necessary to promote healthy grass growth.
h. Mowing during the maintenance period will be scheduled so that the grass is maintained at a height no shorter than two (2) inches and no greater than three (3) inches.

13. Seeding shall meet the following requirements:
    a. All soil areas, which have been prepared prior to the seeding season, shall be observed for effects of weather that have affected the quality of soil preparation. If the soil areas are unaffected, they will be seeded immediately after the opening of the current seeding season. If they have been affected, the PRCS Department and Park developer shall identify the steps in Soil Bed Preparation that may need to be repeated prior to seeding.
    b. All areas, which are prepared during the seeding season, shall be seeded that same season.
    c. Seed mix shall be as specified on the drawings.
    d. Each bag of seed shall be sealed and labeled by the seed dealer in accordance with Federal Seed Laws and New Mexico Department of Agriculture Labeling Laws. This includes variety, kind of seed, lot number, purity, germination, percent crop, percent inert, percent weed (including noxious weeds), origin test date and net weight. Federal Seed Laws require that analysis shall be no older than 9 months for seed shipped intra-state.
    e. Wetting agent shall be Hydro-wet-RTA as manufactured by KALO, Inc., 4550 W 109th Street, Overland Park, KS 66211, 1(800) 255-5196, or an approved equivalent wetting agent having the same characteristics and performance abilities as Hydro-wet. Apply at a rate of 5 gallons liquid product per acre.
    f. The seed mix and rate shall be as specified herein or as shown on the drawings. The prescribed mix and rate shall be uniformly applied over the area to be seeded.
    g. Park developer's vehicles and other equipment shall not travel over the seeded areas. If, as determined by PRCS Department staff, rain or some other factor occurs over prepared surfaces prior to seeding which prevents seeding to the proper depth, the Park developer shall again prepare the seed bed without additional compensation.
    h. Unless otherwise directed by the PRCS Department, turf grass seeding shall only be accomplished in the spring from April 1 through May 30 or in the fall from August 15 through

September 15. “Low water use grass” seeding shall only be accomplished in the spring from April 15 through June 1. If seeding is not accomplished during the “time of seeding” the Park developer shall accomplish the seeding at the “time of seeding” during the next calendar year. Park developer extension of the “time of seeding” shall be accomplished at no additional cost.

i. All seed shall be drilled in cross directions, where practical, with 50% of the seed applied in each direction. The second pass of the seeder when seeding in cross directions shall be across the slope. In areas where seeding in cross directions is impractical, seeding shall be accomplished by drilling and shall be across the slope. Seed shall be planted approximately ¼” inch deep, with a maximum depth of ½” inch unless otherwise specified on the Drawings. The distance between the drilled furrows or slits shall not be more than 2 inches. Seeding shall be done with grass seeding equipment in good working order double disc openers, depth bands, drop tubes, packer wheels or drag chains, rate control attachments, and seed boxes with agitators for trashy seed.
j. Watering of the seed will be the responsibility of the Park developer. All seeded areas shall be watered immediately after completion of seeding, keeping the top two inches of evenly moist until seed has uniformly germinated and grown to a height of two inches. In instances where the irrigation system is metered separately, the Park developer shall be responsible for the cost of water during seeding and maintenance of seeded turf until final acceptance.
k. After the seed has germinated and the grass has reached an approximate height of one-half inch, the wetting agent shall be applied in accordance with the manufacturer's recommendations.

6.3.B.II.g.vi. Turf Grass Guarantee

Sod and seeded turf shall be guaranteed to be in a live, healthy, and normal growing condition following the date of final acceptance by the City through one twelve month growing season. Sod that is dead or in an unhealthy, impaired growth condition shall be removed and replaced, or top dressed and seeded by the Park developer as directed by the City at no additional cost. Replacement seed or sod shall be of equal quality and species mix as that which is being replaced and shall be approved by the City prior to planting.

6.3.B.II.h. Irrigation Systems

Irrigation is necessary to allow plants to survive and thrive. Irrigation is essential in planting beds, turf fields, and for tree establishment. Irrigation standards ensure adequate watering while prioritizing water conservation. PRCS can provide irrigation standard details to the Developer and/or their Design Professional after the initial park planning meeting between the City/PRCS and Developer.

6.3.B.II.h.i. Standards

1. Only approved irrigation products as specified in Appendix 6.5.B Irrigation Products and Execution are permitted. Rainbird Products are required unless none is available or unless otherwise approved.
2. Irrigation Plans and Record Drawings shall be prepared in accordance with the standards of Appendix 6.4.A.
3. 6.4.A Irrigation Design to prevent fugitive water.
4. All existing utilities to be coordinated with during design phase.

5. Manual drain valves shall be the size and type as indicated and at locations as shown on the Drawings. These valves shall be in a bed of ¾" gravel for drainage.
6. In areas where shade structures or picnic / seating areas are present, a quick coupler shall be located within 10 feet of the structure or area.
7. Materials noted on irrigation plan shall be materials installed.
8. Irrigation zones shall be designated by application type. Mix application, combining drip, bubbler, sub surface, or spray, is prohibited.
9. Triangulated Head-to-head coverage is mandatory.
10. Irrigation system to be designed to apply 2" of spray irrigation to high uses turf and 1" to low uses turf. (Appendix 6.5.B).
11. Spray irrigation on a sloped landscape shall be isolated with top and bottom only zones to minimize sheet erosion.
12. All parks with turf areas greater than 1 acre shall be audited by an irrigation association Certified Landscape Irrigation Auditor (CLIA) professional.
13. Utilities must approve the following:
    a. Febco 825 Y on 2" and less water meters.
    b. Febco 880 on 2.5" and greater water meters.
    c. Meters must be treated and registered per Rio Rancho Municipal Code Chapter 154.
14. Backflow enclosure to be heated.
15. Irrigation systems with lines over 2.5" will require thrust blocks and joint restraints.
16. Controller must be GFI protected.
17. Controller and backflow enclosure to be on individual breakers.
18. Central controller computer monitoring capabilities are mandatory. Rainbird ESP or an equivalent shall be provided.
19. A flow meter shall be installed before the Master Valve assembly and before the Backflow preventer. The flow meter shall be a Master Meter.
20. Flow sensors and master valves are mandatory.
21. All materials shall be new and without flaws or defects of any type.
22. Rainbird products are preferred.
23. Products shall meet the standards of Appendix 6.4.A.
24. All PVC piping to be sch 40 for mainline and 6.5" lateral lines.
25. Crossing pipes is prohibited unless otherwise approved by PRCS Department staff.
26. No Saddle tapping of main line.
27. No pipe stacking in trenches.
28. All PVC fittings to be sch 40.
29. Galvanized nipples- sch 40.
30. PVC nipples- sch 80.
31. PVC true union ball valve on upstream and PVC union on Downstream pipe mandatory.
32. Rainbird Rotors (impacts not acceptable).
33. Rainbird 1800 series spray heads.
34. Rainbird 1400 series bubblers (pressure compensating).
35. Rainbird 44-LRC quick coupling.
36. Bubbler to be installed on flex risers.
37. Teflon tape to be used on all PVC thread connections and PVC thread to galvanized connection.
38. Pipe thread compound for galvanized to galvanized connections.
39. Pipe dope to connect valves is prohibited.

40. PVC Cement must be NSSF approved and meet ASTM D 2564 requirements.
41. Expansion coils in valve box to be 36".
42. 120 volt- wiring shall be solid copper (or stranded copper in larger wire sizes), underground feeder for direct burial and PVC insulated. Size of wire shall be #12 AWG.
43. 24 volt- wiring shall be solid copper wire, PVC insulated, UL approved underground feeder wire for direct burial in ground. Common wires shall be #12, white, unless otherwise noted on Drawings. The control wires shall be #14 of any color other than white unless otherwise indicated on the Drawings.
44. Sleeving pipe- PVC calls 200(2x sleeved pipe size).
45. No crossing sleeves.
46. Trench depths shall be 24" deep and sufficient to provide the specified pipe cover as described elsewhere in these specifications.
47. In rocky areas the trenching depth shall be 6" below normal trench depth to allow for pipe bedding as described in other portions of these specifications.
48. In areas where trees are present, trench lines will be adjusted on the site to eliminate any damage to tree roots.
49. All backfill material shall be subject to approval by the City. Backfill material shall be free from rock, large stones, brush, sod, frozen material, or other unsuitable substance that may damage pipe during the backfilling operations.

6.3.B.II.h.ii. Irrigation System Execution

Execution shall generally be conducted using the following process. Appendix 6.5 B Irrigation Products and Execution provides process details.

1. Product handling.
2. Excavation and trenching.
3. Pipe and fitting installation.
4. Solvent welding procedure.
5. Backfilling.
6. Sprinkler head installation.
7. Controller installation.
8. Automatic valve installation.
9. 24-volt control valve wiring.
10. 120-volt controller wiring.
11. Testing.
12. Adjusting system.
13. Irrigation audit.
14. Clean up.
15. Protection of existing utilities.
16. Rock.
17. Final acceptance.
18. Operational instruction.
19. Guarantee.

6.3.C Trails and Multi-Use Paths

6.3.C.I.a. Purpose

1. Provides a safe and convenient alternative to automobile transportation.

2. Provides connections to amenities throughout the community including parks, schools, and natural areas.
3. Provides recreational opportunities.

6.3.C.I.b. Service Area

Trails and multi-use paths aim to serve the entire community and provide connections to surrounding areas.

6.3.C.I.c. Location Guidelines

1. Located along existing streets and roadways.
2. Located along arroyos.
3. Located along utility rights-of-way and other public properties or easements.
4. Connected to other trails, sidewalk, or bike facilities.
5. Connected to schools and recreation facilities.
6. Oriented to minimize trail grade changes.

6.3.C.I.d. Trail and Multi-Use Path Elements

Trail and multi-use path elements should be selected in coordination with the PRCS Department. Trails and multi-use paths should be designed in compliance with the standards of this chapter. Suggested trail elements include seating every half mile, signage at key access points and intersections, and trash receptacles with dog waste station every half mile.

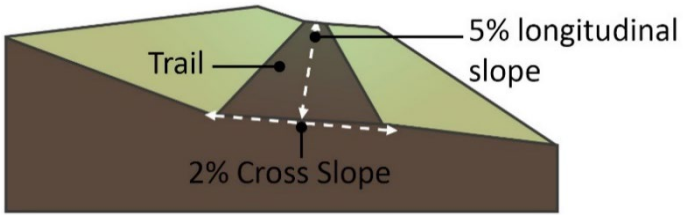
6.3.C.II. TRAILS AND PATH DESIGN STANDARDS

1. Trails and paths within the public right-of-way shall comply with the standards of Chapter 4 Transportation.
2. This section addresses the construction of a variety of trails and paths that may or may not be included as an improvement in a park project. These trail specifications are applicable to trails and paths that will be constructed by the City or constructed by others and dedicated to the City.
3. Park features shall be made ADA accessible via pathways to the parking lot and surrounding neighborhood sidewalks wherever possible.
4. Park trails and paths shall comply with the requirements of Table 6.7 Park Trail and Path Standards.

Table 6.7 Park Trail and Path Standards

Trail Typology	Minimum Width	Materials	Longitudinal Slope	Cross Slope
Paved trails within parks	5 ft	Asphalt or concrete	5% max	2% max
Crusher fine trails	5 ft	Stabilized crusher fines	5% max	2% max

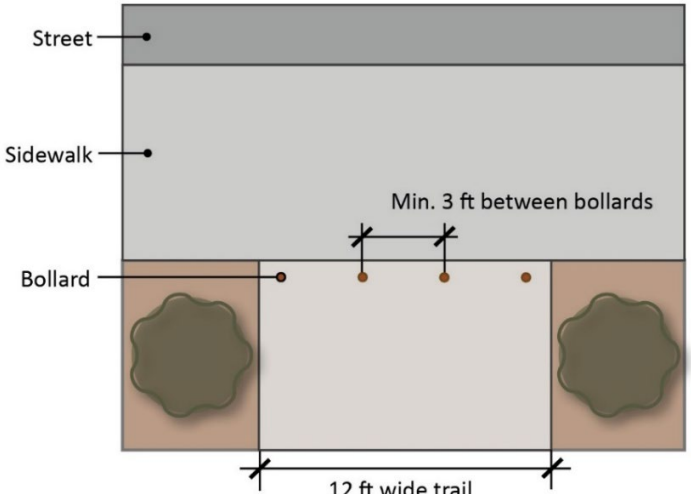
Figure 3 Cross-Slope and Longitudinal Slope of Trails



6.3.C.II.a. Paved trails

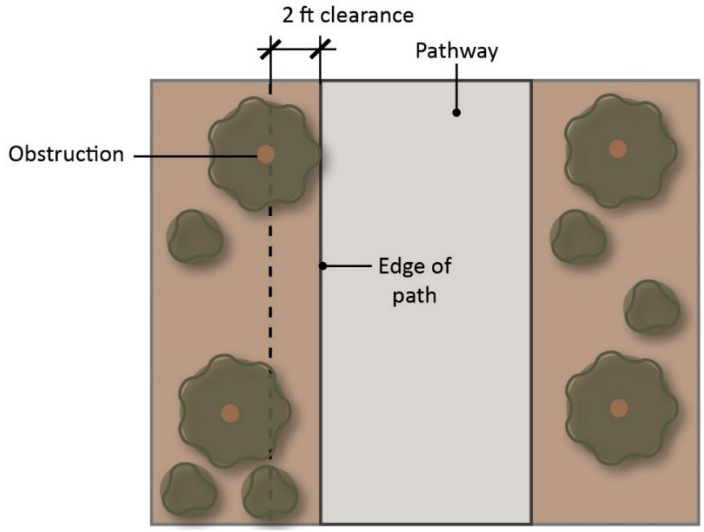
1. Paved trails within parks (not including sidewalks) and multi-purpose trails within subdivisions shall follow the City Standard for "paved pedestrian trail or parking lot" through the Department of Public Work's standard sheet "Pavement Sections – DWG. No. PS-01."
2. Paved trails shall meet minimum ADA accessibility requirements.
3. To prevent motorized vehicles from using the trails, barriers such as boulders, gates or bollards, may be placed appropriately at trail entrances. Fixed barriers, such as boulders or bollards, if used, should be a minimum of 3 ft apart to allow ADA access where appropriate.

Figure 4 Barrier Placement



a. A minimum of 2 feet of clearance between the edge of the path and any obstructions, such as shrubs, trees, signs or fences shall be maintained.

Figure 5 Path Clearance



b. Accessible pathways leading to play structures, tables, basketball courts, etc. and neighborhood sidewalks shall be provided.

6.3.C.II.b. Crusher fine trails

1. Crusher fine trails shall be comprised of crusher fines mixed with a binding product approved by PRCS Department staff, at 4-inch depth, placed on a 95% compacted subgrade. The binding product shall be applied per the City's or the manufacturer's direction.
2. Trails shall have a uniform surface free of voids, depressions, or raised areas greater than ½". Crusher fine paths in or adjacent to turf areas shall have 6 inch wide and 6-inch-deep concrete mow curb between the path and turf.

6.3.C.II.c. Open Space Trails

1. Open space trails are defined as trails or foot paths that are in a natural setting or mostly unimproved state and may or may not be ADA accessible.
2. Trail design and width shall be selected in consultation with the PRCS Department.
3. Open space trails shall meet the standards of Table 6.8 Open Space Trail Standards.

Table 6.8 Open Space Trail Standards

Open Space Trail Typology	Minimum Width	Materials
Improved multi-purpose open space trail	8 ft	Crusher fine
Improved multi-purpose open space trail as commuter connection	8 ft	Asphalt

Table 6.8 Open Space Trail Standards		
Open Space Trail Typology	**Minimum Width**	**Materials**
Improved open space trail	8 ft	Compacted native material or stabilized crusher fines
Open space foot paths	4 ft	Compacted or uncompacted native material

a. Construction should be carried out in a way that minimizes disturbance of the native vegetation or habitat. All disturbed areas outside of the expanse of the trail shall be returned to natural conditions through native reseeding, as specified in the City's Standard in the NPDES standard General Notes for Construction Plan Sets, or other methods approved by the PRCS Department.
b. The PRCS Department may require up to 2 feet on either side of the constructed trail width required within Table 6.8, be cleared, mowed, or otherwise kept free of vegetative growth.

6.3.C.II.d. Trail and Path Guarantee

All asphalt and trail surfaces shall be in compliance with City specifications and found free of any safety hazards or defects for twelve months following the date of final acceptance by the City. Replacement surfacing or City directed patching of trail sections from failure of materials or due to workmanship shall be with material of the same quality as that which is being replaced. Paved surfaces shall be in compliance with the Paving Guarantee requirements of this Chapter.

6.4 Park and Trail Appendices

6.4.A Irrigation Products and Execution

6.4.A.I. PRODUCTS

1. All materials shall be new and without flaws or defects of any type and shall be the best of their class and kind. All materials shall have a minimum guarantee of one year against material defects of defective workmanship.
2. All materials shall be the brands and types noted on the drawings or as specified herein or the approved equal.
3. The irrigation system will be designed around equipment manufactured by specific companies as a standard, typically Rainbird products unless otherwise specified. Approved equal equipment by other manufacturers may be used only with the approval of the City. Submission of irrigation sprinkler assembly for approval, as equal shall only be considered if submitted sprinkler assembly match the precipitation rate, gallons per minute and spacing of specified sprinkler assembly.
4. For City-built facilities, requests for approval of non-specified materials must be submitted to the City a minimum of seven (5) days prior to the opening of bids.
5. For facilities built as part of a subdivision by a Developer, the Park developer must indicate the use of non-specified materials prior to submission of conceptual site plan, or as part of the submission of construction plans through the Design Review Process.

6.4.A.I.a. Plastic Pipe and Fittings

1. Plastic Pipe: All mainline pipe, from the point of connection to the zone valve, shall be Schedule 40 PVC SDR 21; lateral line piping downstream of the zone valve which is ¾" in diameter and greater shall be Schedule 40 PVC SDR 21 and shall conform to ASTM D 2241. Solvent shall meet ASTM L 2774 and D 2855 requirements. All PVC pipe shall be continuously marked with identification of the manufacturer, type, class, and size, and shall be free of holes, foreign material, blisters, wrinkles, dents, sunburn or other sun damage.
2. Location Tape: Irrigation line location tape shall be non-detectable water caution tape.
3. PVC Fittings: Fittings on PVC lines shall be Schedule 40 Molded PVC pipe. All galvanized nipples shall be Schedule 40 galvanized steel pipe.
4. Threaded Nipples: All threaded PVC nipples shall be Schedule 80 Machined PVC pipe. All galvanized nipples shall be Schedule 40 galvanized steel pipe.

6.4.A.I.b. Valves and Valve Boxes

1. Valves for use in electrically controlled automatic control systems shall be diaphragm actuated and hydraulically operated solenoid valves as specified on the Drawings, and wherever possible shall be pressure regulating valves.
2. Electric valves shall include true PVC union ball valve on upstream pipe and PVC union on downstream pipe.
3. The City prefers and may require the use of Rainbird PEB for 2 inch or smaller valve and Rainbird BPE for 3 inch and larger valve for both Master Valve and Automatic Valves.
4. Valve boxes shall be 17" x 30" in size, providing sufficient horizontal and vertical space to access all unions, valves, and related components. The box shall contain 6" of 1" washed gravel with a 2" clearance to the bottom of the valve assembly.
5. Note: A flow meter shall be installed before the Master Valve assembly and before the Backflow preventer. The flow meter shall be a Master Meter.

6.4.A.I.c. Sprinkler heads and Bubblers

1. Sprinklers heads and bubblers shall be as specified and installed as shown on the Drawings.

6.4.A.I.d. Controller

1. Controllers shall be as specified on the Drawings.
2. All irrigation systems shall utilize a controller capable of being connected to the City's Central Control System. The City will provide brand and model specifications to the Landscape Architect.
3. All controllers shall be installed in a locking, stainless steel controller enclosure or clock vault.

6.4.A.II. BACKFLOW PREVENTER

1. The backflow prevention device shall be as specified on the Drawings, and it shall be permitted and inspected by a Rio Rancho certified backflow tester to comply with the City of Rio Rancho Ordinance 51 "Water and Wastewater Rules and Rates. The backflow preventer shall also be installed as required by State Code".

2. The Department requires Febco 825Y for meters 2” or smaller, and Febco 880 for 2.5” and larger. Substitution with a pressure backflow preventer will depend on back flow preventer location, site grading and line placement.
3. The backflow preventer shall be located in a Hot Box insulated enclosure. Electric power shall be made available to the box for a heat source.

6.4.A.II.a. Cements, Cleaners / Primers and Joint Compounds

1. Cement shall be plastic pipe cement for use on all sizes and schedules of PVC pipe and fittings. Cement must be NSSF approved and meet ASTM D 2564 requirements.
2. Cleaner/primer shall be purple cleaner/primer.
3. All threaded connections between metal-to-metal, PVC to metal and PVC to PVC shall be made using Teflon tape. Pipe dope is prohibited. Thread sealing compound shall not be used on thread connections between sprinkler and nipple or bubbler and nipple.

6.4.A.II.b. Wiring

1. Wire for 120-volt wiring shall be solid copper (or stranded copper in larger wire sizes), underground feeder for direct burial and PVC insulated. Size of wire shall be #12 AWG.
2. Wire for 24-volt wiring shall be solid copper wire, PVC insulated, UL approved underground feeder wire for direct burial in ground. Common wires shall be #12, white, unless otherwise noted on Drawings. The control wires shall be #14 of any color other than white unless otherwise indicated on the Drawings.
3. Wire Splicing. Wire shall be laid in long runs with as few splices underground as possible. Where splices occur, they must be accessible in the valve box.
4. Wire Splicing Materials: All wire splices shall be made watertight using watertight connectors.

6.4.A.III. EXECUTION

This section includes installation specifications for all items installed as a part of the sprinkler irrigation system. Certain construction procedures may have been omitted from these specifications that are necessary for the proper installation of the system. In any case, all materials and equipment shall be installed in a neat and workmanlike manner according to manufacturer’s recommendations and specifications, local and state codes, as shown on the Drawings and as specified herein.

6.4.A.III.a. Product Handling

The Park developer shall be responsible for correct procedures in loading, unloading, staking, transporting, and handling all materials to be used in the system. The Park developer shall avoid rough handling which could affect the useful life of equipment. Pipe shall be handled in accordance with the manufacturer’s recommendations on loading, unloading and storage.

6.4.A.III.b. Excavation and Trenching

1. The Park developer shall stake out the location of each run of pipe and all sprinkler heads and valves prior to trenching. The City shall approve each run of trenches for the system before actual installation is started.

2. Excavation and trenching for pipelines shall be true and in line with the trench banks and as nearly vertical as practical. The width of the trenches shall not be greater than necessary to permit proper joining, tamping, backfilling, bedding or any other installation procedures that may be necessary. Trench widths shall also be wide enough so that there will be a minimum horizontal and vertical separation of 4" between pipes in the same trench.
3. Pipelines shall not be stacked, and every effort shall be made to ensure that pipelines will not cross, and verified by City review and acceptance of the Drawing. Additionally, zone design and lateral line layout should minimize the occurrence of multiple lines in the same trench.
4. In areas where trees are present, trench lines will be adjusted on the site to eliminate any damage to tree roots.
5. Trench depths shall be 24" deep and sufficient to provide the specified pipe cover as described elsewhere in these specifications or as noted on the Drawings. In rocky areas the trenching depth shall be 6" below normal trench depth to allow for pipe bedding as described in other portions of these specifications.
6. Depth of Bury: Minimum cover over mainline and lateral piping shall be filled and compacted so that when the trench area is compacted, it will be compacted to the same degree and level as the surrounding soil.

6.4.A.III.c. Pipe and Fitting Installation

1. Installation of plastic pipe and fittings shall be in accordance with the manufacturer's recommendations and procedures and as mentioned in the specifications. Manufacturer's recommended procedures for making solvent weld fitting shall be strictly adhered to. Only solvent cements, cleaners, and primers or lubricants recommended or supplied by the pipe manufacturer shall be used.
2. Caution shall be exercised by the Park developer in handling, loading, unloading and storing of PVC pipe and fittings. All PVC pipes shall be stored and transported in a vehicle with a bed long enough to allow the pipe to lie flat without subjecting it to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged or in any other way found to be defective, either before or after lying shall be replaced with sound pipe without additional expense to the City.
3. Before installation, the inside of the pipe shall be cleaned of all dirt and foreign matter and shall be kept in a clean condition during and after laying of pipe. When work is not in progress, open ends of pipe and fitting shall be secured closed so that no trench water, earth or other foreign materials may enter the pipe or fitting until they have been connected to a valve or capped as directed on the irrigation system Drawings.
4. All PVC pipe and fittings shall be assembled pipe label facing up, and to permit the pipe or fittings to be jointed at the true parallel position of the fittings. Placement of pipe in curving trenches, which cause excessive bending and stress on pipe and fitting, will not be permitted. No excess piping or fittings shall be permitted in the installation of the system, which may increase pressure loss or potential blockage.
5. Before installing the pipe, all rubbish and large rocks shall be removed from the trenches. If the soil is extremely rocky, the trenches shall be bedded with dirt or sand as outlined in other portions of these specifications. The City shall approve material used for pipe bedding. The full length of each section of the pipe shall rest solidly upon the pipe bed, with recesses excavated to accommodate bells, joints, and couplings.

6. Pipe shall not be laid in water or when trench or weather conditions are unsuitable for the work. Any water, which may be encountered or may accumulate in the trenches shall be removed and trenches kept free and clear of water during the progress of the work. Pipe shall not be laid when the temperature is 32 F or below.
7. PVC pipe will expand or contract at the rate of 1"per 100' per 10 F change of temperature. Therefore, the pipe shall be installed in a manner so as to provide for expansion and contraction as recommended by the manufacturer.
8. The minimum horizontal and vertical clearance between lines in the same trench shall be 4". Pipelines shall not be stacked, and every effort shall be made to ensure that pipelines will not cross and verified by City review and acceptance of the Drawing. Additionally, zone design and lateral line layout should minimize the occurrence of multiple lines in the same trench.
9. After all sprinkler piping, risers, valves, etc., have been installed and partially backfilled as specified in other parts of these specifications, the control valve shall be opened, and a full head of water used to flush out the system. After the system is thoroughly flushed, risers shall be capped off and the system pressure tested in accordance with the testing section of these specifications. At the conclusion of the pressure test, the heads shall be installed and the backfill operation completed.

6.4.A.III.d. Solvent Welding Procedure

Pipes and fittings shall be welded as described below.

1. PVC plastic pipe shall be squarely cut utilizing a hacksaw or approved PVC pipe cutter.
2. Burrs left from cutting shall be wiped off with a clean dry cloth.
3. Utilizing a cleaner/primer, thoroughly clean the mating pipe end and the fitting socket with a clean, dry cloth.
4. Apply a uniform coat of primer to the outside of the pipe end with a non-synthetic brush or dauber.
5. In like manner, apply a light coat of primer to the inside of the fitting socket.
6. Apply a light coat of solvent cement to the pipe end and fitting socket, and quickly insert it into the fitting to the full depth of the fitting socket.
7. Rotate the pipe of fitting approximately ¼ turn to insure even distribution of the solvent cement.
8. Hold in position for approximately 30 seconds.
9. Wipe off any excess solvent cement that forms as a bead around the outer shoulder.
10. Care should be taken so as not to use an excess amount of solvent cement that could cause obstructions to form on the inside of the pipe joint.
11. Solvent weld joints shall be allowed to cure for at least 24 hours before pressure is applied to the system.

6.4.A.III.e. Backfilling

1. Upon completion of a particular section of the irrigation system, and after sufficient time has elapsed for the curing of solvent weld joints, partial backfilling can begin, leaving all joints, risers and connections exposed for visual inspection during the hydrostatic testing. Only upon successful testing and inspection for any one particular section, can that section then be completely backfilled.
2. In the event that the material from the excavation or trenching is found to be unsuitable for use in backfill by the City, it shall be removed from the site and properly disposed of by the Park developer and at his own expense. The Park developer shall then, at no additional cost to the City, arrange for, purchase, and furnish suitable backfill material consisting of earth, loam sandy clay, sand or other

approved materials free of large clods of earth or sharp stones and capable of attaining the same relative density of the surrounding ground.

3. In rocky areas, the trench depth shall be 6” below the 18” normal trench depth to allow for 6” of suitable backfill as padding for the pipe. In like manner there shall be at least 6” of padding on all sides of the pipe as padding against the rock wall of the trench.
4. All mainline piping shall have irrigation line location tape installed in the trench six (6”) inches above the pipe.
5. Backfill shall be placed in horizontal layers not exceeding 6” in depth and shall be thoroughly tamped, or water compacted to near original density or so that no settling will result. Backfill shall be placed to the original ground level as previously described (Irrigation Systems 6.5.B.II.h.ii.49). If settlement of trenches occurs within one (I) year from date of completion, it shall be the Park developer’s responsibility to refill trenches and re-seed or sod the repaired areas.

6.4.A.III.f. Sprinkler Head Installation

1. Sprinkler heads shall be of the type and make specified and shall be installed providing head-to-head coverage as will be shown on the Drawings. Sprinkler heads shall be installed with a 4” space between the edge of the sprinkler head and curbs, walls, driveways, buildings walls, etc. Heads shall be installed in the vertical position and backfilled compacted to near original density.
2. No popup sprinklers shall be located in turf areas larger than 1,00 square feet.
3. Sprinkler head spacing shall not exceed the spacing shown and shall be in the location and configuration as shown on the Drawings. Sprinkler heads shall be spaced to achieve uniform coverage.
4. After all piping and risers are in place and connected and before installation of the sprinkler heads, all control valves for a given section shall be fully opened and a full head of water shall be used to flush out the system. If water pressure without the heads installed is not sufficient to provide adequate water flow at end risers, the Park developer shall cap off enough heads closest to the water source to provide adequate flushing of the end riser assemblies.
5. Teflon tape shall be used on all sprinkler head connections.

6.4.A.III.g. Controller Installation

1. The Controller location shall be indicated on the Drawings. The Park developer shall familiarize himself with the requirements of making the power connections at the locations noted (120-volt supply to the Controller). 120-volt power shall be supplied to the Controller location by a licensed electrician. Park developer shall include this in the lump sum price for the sprinkler irrigation system.
2. The Controller shall be mounted and wired according to the manufacturer’s recommended procedures and as specified herein and on the Drawings. The controller must be GFI protected.
3. For Controllers installed inside of vaults or other enclosures, the Park developer shall provide and install on the Controller, an electrical pigtail outlet that must be GFI protected.
4. When Controllers are mounted outside of any building, vault or enclosure, the Park developer shall direct wire the 120-volt power to the Controller.
5. Remote control valves shall be connected to Controller in the numerical sequences as shown on the Drawings or as directed by the City.
6. Valve box and spacing shall be large enough for maintenance to be performed.

6.4.A.III.h. Automatic Control Valve Installation

1. All automatic control valves shall be of the type and size as indicated on the Drawings. Installation shall be according to these specifications, the Drawings and the manufacturer's recommendations.
2. The valve boxes shall be of the size and type as shown in the detail drawings.
3. Valve wire splices shall be waterproofed using waterproof connectors, and the Park developer shall provide a 36" wire expansion coil to facilitate raising splices to ground level without cutting wires.
4. All connections for electric valves shall be made using Teflon tape.
5. Flow Meter shall be installed before the Master Valve assembly and after the backflow preventer.

6.4.A.III.i. 24 Volt Control Valve Wiring

1. All wire installation procedures as described herein shall be checked to conform to local codes.
2. The Park developer shall install the 24-volt control valve wiring in the same trench as the irrigation mainline. Only when it is not possible for the wires to be installed in the mainline trench, they shall be installed in the later pipe trench. All wires shall be laid loose in the trench and taped together at 10'- 0" intervals. When trenches used for piping are not appropriate for routing wire, Park developer shall install in a separate trench, 18" deep.
3. Wire splices, other than at valve box locations, shall be kept to a minimum and if needed shall be made only at common splice points and placed in a wire splice box as shown in the detail drawings. The location of these wire splice boxes shall be made waterproof using waterproof connectors.
4. At control wire splices, the Park developer shall provide a 36" wire expansion coil to facilitate raising splices to ground level without cutting wires.
5. All continual wire shall be one color and in no case shall wires of different colors be spliced together.
6. All 24-volt wiring shall be installed in PVC conduit when inside a building. All 24-volt wiring installed on exterior building walls shall be installed in metal conduit.

6.4.A.III.j. 120 Volt Controller Wiring

1. The Park developer shall familiarize himself with the work required to complete this portion of the installation. All 120-volt wiring shall be installed in accordance with local electrical codes.
2. 120-volt power shall be supplied to the Controller location by a licensed electrician.

6.4.A.III.k. Testing

1. Upon completion of the irrigation system's main line, the entire mainline shall be tested for a one-hour period at 100 psi, unless otherwise noted. Prior to testing, the mainline shall be partially backfilled, leaving all joints and connections exposed for visual inspection. All dirt shall be flushed from the system and the line filled with water to remove air. The mainline shall be brought to static pressure. A pressure gauge and temporary valve shall be installed at the end of the mainline to permit air pressure to be applied to the main. A pressure of 100 psi must be retained for a one-hour period. Any leaks resulting in the one-hour pressure test shall be repaired and the system retested until the system passes the test.
2. Upon completion of the lateral piping sections, each lateral system shall be pressure tested for one hour at 100 psi. On systems using flex risers, or swing joints, the lateral system shall be tested prior to installation of the flex risers or swing joints. Prior to testing, the lateral lines shall be partially backfilled leaving all joints and connections exposed for visual inspection. All air and dirt shall be

flushed from the system and all open fittings shall be capped. The testing procedure shall be the same as used for the main line. If after one hour no visual leakage has occurred and the 100-psi pressure has been retained, the heads shall be installed, and the backfill operation completed. Any leaks resulting from the hydrostatic test shall be repaired and the system retested until the system passes the test.

6.4.A.III.l. Adjusting of System

After completion of testing and installation, the Park developer shall adjust all valves for the proper operating pressure and adjust all sprinklers and bubblers for uniform coverage and even flow. Park developer shall wire the Controller (valve/station) as directed by the City, and the wires shall be numbered for each of the zones. The valve number will be indicated on the Controller panel for each station. Park developer will program Controller to provide optimum sprinkler system performance.

6.4.A.III.m. Irrigation Audit

If the landscape being watered by the irrigation system has a total turf area of one or more acres, the Park developer must have a Landscape Irrigation Audit performed in order to comply with the City of Rio Rancho, Water Conservation Ordinance 52. The audit of the system must be performed prior to the installation of turf or seed.

6.4.A.III.n. Clean up

The Park developer shall continuously keep a neat and orderly area in which he is installing the system. Disposal of rubbish and waste material resulting from the installation shall be continual. Upon completion of the system, the Park developer shall remove from the City's property at his own expense, all temporary structures, rubbish, waste material, tools and equipment resulting from or used in the installation of the system.

6.4.A.III.o. Protection of Existing Utilities

The Park developer shall be responsible for locating all cables, conduits, piping, and any other utilities or structures that may be encountered either above or below ground. All necessary precautions must be taken by the Park developer to prevent any damage to these existing utilities and improvements. In the event that such damage should occur from his operations, the Park developer shall repair or replace damaged utilities to their original condition at no additional expense to the City.

6.4.A.III.p. Rock

If the Park developer encounters rock or other unfavorable trenching conditions, no additional compensation will be paid. When material from the excavation or trenching is unsuitable for use as backfill, additional backfill material suitable for this purpose shall be brought in at the expenses of the Park developer. It shall also be the Park developer's responsibility to remove and dispose of all unsuitable materials removed from the trench that cannot be used in the backfill operation.

6.4.A.III.q. Final Acceptance

1. When the Park developer is satisfied that the system is operating properly, that it is balanced, adjusted, has passed an irrigation audit, and that all work and clean-up is completed, he shall notify the City's Representative by phone, a minimum of 48 hours in advance, for an inspection.
2. At that time the Park developer shall demonstrate the operation of each system in its entirety. In judging the work, no allowance for deviation from the original Drawings and Specifications will be made unless prior approval has been obtained.
3. Any inconsistency to the Specifications or the Drawings shall be noted by the City and a written copy of required corrections shall be given to the Park developer. Any work deemed not acceptable shall be re-worked to the complete satisfaction of the City.
4. When the completed work and the "RECORD" drawings, certification of backflow inspection, keys and maintenance manual have been reviewed and approved by the City, the irrigation system will be considered complete and landscape activities may begin.

6.4.A.III.r. Operational Instruction

1. After the system has been tested and accepted as complete, the Park developer shall instruct the City or the City's representative in the operation and maintenance of the system.
2. The Park developer shall provide the City with two (2) keys for the following:
    a. Manual Straight Valves.
    b. Manual Drain Valves.
    c. Valve Boxes.
    d. Valve Markers.
    e. Controllers.
    f. Hot Box.
    g. Any locking assembly in need of key access.
3. The Park developer shall provide the City with two copies of a Maintenance Manual bound in a three-ring binder. The maintenance manual shall include copies of the approval Submittals, Controller operations manuals and manufacturers warranties on all irrigation products.

6.4.A.III.s. Guarantee

1. For a period of one (1) year from final acceptance of the facility, the Park developer will promptly furnish and install any damaged or inoperative materials or systems that are found to be damaged, defective, or inoperable due to manufacture defects, improper installation or workmanship, but not regular wear or operation of the system or facility. Damage due to irrigation system line breaks shall be repaired and brought to original condition by the Park developer at no expense to the City.
2. In the fall, at the City's request, the Park developer will drain the system, and otherwise prepare the system for winter. In the spring, at the City's request, the Park developer will reactivate the system, repair any defects or damage and adjust the system. As these services are performed, the Park developer will inform and instruct the City.
3. For a period of one (1) year from final acceptance of the facility, the Park developer shall repair any settlement of trenches by one of the following methods as directed by the City.
    a. Bring to grade by top-dressing (raking topsoil into grass).
    b. Bring to grade with amended topsoil and seed.

c. Remove existing sod, fill depression with topsoil, and replace with new sod to match existing sod.
d. Repair by any of the above methods must result in a smooth, level area. Maintenance of repaired areas shall be the responsibility of the City.

DEVELOPMENT PROCESS MANUAL

Chapter 7: Surveys and Permanent Monumentation



RioRancho City of Vision

Bohannan Huston

Dekker Architecture in Progress

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7. Surveys and Permanent Monumentation

7.1 Introduction

This chapter outlines the minimum criteria, standards, and acceptable procedures for establishing survey monuments required by the City of Rio Rancho's Subdivision Ordinance (Chapter 155) and the New Mexico State Statutes Chapter 61-23-1 Engineering and Surveying Practices Act (NMSA 1978).

All subdivision surveys shall be referenced to the coordinate system based on the New Mexico State Plane, Central Zone, with vertical datum utilizing North American Vertical Datum 1988 (NAVD'88), and horizontal datum utilizing North American Datum 1983 (NAD'83). At least one point on the subdivision survey plat must show New Mexico State Plane northing and easting coordinates with combined scale factor and mapping angle indicated. Where existing platting references land grant or other information, subsequent platting will reference the New Mexico State Plane, Central Zone Coordinate System (Chapter 155.24 (D) (3), (a) and 155.25(C), (5)).

In general, any professional surveyor licensed in the State of New Mexico can perform the survey requirements for the development process; however, certain portions must be performed under the City Engineer or his/her designee approval and specifications.

7.2 Governing Regulations

The New Mexico State Statutes, including but not limited to NMSA 1978, 61-23-1, Engineering and Surveying Practices Act, and the NMAC Title 12, Chapter 8 Part 2, Minimum Standards for Surveying in New Mexico contains the regulations governing monumentation and surveys for subdivisions in the City of Rio Rancho. Survey, design, and construction professionals should be thoroughly familiar with the survey and monumentation requirements of these regulations.

7.3 Monumentation

7.3.A Subdivision Monuments

1. Subdivision control monuments must meet the State's current Minimum Standards for Surveying in New Mexico, as amended.
2. Monuments must be set flush with the earth or within 0.2 feet above and must bear a cap or permanent tag identifying the registration number of the surveyor setting the monument.
3. Subdivision control monuments shall be set only under the supervision of a professional surveyor licensed in the State of New Mexico.

7.3.B Permanent Survey Monuments

Section reserved for future use.

7.3.C Benchmarks

Section reserved for future use.

7.4 Rio Rancho Geodetic Reference (Control Survey Network)

Section reserved for future use.

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
I. Introduction	2 Development Procedures	• Contents from existing Volume I were moved into one comprehensive new chapter about procedures • Relocated all procedures that currently lived in Volume 2 • Updated all procedures to be consistent with current staff practices • Removed checklists to make them more administrative and accessible on City's website • Re-formatted all sections for consistency and provided updated process flowcharts
I.1 Development Process Review	2.1	• Clarified and updated Development Process overview language • Created more detailed summary of procedures table that includes all development applications in Chp.2 and indicated information regarding Notifications, Review/Decision authorities and cross references to sections providing actual procedures.
I.3 Starting the Process	2.2.A Development Review Committee Process	• Clarified DRC process in terms of timing and review authorities
1.13 Notifications	2.2 B Public Notices 2.2 C Public Hearings	• Added requirements that the notices need to include address and name of the property owner and name of applicant if different from property owner, summary of the project, date, time of hearing and contact information for additional information. • Remaining content remains generally the same. • Added requirements for Public Hearings, Table 1 summary development procedures summarize which application requires a public hearing.
1.15 Appeals	2.2 D Appeals	• Requirements for Public Hearings can be found in Table 1- Summary development procedures on decision making body that hears appeals for the different types of applications. • Clarified language and added illustrative flowchart for criteria for administrative decision appeal process • Clarified language and flowchart for criteria for Planning and Zoning decision appeal process • Appeal to governing body decision appeal process area made in District Court.
-----	2.3 Policy Decisions	• Added Policy Decision process that implement large City goals and policies within the Comp Plan, Master Plan and Specific Area Plans.

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
I.4 Annexation-Expanding City Limits	2.3.A Annexation	• Provided detailed language on recommendations on Annexation of lands into the municipal corporate limits • Added new language to the Annexation Process
I.5 Planning-Rio Rancho's Future	2.3.B Land Use Plans	• Removed references to Large Scale Area Plans • Added process for Land Use Plan Adoption which includes the Criteria for Approval.
I.6 Zoning-Determining Land Use	2.3.B.I Land Use Plan Adoption 2.4. C Zoning	• Added language regarding Land Use Plan Adoption which includes the Criteria for Approval, Land Use Plan Process, • Land Use Plan amendment and Criteria for Approval, Land Use Plan Amendment Process
----	2.4 Decisions Requiring a Public Hearing	• Added language to process that requires a public hearing process which includes an illustrative flowchart.
I.7 Platting-Subdivision of Land	2.4.A Subdivision of Land 2.6 G Summary Plat Procedure	• Added additional language clarifying each procedure and shifted materials in the following order: ○ Added description of what a Bulk Plat Procedure is, added additional clarifying language and flowchart of the process and timeline. ○ Added procedures including illustrative flowchart for the timelines of the process for Preliminary Plat Procedure ○ Added language and flowchart for the timelines of the process of Plat Extension Procedure ○ Added the criterial for approval process for the Final Plat Procedure ○ Final Plat Procedure Criteria for approval and the final plat process with an illustrative flowchart. ○ Added clarified language and Vacation Plan criteria for approval and process with an illustrative flowchart. ○ Clarified language for Subdivision Criteria for Approval and Variance Process with an illustrative flowchart.
1.14 Variances	2.4.A.VI. Subdivision Variances	• Added language and flowchart to clarify the Subdivision Variance Process • Added language and flowchart to clarify Administrative Variance Process

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
	2.4 F Variances	
1.11 Street Addressing and Naming	2.4.B Street Naming	• Added language to Citizen Petition Street Name Change Process • Added language to Governing Body Street Name Change Process
I.9 Construction-Permitting Buildings	2.5 Construction Permits 2.5.A Building Permits	• Provided clarification on the types of actions that do/do not require residential permits. Additional Development actions for residential permit include - manufactured home placement, repairs, re-roofs, solar energy systems, new windows, decks exceeding 120 SF and are 30" above grade, retaining walls supporting more than 3' of unbalanced backfill. • Clarified Building Permit Process through flowchart. • Added projects like new commercial structures, New Multifamily Structures, Additions, Remodels, Repairs, Tenant Improvements, Re-Roofs, Solar Energy Systems, Public And Private Parks To Commercial And Multifamily Permits. • Removed this section from the original DPM that required to begin the plan review and building permitting process which included Site Development plan, Grading Drainage plan, Stormwater pollution prevention plan, Architectural plan, mechanical plan, plumbing and gas plan, electrical plan, landscape plan and additional documents. • Added language to Building Permit Process regarding criteria, the process. • Clarified and added new language to Construction Inspection Procedures like building inspections, electrical inspections, plumbing inspections
------	2.5.B. Park Permits	• Added new park permit for parks and recreational facilities owned and maintained by the City and private entities. • Added standards for process similar to other construction permits. • Added language pertaining to the Maintenance and Protection of Park features • Added language regarding the inspections for various Park elements

1.12 Administrative Permits and Processes	2.6 Administrative Permits	• Added a list to what all require a special permit, including:
		  ○ Food or/and alcohol
		  ○ Dedicated safety resources
		  ○ Tents/other structures erected.

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
		• Traffic flow access- moved from Transportation Section.
I.2 Business Registration/Licensing	2.6.A Business Registration and Business Licensing	• Moved Business Registration and licensing section from 1.2 to 1.12 but language generally stay the same. • Removed Hobby Breeder section. • Clarified language for Home Occupation license process through a flowchart.
------	2.6.B Change of Address	• Added new section for language to Change of Address process.
1.12 Administrative Permits and Processes	2.6. C Residential Care Facilities and Childcare facilities	• Clarified the approval process of Residential and childcare facility through a flowchart.
-------	2.6. D Administrative Garage Conversions	• Added new section- Administrative Garage Conversions and clarified the process through a flowchart.
1.12 Administrative Permits and Processes	2.6.E Model Homes/Sales Office	• Added Criteria for Approval and the process for Model homes/Sales office.
1.12 Administrative Permits and Processes	2.6. F Signs	• Clarified Sign Permit Process through a flowchart.
1.12 Administrative Permits and Processes	2.6.J Wireless Telecommunication Facilities	• Added new language to permit approval process, that there are three separate processes depending on the scope and location of the project • Added new language – substantial changes, collocations, and new towers in residential zone districts process • Added new language – substantial changes, collocations, and new towers in non-residential zone districts process
1.12 Administrative Permits and Processes	2.6.H Special Event Permits	• Removed language which said- “special events are limited to two events per business/org per year.” • Special event permits are required when any of the following requires a permit: • Selling or vending of food or/and alcohol, Dedicated safety resources are necessary, Tents or other structures are erected, Traffic flow and access is impacted

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
		• Clarified the special event process through a flowchart.
1.12 Administrative Permits and Processes	2.6. J Fences, Walls and Small Accessory Structure Permits	• Changed language to fences, walls and accessory structures that do not exceed 120SF require a zoning plan review. • Clarified the permit process through an illustrative flowchart.
II.2 Submittal Requirements	2.7 Submittal Requirements 2.7. A Technical Reports, Studies and Analysis	• Reformatted this section • Clarified language that in addition to required plans, submittals include technical reports, studies and analysis including but not limited to Drainage reports, Drainage Implementation Plan, Geotechnical Report and the Traffic Impact Study • Updated TIS requirements • Clarified language to speak to Report format and Organization Guidelines • Clarified language to the minimum requirements for technical reports and studies that are required for the submittal.
II.2 Submittal Requirements	2.7 B Construction Plan Standards	• Added language to say that the plans should first use City of Rio Rancho standards and drawings followed by NMDOT standards and drawings • Added requirements for Plan Submittal sets for residential and commercial developments
II.2 Submittal Requirements	2.7. C Plan sheet Sequence	• Content stays generally the same.
II.2 Submittal Requirements	2.7 D Digital Record Drawing Requirements	• Added new requirements like GIS Shapefile requirements, the rest of the language generally remains the same.
II. 1. Recordable and Development Documents	2.7. E Recordable Documents	• Content generally stays the same.
II.7 -Appendices	2.7.F Submittal Requirement Appendices	• Content generally stays the same.
I.10 Construction-Infrastructure	2.8 Public Infrastructure Improvements	• Clarified language pertaining to what a Development Agreement is, and the process • Added additional language to clarify the approval land process for construction within the public-right-of way • Added language pertaining to Grading and Drainage Improvements moved into procedures from Drainage section.

Development Process Manual Crosswalk Table Chapter 2 Procedures		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
	2.8 B Application for Construction within Public Right of Way	• Moved from Chp.4 Transportation section, content stays generally the same.
	2.8 C Grading and Drainage Improvements	• Moved from Chp.4 Drainage, Flood Control and Erosion, content stays generally the same.
	2.8 D Drainage Submittals	• Moved from Chp.4 Drainage, Flood Control and Erosion. Content updated.
	2.8 E Vacation Procedure for Rights of Way and Easements	• Moved from Chp.4 Transportation section, content stays generally the same.
	2.8 F Storm Drainage Infrastructure Allocation	• Moved from Chp.4 Drainage, Flood Control and Erosion, content stays generally the same.
II-7- 2.0 Construction Submittal	2.9 Record Drawings	• Added GIS Shapefile requirements • Surveying associated with certification must be completed by professional surveyor or engineer. • Clarified process and initiating actions under responsibility of the contractor. • Allowances for electronic copies
I.8 Impact Fees-Paying for Growth		No revisions

Development Process Manual Crosswalk Table Chapter 3 Drainage, Flood Control, and Erosion		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
1. Intent & Support Documents	**3.1 Introduction**	• Changed "Intent & Support Documents", to "Introduction". • Clarified purpose and administration of the standards focused on City of Rio Rancho in coordination with SSCAFCA.
1.A. Goals, Mission Statement and Vision Statement		• Removed "Goals, Mission and Vision Statement" as they were each specific to the operations and purview of SSCAFCA, not the City.
1.B. Summary of Documents Relating to Drainage, Flood Control and Erosion Control	**3.2 References**	• Simplified multiple reference locations and added links.
2. Hydrology	**3.3 Hydrology**	• Added clarification that developments larger than 40 acres in the City shall follow SSCAFCA guidelines. This is consistent with current processes and based on consultation with City staff and SSCAFCA staff.
2.A Preface		• Preface section was removed for streamlining and clean up purposes. Previously this section only provided historical narrative on the evolution of the DPM from the standpoint of SSCAFCA.
2.B. Introduction		• Removed methodology that is no longer applicable.
	3.3.A Considerations	• Clarified coordination with SSCAFCA and the use of SSCAFCA's Hydrology Manual. • Outlines the use of this document by the City.
	3.3.B Storm Drainage Release Rate	• Section was previously included later in the document. Moved to increase clarity and understanding of this standard for the City. • Release rate was updated to reflect current practice based on technical expert recommendations and SSCAFCA/City staff concurrence. • "Unless further restricted by downstream or specific infrastructure limitations, the peak discharge permitted from a developed property in the event of a ***100-year, 24-hour storm*** shall be the amount of the historic or pre-developed peak discharge in all watersheds of the City of Rio Rancho."
2.C. Symbols and Definitions	Symbols and Definitions	• Updated symbols to reflect current equation needs for hydrologic analysis purposes.
Definitions	3.3.B.I. Definitions	• Content remained the same.

Development Process Manual Crosswalk Table Chapter 3 Drainage, Flood Control, and Erosion		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
		• Removed minimal terms no longer necessary for hydrologic analysis/calculations.
Storm Drainage Release Rate	3.3.B Storm Drainage Release Rate	• Moved to section 3.3.B above. • Updated release rate – see text above.
2.D. Rational Method	3.3.C Rational Method	
2.D.1 Introduction	3.3.C Rational Method	• After substantial review by consultant, technical experts and stakeholders, standards for rational method were determined to be up to date.
2.D.2 Assumptions	3.3.C.I. Assumptions	• After substantial review by consultant, technical experts and stakeholders, assumptions were determined to be up to date.
2.D.3 Limitations	3.3.C.II. Limitations	• After substantial review by consultant, technical experts and stakeholders, limitations were determined to be up to date.
2.D.4 Runoff Coefficients	3.3.C.III. Runoff Coefficients	• Removed copy/pasted reference material from external documentation managed by external authorities. • Runoff coefficients may be determined following the procedure outlined in the current version of the New Mexico Department of Transportation Drainage Design Manual (NMDOT DDM, Section 403.3)
2.D.5 Time of Concentration	3.3.C.IV. Time of Concentration	• After substantial review by consultant, technical experts and stakeholders, standards for time of concentration were determined to be up to date.
2.D.6 Intensity	3.3.C.V. Intensity	• After substantial review by consultant, technical experts and stakeholders, standards for intensity were determined to be up to date.
2.D.7 Runoff Volume	3.3.C.VI. Runoff Volume	• Added reference to NOAA 14 Precipitation Frequency Data Server for updated Precipitation Values in the future.
2.D.8 Runoff Hydrograph	3.3.C.VII. Runoff Hydrograph	• After substantial review by consultant, technical experts and stakeholders, standards for runoff hydrograph were determined to be up to date.
2.D.9 Procedure		• Procedure specifications were removed. Licensed engineers are expected to know the expected procedure.
2.D.10 Example		• Removed to streamline and clarify.

Development Process Manual Crosswalk Table Chapter 3 Drainage, Flood Control, and Erosion		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
2.E. Rainfall-Runoff Modeling: AHYMO		• Removed – AHYMO is no longer used.
2.F. Rainfall-Runoff Modeling: HEC-HMS	3.3.D Rainfall-Runoff Modeling: HEC-HMS	• Instead of detailing rainfall-runoff modeling for drainage areas greater than 40 acres, the updated section references and links to the procedure that SSCAFCA uses. An area of this size follows the SSCAFCA process, not a City process. • "Rainfall-runoff modeling for drainage areas greater than 40 acres in size is to be conducted using the U.S. Army Corps of Engineers HEC-HMS software following the procedures outlined at http://www.sscafca.org/resources."
2.G Procedure for Probable Maximum Flood	3.3.E Procedure for Probable Maximum Flood	• Content remained largely the same. Updated reference links. • New Mexico Office of the State Engineer/Interstate Stream Commission • GIS Probable Maximum Precipitation (PMP) Tool Documentation
2.H Use of Alternate Procedures		• Removed because a licensed engineer is expected to know the procedure.
Part G – AHYMO Input and Output		• Removed. No longer used.
3. Hydraulic Design	**3.4 Hydraulic Design**	• Removed Bibliography and moved to end of chapter.
	Head Losses	• Added reference to SSCAFCA's Sediment and Erosion Design Guide. • The values of n can be found in SSCAFCA's Sediment and Erosion Design Guide. For materials not listed, contact the City Engineer prior to use.
4. Channel Treatment Selection Guidelines	**3.5 Channel Treatment Selection Guidelines**	• After substantial review by consultant, technical experts and stakeholders, channel treatment selection guidelines were determined to be up to date.
5. Design Grading and Erosion Control	**3.6 Design Grading and Erosion Control**	• SSCAFCA specific roles and responsibilities have been removed to focus on City expectations. • "Projects on/with SSCAFCA owned and/or maintained facilities must have an agreement in place with SSCAFCA."
6. Rights-of-Way and Easements	**3.7 Rights-of-Way and Easements**	• Removed SSCAFCA roles and responsibilities • "Projects on/with SSCAFCA owned and/or maintained facilities must have an agreement in place with SSCAFCA."

Development Process Manual Crosswalk Table Chapter 3 Drainage, Flood Control, and Erosion		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
7. Procedures for Drainage Submittals		• Moved to Chapter 2 Procedures.
8. Supplementary Materials for Drainage Submittals		• Moved to Chapter 2 Procedures.

9. Miscellaneous	**3.8 Miscellaneous**	• Removed SSCAFCA roles and responsibilities.
		  • Removed standards for publicly maintained facilities.
		  • Removed "Development that encroaches or is adjacent to a Lateral Erosion Envelope (LEE) must: Comply with Watershed Parks/Quality of Life Plan and consider inclusion of Quality of Life amenities acceptable to SSCAFCA.."

10. Stormwater Pollution Control	**3.9 Stormwater Quality and Low Impact Development**	• Complete overhaul of this minor section. • Content was updated and provided to the consultant team by City Staff, for example:
	3.9. A General	• "..sustainable stormwater management strategies must be utilized to control runoff by minimizing impervious cover and by using natural or man-made systems to filter and recharge stormwater into the ground."
	3.9.B Applicability	• "All land development projects must comply with the MS4 Permit and City of Rio Rancho, Municipal Code, Chapter 153, which requires stormwater Best Management Practices (BMP) to manage the stormwater quality.. This includes sites which disturb less than one acre.. • "Projects must also evaluate opportunities to implement low impact development and green infrastructure best management practices."
	3.9.C Stormwater Quality Volume	• "Required water quality volume, provided water quality volume and surface water quality elevation, as well as 100-year water surface elevation shall be shown on the Grading and Drainage Plan." • "Impervious area calculations shall include all roads, driveways, parking areas buildings, concrete, and other impermeable construction covering the natural land surface."
	Bibliography	• Moved from previous section 3.4. • Updated reference links

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
1. Introduction	**4.1 Introduction**	
1.1 Purpose	4.1.A Purpose	• Under, the following shall be established, removed "topography of the area" and added "impacted existing roadway and new roadways to be constructed".
1.2 Applicability	**4.2 Applicability**	• Clarified/simplified language.

	4.3 Definitions	• Added definitions for 21 transportation related items, for example:
		  • *Average Daily Traffic (ADT)*
		  • *Bikeway*
		  • *Design Year*
		  • *Functional Classification*
		  • *Etc.*

2. Transportation	**4.4 Transportation Planning**	
2.1 Functional Classification	4.4.A Functional Classification and Level of Service (LOS)	• Created graphics to help the reader visualize roadway functional classifications. • Updated roadway functional classifications by removing urban and rural categories – creation of one set of functional classifications.

2.1.1.1 Rural Principal Arterial Road System &
2.1.2.1 Urban Principal Arterial Road System
	4.4.A.I.a. Principal Arterial	• Recategorized Rural and Urban Principal Arterial Road System to "Principal Arterial"
		• Recategorized roadway characteristics.
		  • Posted speeds between 45 mph and 65 mph.
		  • Four-lane or six-lane roads with exclusive turn lanes where applicable.

2.1.1.2 Rural Minor Arterial Road System &
2.1.2.2 Urban Minor Arterial Road System
	4.4.A.I.b. Minor Arterial	• Recategorized Rural and Urban Minor Arterial Road Systems to "Minor Arterial"
		• Recategorized roadway characteristics.
		  • Posted speeds between 45 mph
		  • Undivided or undivided (divided preferred) two or four-lane with intersections at grade and exclusive turn lanes where applicable."

2.1.1.3 Rural Local Road System & 2.1.2.4 Urban Local Road System (Residential)	4.4.A.I.e. Local Road	• Recategorized Rural and Urban Minor Local Road Systems to "Local Road" • Recategorized roadway characteristics. • Speed limit of 25 mph.

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**

2.1.2.3 Urban Collector Road System	4.4.A.I.c. Major Collector & 4.4.A.I.d Minor Collector	• Recategorized "Urban Collector Road System" to "Major Collector" and "Minor Collector"
		• Recategorized roadway characteristics.
		  • Commercial development may front directly on the road.
		  • Residences do not front collectors.
		  • Minimum speed limit of 30 mph.

Table 2.1 Urban and Rural Roadway Planning Level Traffic Volumes	Table 1 Roadway Planning Level Traffic	• Reduced 2-Way ADT Range for Local Road from 50-1,500 to 50-1,000, to increase safety, per engineer's recommendation. • Reduced ADT/Lane for Principal Arterial from 10,000 to 7,500, to increase safety, per engineer's recommendation.
	4.4.C Traffic Impact Analysis Procedures	• Moved this content from Section 2.4 to here to make it easier to find. • Developers shall initially provide a trip generation report and a site plan for staff to review to determine if further traffic impact analysis is required. • Depending on the volume of vehicle trips a development is estimated to generate during either the AM or PM peak hour, an expanded TIA may be required.
2.3 Design Hour Volumes	4.4.D Design Hour Volumes	• Removed formula to determine DHV because the DPM states what is required not how to do it. • Added link to MRCOG travel demand model.
2.4 Traffic Impact Study Procedures		• Moved up to section 4.4.C.
3. Design Procedure	**4.5 Design Procedure**	
3.1 Basic Criteria	4.5.A Basic Criteria	• Added reference to Procedures chapter.
3.2 Special Provisions and Engineer's Estimate	4.5.B Special Provisions and Engineer's Estimate	• Removed special provisions for Capital Improvement Projects specific to City implementation efforts.
3.3 Survey and Data Acquisition	4.5.C Survey and Data Acquisition	• Removed survey and data acquisition procedures. The development of a survey for the purposes of roadway design shall be completed in accordance with Chapter 6 Survey and Permanent Monumentation of the Development Process Manual.

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
3.4 Right of Way	4.5.D Right of Way	• After substantial review by consultant, technical experts and stakeholders, right of way standards were determined to be up to date.
3.5 Utilities	4.5.E Utilities	• Removed the requirement for a City of Rio Rancho Utility Conflict Letter. For any PNM maintained streetlights (unmetered) this would be the responsibility of the developer. The City could assist in coordination with a City maintained (metered) streetlight.
3.6 Traffic Design	4.5.F Signing and Striping	• Renamed “Traffic Design” to “Signing and Striping” to better reflect the content of the section.
3.6.1 Signing & Striping Design	4.5.F.I. Signing and Striping Design	• Changed to just refer to the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), to reflect current practice. This is done to streamline the code and also reduce the risk of including specific standards that may get updated, then become outdated in the code.
3.6.2 Coordination with the City	4.5.F.II Coordination with the City	• Removed expectation for the Project Design Team to develop a description of the project showing all proposed improvements prior to meeting with the City. • Clarified topics of discussion between Developer and the City.

3.6.3 Field Review		• Removed requirement for field review.
		  ◦ Removed site visit.
		  ◦ Removed site inventory.

3.6.4 Early Traffic Engineering Input into Geometric Design	4.5.F.III. Early Traffic Engineering Input into Geometric Design	• Simplified by referencing the current version of the Manual on Uniform Traffic Control Devices.
3.6.5 Lighting and Signing	4.5.F.IV. Lighting and Signing	• There is an outstanding comment noting a conflicting standard. • Removed requirement for a label to be placed on the back of all single sided signing installed by developer contractors.
3.6.6 Intersection Control and Markings	4.5.F.V Intersection Control and Markings	• After substantial review by consultant, technical experts and stakeholders, standards for intersection control and markings were determined to be up to date.

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
3.6.7 Traffic Control, Construction Phasing and Construction Permits	4.5.F.VI. Traffic Control, Construction Phasing and Construction Permits	• Simplified by referencing latest edition of the Manual on Uniform Traffic Control Devices and Right of Way use permits located on the City's website.
3.7 Railroad Crossings - Reserved		• Removed – reservation not anticipated for future requirements.
3.8 Subdivision Infrastructure Requirements	4.5.G Subdivision Infrastructure Requirements	• After substantial review by consultant, technical experts and stakeholders, standards for subdivision infrastructure requirements were determined to be up to date.
3.9 As-Builts	4.5.H Post Construction Requirements	• Renamed section from "As-Builts" to "Post Construction Requirements" to better reflect the content of the section.
4. Geometric Design Criteria	**4.6 Roadway Design Standards**	• Renamed section from "Geometric Design Criteria" to "Roadway Design Standards" to better reflect the content of the section.
4.1 Geometric Design Criteria	4.6.A Design Criteria	• Moved publications to an earlier section of the chapter.
4.2 Roadway Cross Sections	4.6.B Roadway Cross Sections	• Removed "The length of the transition to match the standard cross section must be determined using the road width transition tapers as specified in SECTION 4.0, SUBSECTION 8.0 TRANSITION TAPERS."
4.3 Design Speeds	4.6.C Design Speeds and Posted Speeds	• Renamed section from "Design Speeds" to "Design Speeds and Posted Speeds" to better reflect the content of the section.
4.4 Horizontal Curves	4.6.D Horizontal Curves	• Simplified with one reference to AASHTO's A Policy on Geometric Design of Highways and Streets, latest edition.
4.5 - 4.11	4.6.E – 4.6.G	• After review by consultant, technical experts and stakeholders, kept reference to AASHTO guidance for vertical alignment, roadway alignment, clear zones, guardrail, and curb standards.
4.12 Sidewalks	4.6.H Sidewalks	• Added, sidewalks shall take into account Public Rights-of-Way Accessibility Guidelines.
4.13 Grading in Parkway and on Private Property	4.6.I Grading in Parkway and on Private Property	• Reformatted sections to simplify code. • After substantial review by consultant, technical experts and stakeholders, standards for grading in parkway and on private property were determined to be up to date.

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**

5. Intersections	**4.7 Intersections**	• Simplified content by referencing other publications.
		• Added links to references.
		  ◦ Added link to Traffic Calming techniques listed on the City's website.
		  ◦ Added link to City's Roundabout Information.
		• Removed standards for traffic circles.

6. Access to City of Rio Rancho Roadway System	**4.8 Access Control**	• Renamed section from "Access to City of Rio Rancho Roadway System" to "Access Control" to better reflect the content of the section.
6.1 Access Control		• Removed superfluous content to help streamline.
6.2 Driveways	**4.11 Driveways**	• Moved definition of driveway and removed driveway types.
6.3 Driveway Characteristics	4.11.A Driveway Characteristics	• After substantial review by consultant, technical experts and stakeholders, driveway characteristics were determined to be up to date.
6.4 Driveway Design	**4.12 Driveway Design**	• Removed, "The design of these islands must accommodate a WB-50 design vehicle." • Replaced "The sight distance requirements for passenger cars are based on a 3.5 foot height of eye and 3.5 foot height of object. The distances for trucks are based on a 7.6 foot height of eye and 3.5 foot height of object." with "AASHTO guidance and a design speed of at least 5 miles per hour should be used when determining site distance."
6.5.3 Large Developments	**4.13 Large Developments**	• After substantial review by consultant, technical experts and stakeholders, standards for large developments were determined to be up to date.
6.6 – 6.8	4.14 – 4.16	• After substantial review by consultant, technical experts and stakeholders, standards for driveway locations, driveway storage and acceleration and decelerations lanes were determined to be up to date.
7. Bicycle Facilities Guidelines	**4.17 Bicycle Facilities Guidelines**	• Updated standards with reference to the City's Bicycle and Pedestrian Transportation Master Plan. • Added link to Urban Bikeway Design Guide.
8. Landscaping	**4.18 Landscaping**	• Updated the graphics to display standards.
Appendix A-1, A-2, and A-3		• Removed. Available on the City's website.

Development Process Manual Crosswalk Table Chapter 4 Transportation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
	4.19 Appendix A	• New table for Intersection Stop bars/Yield Marks, Crosswalks, and Lane Designation Symbols

Development Process Manual Crosswalk Table Chapter 5 Water and Wastewater		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
1. Introduction	**5.1.A Purpose**	• Retitled to "Purpose" for clarity.
2.1 Authority	5.1.B Applicability	• Retitled to "Applicability" for clarity.
2.2 Effective Date of Standards	5.1.C Effective Date of Standards	• After review by consultant, and Development Services, Effective Date of Standards was determined to be appropriate.
2.3 Revisions	5.1.D Revisions	• After review by consultant, and Development Services, standards for Revisions were determined to be appropriate.
2.4 City of Rio Rancho Department of Public Works Control	5.1.E City of Rio Rancho Utilities Department	• After review by consultant, and Development Services, language for City of Rio Rancho Utilities Department was determined to be appropriate.
2.5 Organization and Interpretation of Manual		• Organization and Interpretation of Manual was removed. No longer applicable.
2.6 Definitions	5.1.F Definitions	• Moved definitions here to make them easier to find.
2.7 Abbreviations	5.1.G Abbreviations	• Moved abbreviations here to make them easier to find.
2.8 Standards Specifications and Details	5.1.H Standard Specifications and Details	• After substantial review by consultant, technical experts and stakeholders, standard specifications and details were determined to be up to date.
2.9 General Notes	5.1.I General Notes	• Updated the link.
2.10 Standard Products List	5.1.J Standard Products List	
2.11 Availability Statement Process	5.1.K Availability Statement Process	• After review by consultant, and Development Services, the Availability Statement Process was determined to be appropriate.
3. Utility Engineering Report		• Moved procedures for a utility engineering report to Chapter 2 Procedures.
4. Water Distribution and Transmission Systems	**5.2 Water Distribution and Transmission Systems**	• After substantial review by consultant, technical experts and stakeholders, standards for water distribution and transmission systems were determined to be up to date.
5. Water Production Facilities	**5.3 Water Production Facilities**	• After substantial review by consultant, technical experts and stakeholders, standards for water production facilities were determined to be up to date.
6. Wastewater Collection System	**5.4 Wastewater Collection System**	• After substantial review by consultant, technical experts and stakeholders, standards for the wastewater collection system were determined to be up to date.
Appendix A: Definitions		• Moved definitions to section 5.1.F above.

Appendix B: Abbreviations		• Moved abbreviations to section 5.1.G above.
Appendix C: Standard Details and Drawings	5.4.I Appendix A: Standard Details and Drawings	• Content remained the same.
Appendix D: Approved Products List		• Removed. Reference links to City website for any provided list.
Appendix E: Water and Wastewater Availability Information		• Removed. Reference links to City City's website.

Development Process Manual Crosswalk Table Chapter 6 Parks and Trail Design		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
1. Introduction	**6.1 Introduction**	• Clarified/simplified language but content remains generally the same.
	6.2 Applicability	• New to provide clarity on what facility must comply with these standards • All parks must submit new Parks Application • Parks under 3 acres must be owned and maintained by a Homeowners Association (HOA). • Privately owned and maintained parks, trails, and recreation facilities should be coordinated with the City PRCS Department and are subject to the minimum safety requirements of International Play Equipment Manufacturers Association (IPEMA), Consumer Product Safety Commission's (CPSC), and the Americans with Disabilities Act (ADA).
2. Design Guidelines	**6.3. Design Standards**	

1. General Design	6.3.A General Design	• Added standards to ensure construction is completed by licensed professional and is compliant with applicable codes:
		  • International Building Code and New Mexico Administrative Code requirements shall be followed for all design, construction, and improvements made to parks, trails, and related facilities
		  • The U.S. Access Board's Guide to Accessibility Standards, as well as any other applicable ADA standards, shall be followed.
		  • Clarified min accessible pathways necessary to elements such as shade structure, activity elements, public sidewalks etc.
		  • Requirements for park developer shall make every effort to maximize the usable space, activity, and turf areas.
		  • New standards that disturbance to terrain and vegetation to undeveloped open space areas shall be minimized to the maximum extent practicable. Disturbed areas shall be reseeded or planted with low-water, low maintenance, native, or naturalized plant materials and maintained for 3 years.

2. Park Design Standards	6.3.B Parks	
	6.3.B.I Park Typology Standards	• Added a new subsection that clearly outlines the Parks Typologies to more closely align with the Parks Master Plan: New table for Park Typologies, removed small neighborhood parks and add

		new HOA pocket park for parks that are 3 acres that are now required to be owned/maintained by HOAs, Neighborhood parks, formerly Large Neighborhood Parks, refer to city-maintained parks between 3-10 acres.
2.1 Small Neighborhood Parks Design Guidelines	--	• Removed small neighborhood park requirements as parks are now required to be owned and maintained by HOAs
2.2 Large Neighborhood Park Design – Guidelines	6.3.B.I.a Neighborhood Park	• Park type sections are reorganized to clearly provide a purpose, service area, size guidelines, location guidelines, and min park elements. Above categories align with Parks Master Plan • Generate a table that outlined desired park elements per discussions with PRSC staff: ○ Clarified between required and optional elements, ○ Simplified playground elements to activity elements for more flexibility and creativity for Park designers, ○ Added min requirements for elements such as parking requirements, dog waste stations, etc. • Moved standards specific to items like playground equipment to an overall section that provide standards by which all playground equipment must comply, so they aren't repeated in each park type • Inspections protocols are moved to procedures
	6.3.B.I.b. Community Park	
2.3 Regional Park	6.3.B.I.c. Regional Park	
----	6.3.B.I.d. Special Use Facility	
----	6.3.B.I.e. Recreational Open Space	
----	6.3.B.II. Park Element Standards	
----	6.3.B.II.a. General standards	• Added clarifying standards applicable to all sections: ○ The park element standards listed below apply to elements within all park typologies ○ All provided amenities shall be installed per manufacturer's instructions or as described in the Drawings ○ The PRCS Department and the Parks and Recreation Commission reserve the right to require additional elements in the design of the park ○ Review of park elements will follow the procedures of Section 2.5.B. Park Permits
3.1. Paving	6.3.B.II.b Paving	• Minimal changes to language for clarity only • Reference City's specifications for paving
----	6.3.B.II.b.i Parking lot standards	• Updated cross-reference to standard drawings • Added requirements for accessible parking per ADAAG • Allows Low Impact Development parking lots provided they shall follow the SSCAFCA standard specifications and construction details, as specified by staff

		• New parking requirements required spaces for parking lots is 3 spots per acre for parks that are 5 acres and greater
3.3 Lighting	6.3.B.II.c. Lighting	• Clarified / simplified general lighting standard language but content remains generally the same • Reference to approved national lighting standards required for rules for evening or lighted play for sports facilities • Lighting shall comply with the maximum height, and wattage, and shielding requirements for fixtures as stated in Rio Rancho Municipal Code Chapter 159 Outdoor Lighting • Lighting plan requirements and inspections have moved to procedures, as applicable
----	3.C Trails	• New section to provided location Guidelines that trails and/or multi-use paths are appropriate along streets, arroyos, public easements, and utility rights-of-way; and for use to connect to schools, recreation facilities, and other trails; and should minimize grade changes • Required trail and multi-use paths elements should follow PRCS standards, with seating, signage, and waste stations provided at regular intervals • Added standards for paved trails, crusher fine trails, open space trails • Trail and paths should be in compliance with the paving guarantee requirements
3.4 Fencing	6.3.B.II.d Fencing	• Added fencing standards for Chain link fence and gates through the PRCS Department • Fencing plan requirements and inspections have moved to procedures, as applicable
3.5 Playground Structures	6.3.B.II.e Playgrounds	• Clarified/Simplified language for playground standards to provide safe, accessible and age-appropriate equipment to promote physical, sensory and imaginative play meeting all safety standards • Added prohibited playground equipment: “Products that do not conform to ASTM and CPSC Standards” • Playground structures plan requirements and inspections have moved to procedures, as applicable
3.6 Park Amenities	6.3.B.II.f Site Amenities	• Clarified standards to differentiate site furniture to include trash receptacles, dog waste stations and fitness stations • Added standards to ensure shade structures are ADA accessible • Requirement for drinking fountains to incorporate dog fountains • The concrete pad providing accessibility to the fountain shall follow concrete paving standards • Added design standards for tennis and pickleball

		• Clarified requirements for bike and skate parks, including minimum surface areas. All elements must be weather-resistant, UV-protected, and use anti-vandal hardware, with concrete pads required for all skate areas • Park Amenities plan requirements and inspections have moved to procedures, as applicable
3.7 Landscape Planting	6.3.B.II.g Landscape and Plantings	• Added additional/clarified language regarding landscape and planting standards • Added additional plants to list of prohibited trees which include- Cypress, Juniper, Cedar, Mulberry, Cottonwoods and Poplars • Require soil analysis should be done for all landscape and plantings • Landscape Planting plan requirements and inspections have moved to procedures, as applicable • Added additional standards regarding Turf grass
3.8 Grass Sodding	6.3.B.II.h.i (xii) Grass Sodding	• Clarified/simplified language but content remains generally the same
3.9 Grass Seeding	6.3.B.II.h.i (xiii) Grass Seeding	• Clarified/simplified language but content remains generally the same
3.10 Irrigation Systems	6.3.B.II.i	• No mixed application irrigation zones • Require landscape irrigation audits for more than one-acre • Require triangulated head-to-head spray head coverage • Require separation of controller and enclosure with individual breakers • No turf installation under a 1000 sq.ft. allowed • Clarified equipment specifications • Require installation of quick connect at public shade structures • Irrigation application minimums for turf • Clarified specifications of Thrust blocks, Manual drain valve, Sleeve crossing, Saddle taps
Appendix II.5-1	6.3. A	• Content remained the same

Appendix II.5-2	6.5 A	• Addition of system performance information for schedule-
		  ○ Type of irrigation application,
		  ○ designed pressure for operation at point of connection.

	6.6	• Consolidated sections for clarification and moved shorter sections to bullet points.

Development Process Manual Crosswalk Table Chapter 7 Surveys and Permanent Monumentation		
Existing DPM Section	**Revised DPM Section**	**Summary of Proposed Changes**
1. Introduction	**7.1 Introduction**	• The City does not have a geodetic control network at this time, the responsibility of subdivision monumentation by the City Engineer was removed.
1.A. Definitions		• Removed Definitions because the words are no longer used in the chapter.
2. Monumentations	**7.2 Monumentation**	
2.1 Centerline Monuments	7.2.A Subdivision Monuments	• Simplified this section to point applicant to follow requirements in state statute, in addition to specifying where the monuments must be set and specifying that they be set under supervision of the engineer.
2.2 Permanent Survey Monuments	7.2.B Permanent Survey Monuments	• Section reserved for future use when/if the City of Rio Rancho adopts a geodetic control network.
2.3 Benchmarks	7.2.C Benchmarks	• Section reserved for future use when/if the City of Rio Rancho adopts a geodetic control network.
2.4 City of Rio Rancho Control Survey Network	**7.3 Rio Rancho Geodetic Reference (Control Survey Network)**	• Section reserved for future use when/if the City of Rio Rancho adopts a geodetic control network.
2.5 Record Requirements		• Removed because the City does not have a geodetic control network at this time.
3. Construction Surveys		• Removed because the City does not have a geodetic control network at this time.
Appendix 2.6.1 Example of Permanent Monumentation		• Removed because the City does not have a geodetic control network at this time.
Appendix 2.6.2 Monument Record Forms Instructions		• Removed because the City does not have a geodetic control network at this time.

CITY OF RIO RANCHO
PUBLIC HEARING NOTICE

The PLANNING and ZONING BOARD of the CITY of RIO RANCHO will consider the following matters at its regularly scheduled meeting at 6:00 p.m. on Tuesday, May 27, 2025:

Preliminary Plat
Case #25-210-00002
The applicant, X2D, LLC., through their agent, Development Management Consultants, requests approval of a Preliminary Plat for the Dos Soles Subdivision, comprised of 42 Lots and 2 Tracts zoned SU: Special Use District for Townhomes.

Subdivision Variance
Case #25-280-00002
The applicant, X2D, LLC., through their agent, Community Design Solutions, LLC., requests approval of a Subdivision Variance to Chapter 155.43 Easements requiring internal 5-ft public utility easements inside all side and rear lot lines for the proposed Dos Soles Subdivision.

Preliminary Plat
Case #23-210-00013
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Preliminary Plat for the Broadmoor Hill Subdivision, comprised of 56 lots, 2 tracts, and 1 parcel zoned R-2: Single-Family Residential District.

Subdivision Variance
Case #23-280-00009
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Mimbres Drive NE within the proposed Broadmoor Hill Subdivision.

Subdivision Variance
Case #23-280-00010
The applicant, Las Ventanas NM, Inc., through their agent, Huitt-Zollars, Inc., requests approval of a Subdivision Variance to Chapter 155.41(M) to allow for a dead-end street stub for Salado Loop NE within the proposed Broadmoor Hill Subdivision.

Preliminary Plat (Extension)
Case #23-210-00010
The applicant, Richmond American Homes, is requesting approval of an extension on the preliminary plat for a proposed subdivision containing 53 single-family residential lots and three tracts, on approximately 14.46 acres zoned R-4: Single Family Residential. The subject property is legally described as Broadmoor Heights, Tract 4-A

Development Process Manual (DPM)
The City of Rio Rancho is requesting approval of an update to the Development Process Manual.

Text Amendment Request
Case #25-105-00001
The City of Rio Rancho is requesting approval of text amendments to the Rio Rancho Code of Ordinances (R.O. 2003) Chapter 155 Subdivisions.

The meeting is scheduled in the Council Chambers at City Hall, 3200 Civic Center Cir NE, Rio Rancho, NM. The public is invited to attend in person or virtually at www.rrnm.gov. Materials related to these items are available for viewing in the Development Services Department at City Hall.

If you would like to comment on any of these applications, you are encouraged to submit a written comment to planning@rrnm.gov. Written comments will be inserted into the public record.

Journal: May 12, 2025.

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
AB	rename appendices if they are inserted by chapter to avoid repeat Appendix names (found locations where appendix names were repeated)	Pg 4-46	Appendix headers have been revised and repetitive sub-headers removed.	
AB	Pg 2-71 - 2.8.A.III.c - remove "the city may require two lanes in each direction so long as intersections maintain operation at LOS D or better"	2.8.A.III.c Pg 2-71	**2.8.A.III.c. Traffic Impact Analysis (TIA)** The primary concerns to be addressed in the TIA are site access, impact on the existing roadway system, and what construction is necessary to mitigate both the on-site and off-site impacts. Site design should be tailored to the traffic requirements, and the City reserves the right to require changes to the access points to better serve the transportation system. For roads with a projected ADT, the City will require two lanes in each direction only for roads with a projected ADT above 18,000 vehicles~~, the City may require two lanes in each direction so long as intersections maintain operation at LOS D or better~~.	
AB	Pg 2-73 - 2.8.A.III.c.ii.3 - item 3.b - theoretical performance of a roundabout should always be calculated, not just if there are 2 roads with one through lane in each direction.	2.8.A.III.c.ii.3 - item 3.b Pg 2-73	2.8.A.III.c.ii.3. Methodology 1. All intersection analysis shall be done in accordance with most current Highway Capacity Manual (HCM) procedures for two-way stop control, four-way stop control, roundabouts, and signals. 2. Level of service (LOS) determination for all stop and signal-controlled movements shall be calculated for: a. Design year i. No-build condition. ii. Build condition. b. Horizon year i. No-build condition. ii. Build condition. 3. Queue analysis shall be completed for: a. Horizon year i. No-build condition. ii. Build condition. b. Where high volumes prevent adequate operation of a two-way stop-controlled intersection (LOS E or worse), a signal warrant analysis shall be completed according to current MUTCD standards. ~~If the intersection consists of two roads with one through lane in each direction, then the t~~ Theoretical performance of a roundabout shall also be calculated. Estimated ADTs for all system streets shall be included in the report. In some cases, a crash analysis may be requested by city staff to help identify unsafe conditions in the project area that may be exacerbated by an increase in traffic.	
YPM	NM Licensed Engineer. It may not be the engineer of record. Same comment on subsequent engineer of record below	2.9.A.II. Process for Developer Projects	**2.10.B Process for Developer Projects** 1. "Working Record Drawing" plans shall be submitted, by the Contractor, as redline drawings with correct survey data for review, once a month, to the Developer's ~~Engineer of Record~~New Mexico Licensed Engineer. These drawings will need to be initialed and dated by the reviewer for them to be valid. 2. At the end of the project/subdivision, the Contractor will provide the Developer's ~~Engineer of Record~~New Mexico Licensed Engineer the valid redline drawings with correct survey data. The Developer's ~~Engineer of Record~~New Mexico Licensed Engineer will then make digital changes to the original Construction Plans. 3. A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land	
2.26.25 - Staff	Revise date from 2024 to 2025	1.4 DPM Update Procedures	Change date to 2025	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Include language in the Master Plan section that required ownership of the subject area acreage is 75%.	2.4.B Land Use Plans Pg. 2-17	• Master Plans Master Plans are prepared by either the City or private sector and submitted to the City for review and approval. Master Plans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres. For subdivisions that are 20 acres or less, master plans may be less detailed, and certain sections may be omitted per staff discretion and approval. At a minimum Master Plans shall require conceptual Grading & Drainage, Circulation and Utilities layouts and an updated land use map maybe required, if changes are proposed. Ownership of at least 75% of the subject area acreage shall be required for the preparation and submission of a Master Plan.	
	For the Park Site Plan, we would like to include a list of what will be reviewed, which is the following: • Site Plan • Grading and Drainage if not already included in a Preliminary Plat • Structures Over 120 sf • Backflow Preventers	2.6.B.II Permit Submittals Pg. 2-44	**2.6.B.II. PERMIT SUBMITTALS** Park permit submittals generally require the following plans and information to be submitted. 1. Site Plan 2. Grading and Drainage if not already included in a Preliminary Plat 3. Structures Over 120 sf 4. Backflow Preventers	
3.5.25	Regarding the parks and rec development flowchart: At this time the PRCS Director does not have authority to sign an agreement on behalf of the City.	2.5.B.III. Acceptance Of Park Infrastructure Pg. 2-44	No change	The intent of the flowchart is to allow PRCS the opportunity to review the content of the development agreement prior to final sign-offs.
3.5.25	Should apply to Developer-Built Public Parks (only) Instead state For parks dedicated to the City, the Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The Developer shall not transfer and record the deed prior to the completion of improvements and final inspection.	2.6.B.II Inspection and Acceptance Pg. 2-43	applicable. 4. For parks dedicated to the City, t~~T~~he Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The developer shall not transfer and record the deed prior to the completion of improvements and final inspection. 5. The one-year warranty period shall begin on the date that the Deed is recorded.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove the Recommended DRC Meeting from the Special use site plan procedures flowchart	2.4.G.III Pg 2-33		
	Strike language from table	2.7N Appendix I Drainage report checklist	Strike “current version of AHYMO or equivalent hydrologic modeling program i.e.”. Requires use of HEC-HMS	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	At a minimum conceptual Grading & Drainage, Circulation and Utilities layouts will be needed and an updated land use map if changes are proposed.	2.3.B Land Use Plans / Master Plans	• Master Plans Master Plans are prepared by either the City or private sector and submitted to the City for review and approval. Master Plans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres. For subdivisions that are 20 acres or less, master plans may be less detailed, and certain sections may be omitted per staff discretion and approval. At a minimum Master Plans shall require conceptual Grading & Drainage, Circulation and Utilities layouts and an updated land use map if changes are proposed.	
	Occasionally, they are prepared by the private sector for a specific development project when development of an arterial is identified in the Traffic Impact Analysis.	2.3.B Land Use Plans / Corridor Plans	Corridor Plans Corridor Plans cover a smaller geographic area of the City such as a transportation corridor. Corridor Plans often address specific issues such as architectural control, design guidelines, buffering and transportation access elements. Corridor Plans are usually created by the City to address specific issues as noted above. Occasionally, they are prepared by the private sector for a specific development project. when development of an arterial is identified in the Traffic Impact Analysis.	
JaLiker	This is currently not the case. Several developments below 20 acres are being required to provide master plans.	2.3.B Land Use Plans / Corridor Plans	Corridor Plans Corridor Plans cover a smaller geographic area of the City such as a transportation corridor. Corridor Plans often address specific issues such as architectural control, design guidelines, buffering and transportation access elements. Corridor Plans are usually created by the City to address specific issues as noted above. Occasionally, they are prepared by the private sector for a specific development project. when development of an arterial is identified in the Traffic Impact Analysis.	
	The site development plan, as required by zoning,	2.3.B Land Use Plans / Corridor Plans	• Project Specific Site Plans The site development plan as required by Zoning, specifies the present characteristics of a particular parcel of land and its surroundings and describes intended activities and their potential impact on the community. The terms “site plan” and “site development plan” are interchangeable.	
	For public parks, the Developer...	2.5.B.II Inspections and Acceptance	4. For Public Parks, t~~T~~he Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The developer shall not transfer and record the deed prior to the completion of improvements and final inspection.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
AMREP	add Street Light Disconnects	2.7.K Appendix E Street Light Layout Checklist	a. Luminaire description RR DPM PROCEDURES | 2-153 RR RioRancho 1. Local street – 100 watt, 9,500 lumen, high pressure sodium 2. Collector street – 150 watt, 16,000 lumen, high pressure sodium 3. Arterial street – 250 watt, 30,000 lumen, high pressure sodium b. Luminaire mounting height c. Pull Box size and type d. Existing luminaire type, pole, and wattage e. Disconnects fe. Traffic Signal Mounted Luminaire type, pole, and wattage ___ Coordinate streetlight plan with the engineer preparing other offsite improvement plans Provide stations at all intersections	
	Refers to the old DPM chapters. Please check these references throughout	2.7N Appendix | Drainage report checklist	Compliance with City of Rio Rancho DPM (~~Sections 2.2.2 through 2.2.8~~Chp.2) and SSCAFCA criteria	
	Department	2.7.T Appendix M Checklist for Submittal of Preliminary/Bulk Plats	Yes No ☐ ☐ Statement of water and wastewater availability issued by the Department of Public Works noting approval by the Utilities ~~Commission~~Department. NOTE: This should be received prior to submittal of Preliminary Plat.	
2.26.25 - P Wymer	I think there should be a definitions chapter to section 2.	TOC	Definitions have been added	
PW	Should this be changed to "pecuniary interest" instead? If so, there should be a definition accordingly.	2.5.D Appeals	To provide due process and fairness in the development review process, any aggrieved party ~~person with standing~~ can appeal decisions of City staff, Planning and Zoning Board, and/or Governing Body, which can be ultimately referred to a judicial review in District Court.	
PW	Add a colon here	2.3.A.I Annexation Process	2.3.A.I. ANNEXATION PROCESS New Mexico State Statutes (NMSA 1978) Section 3-7 Annexation of Territory establishes three different methods of annexing territory to a municipality, arbitration, boundary commission, and petition:~~.~~	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	add "than" here	2.3.A.I Annexation Process	• Specific Area Plans These plans encompass large geographic areas of the City providing a higher degree of detail than the comprehensive plan. Area plans establish planning criteria and land use goals specific to the physical development consistent with the Principles and Policies of the Comprehensive Plan. Area plans are primarily created by the City due to the high number of properties and owners involved.	
	fees	2.3.B.I.b Land Use Plan Process	2.3.B.I.b. Land Use Plan Process Land Use Plan applications are reviewed through the following process. Applications and appropriate fees are submitted to the Development Services Department. Applications may be submitted by the property owner,	
	This sentence needs to be re-worded. The first sentence of this paragraph references Zone Map Amendments, The PZB does not make the final decision on ZMA's.	2.4 Decisions Requiring a Public Hearing	Decisions requiring a public hearing include subdivision applications, zone map amendments, conditional use permits, and variances. With the exception of zone map amendment, sSuch applications are reviewed by the City Staff who makes a recommendation to the Planning and Zoning Board. The Planning and Zoning Board makes a final decision at a public hearing. For zone map amendments, the Planning and Zoning Board makes a recommendation, but the Governing Body, which serves as the ultimate decision-maker, makes the final decision at a public hearing. The general process of decision requiring a public hearing is laid out below. Applicants can expect a decision requiring a public hearing development application process to take 2 to 4 months from the date the application is submitted to final approval.	
	Should "continuation" be added throughout the DPM as a possible result of PZB actions?	2.4.A.I.b Bulk Plat Process	Added continuation throughout the procedures	
	for consistency with the Appendix M checklist, this should read "preliminary construction plans"	2.4.A.II Preliminary Plat Procedure	2.4.A.II. PRELIMINARY PLAT PROCEDURE Preliminary Plats provide the proposed subdivision and improvements. When a development is not ready for construction, a Preliminary Plat can be considered without the submittal of preliminary construction plans; if, ~~however, for a building regulated by the International Residential Code~~	
	Remove second comma	2.5.A.I.b The residential...	4. Prefabricated swimming pools accessory to buildings regulated by the International Residential Code that are less than 24 inches deep, and are installed entirely above ground.	
	add comma here	2.6.A.III Commercial Business License Procedure	registration or licensing fee and fire fee, as applicable. Annually each commercial business must pay a business registration or licensing fee, and fire inspection fee based on square footage of location, as applicable, except Limited-Time Businesses who are operating a business temporarily.	
	change to "decision"	2.6.D.I Administrative Garage Conversion..	2.6.D.II. ADMINISTRATIVE GARAGE CONVERSION PROCESS Applicants submit an application to the Development Services Department office. The Development Services Zoning Division review and decide on the application. Staff provide notice of decision to the applicant.	
	is "furnished" a requirement of model homes?	2.6.E Model Home / Sales Office	Struck furnished Model homes and sales offices require a model home and sales office permit approval. A model home is defined as any ~~furnished~~ dwelling, which is primarily used as a marketing tool to show prospective homebuyers a particular plan, type of construction, accoutrements, or floor plan and which is not a residence at the same time. A sales office is defined as an office accessory use, used specifically for the purpose of conducting business transactions associated with the sale of residential dwelling units.	
	add "which will" here. Remove the "s" from inspects.	2.6.H.II Special Event Permit Process	applicant pays any required permit fees, the permit is issued, and the event may commence. If the event includes the use of tents or canopies, a Fire Inspection must be scheduled with the Fire Rescue Department which will inspect tents and canopies prior to the event.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	change "approval" to "notice of decision"	2.6.I.IV Substantial Changes...		
	add close parentheses	2.7.A.I General Requirements	analysis including but not limited to Drainage Reports, Drainage Implementation Plan, Geotechnical Report, Traffic Impact Study (TIS, and/or Water and Sewer Availability statements). These may be required by Rio Rancho Municipal Code or by thresholds established within this DPM. The purpose of these reports, studies, development.	
	add comma	2.7.A.III.a.v Conceptual Layout	6. Unusual Features: Identify unusual features, such as creeks, railroads, and irrigation ditches, that might influence the location of underground utilities.	
	Is the the Executive Summary discussed in line item 3, below?	2.7.A.III.b.i.1.1 Intro	1. Provide a brief yet comprehensive executive summary ~~discussion~~ of the following: a. Drainage concept for the site (include relevant #'s as appropriate) b. How offsite flows will be handled c. How onsite flows will be handled and discharged d. Downstream capacity and how determined e. Impacts on or requirements of other jurisdictions	
	line item 3	2.7.A.III.b.i.1.2	3. Narrative description of project scope. The narrative should expand on the Executive Summary, providing additional project details. For non-complex projects, combine this section with the Executive Summary for clarity and efficiency.~~Provide more detail than presented in the Executive Summary (combine with Executive Summary for non-complex projects)~~	
	should "not" be added? to read "Though a development may NOT meet these thresholds.....	2.7.A.III.c.i Applicability..	The City of Rio Rancho has developed thresholds that may be used as a general guideline to determine if a TIA will be required for a given development proposal. Though a development may not meet these thresholds, the City reserves to right to require a TIA in some cases, such as, but not limited to, creating	
	throughout the DPM, there are many instances where sentences do not include a period to close. This is one of many examples. Probably not a big issue. Just an observation.	2.7.B.IV.i.ii Calculations	4. Provide sample calculations, tables, charts, etc. as necessary to support the calculations and results.	
	change to "low"	2.7.B.IV.j Irrigation Plans	4. If the service pressure is too high, a pressure reducing valve may be necessary. If the service pressure is too low, a booster pump may be necessary.	
	and another example	2.7.B.IV.i.ii Calculations	Fixed punctuation	
	shall with 2 small letter l's, not number 1.	2.7.D Digital Record Drawing Requirements	project/subdivision tied to the state plane coordinates. These submitted files shall include all survey data as stated below. The files shall contain the following information and shall be in the City's schema for structure	
	gutters	2.7.D.II.b. Street, Storm	11. Elevations shall be provided at all drainage control points (. detention overflow point, tops and bottoms of detention basins, drain rim, valley gutters, curbs, etc.).	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
		Drains, and Grading & Drainage Plans		
	If this colon is indicating the following items, they should be subsets of this, not new numbers.	2.7.D.II.c. Water Plans	2.7.D.II.c. Water Plans 1. Street centerline station and offset dimensions to: a. All fire hydrants and fittings (i.e. valves, bend, tees). b. Main line at all changes in horizontal and vertical alignment. c. All horizontal control points (i.e. centerline intersects, PC, PT). d. Dimension to all operating nuts referenced to the water main on valves with offset operating devices.	
	is	2.7.D.II.c. Water Plans	e. If the designed topography does not allow for the service standards to be used, centerline station and offset to each service tap; size of tap and dimension to nearest side property line are required. If topography allows for the standard to be used, then a survey point ~~i~~is only required at the end of the service for location purposes.	
	Is this intended to refer to Final Plat, Preliminary Plat, and Construction Plans, the latter of which might include the 8 other documents/plans listed?	2.7.E Recordable Documents	Examples of appropriate dedication statements on plats and formats for grants of easement by separate instrument for certain purposes, are also included. The other major types of documents discussed are Construction Plans, including but not limited to; Site Development Plans, Grading and Drainage Plans and Landscaping Plans, Traffic Impact Analysis, Geotech Report, Drainage Master Plan, Drainage Implementation Plan, and a Water and Wastewater Availability Statement. Detailed criteria for these ~~three~~ types of plans have been developed to assure that information may be consistently found on the plans and that no information is lost due to illegibility when the documents are scanned for record.	
	Are these still accurate?	2.7.E.VI.b.ix Certifications/ Signatures	3. Certification by utilities that respective needs, if reasonable, are met by the plat. Xfinity, CenturyLink, and Sparklight ~~Cable One, Qwest Communications,~~ PNM Electric Services and New Mexico Gas Services are the firms currently providing local service which should make such certification by authorized representatives.	
	add "by the" here	2.7.E.VI.b.xii.1 Disclosure statement	Building permits, wastewater permits, or other use permits must be issued by the State or City officials before improvements are constructed. You should investigate the availability of such permits before	
	from	2.7.E.VI.b.xii.1 Disclosure statement format	22. NEW MEXICO STATE ENGINEER'S OPINION ON WATER AVAILABILITY Include here the approved summary of the opinion received by the City from the New Mexico State Engineer regarding:	
	add "by the City" here for consistency	2.7.E.VI.b.xii.1 Disclosure statement format	Building permits, wastewater permits, or other use permits must be issued by the State or City officials before improvements are constructed. You should investigate the availability of such permits before you purchase, lease, or otherwise acquire an interest in the property. You should also determine whether such permits are required for construction of additional improvements before you occupy the property.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	should there be a discussion on HOA developed parks and costs to the lot purchaser for maintenance?	2.7.E.VI.b.xii.1 Disclosure statement format	35. RECREATIONAL FACILITIES (describe all recreational facilities, actual and proposed in the subdivision) (state the estimated date of completion of each proposed recreational facility) (state whether or not there are any bonds, letters of credit or other collateral securing the construction of each proposed recreational facility and describe any such bond, letter of credit or other collateral) 35. ~~36.~~ HOA PARK FACILITIES (describe all parks developed by the Homeowners Association (HOA), both existing and planned. This includes park amenities such as playgrounds, green spaces, walking trails, sports courts, or other recreational features within the HOA-managed areas) (state the estimated completion dates for any proposed HOA-developed parks and their amenities) (outline the costs that will be incurred by the lot purchaser for the maintenance of HOA-developed parks, including any HOA fees or special assessments for ongoing upkeep and improvements) 36. FIRE PROTECTION	
	or volunteer?	2.7.E.VI.b.xii.1 Disclosure statement format	(state whether the fire department is full-time, ~~or~~ semi-staffed, or volunteer)	
	There are several layer names throughout this chart that are missing descriptions	2.7.L Appendix G CAD File Layering Convention		Missing names have been added.
	Remove "EXST"	2.7.L Appendix G CAD File Layering Convention	C-TRAF-PM-SKY-EXST | Existing-Traffic-Skip Yellow Paint	
	duplicate	2.7.L Appendix G CAD File Layering Convention	C-UTIL-POWR-EXST | Existing-Electrical Power-At Grade	
	is AHYMO still utilized?	2.7.N APPENDIX I DRAINAGE REPORT CHECKLIST	No, comment already addressed by staff	
	missing text?	2.7.N APPENDIX I DRAINAGE	No text is missing	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
		REPORT CHECKLIST		
	duplicate? see line above.	2.7.N APPENDIX I DRAINAGE REPORT CHECKLIST	Already addressed in staff comments	
	period	2.7.O.3.j Appendix J	i. Phasing.	
	lower case	2.7.O.2.a Appendix J	b. Rights-of-way and easements needed to accommodate (a) above.	
	page break so this line item is all contained in the same location	2.7.O.I. GRADING AND DRAINAGE PLAN CHECKLIST	Updated table properties to disallow rows spanning pages	
	this needs to be re-worded and/or reformatted.	2.7.Q EROS I ON CONTROL AND STORMWATER POLLUTION PREVENTION PLANS CHECKLIST	Item and Description Consultant Reviewer (put "Y" yes or "NA" not applicable comment or reference a "footnote" for review letter) GENERAL	
	is this accurate? 18" seems like a large deviation.	2.7.S Appendix L		
	are these still accurate? NM Gas?	2.7.U Appendix N	☐ ☐ Certification of franchised utility companies (Xfinity, CenturyLink, and Sparklight~~Cable One, Qwest~~, PNM) and Department of Public Works	
	Fix numbering (A) (B) (C)	2.7.U Appendix N	**Yes No** ☐ ☐ Digital submittals are required and must contain a minimum of the following: (A) Coordinate system	

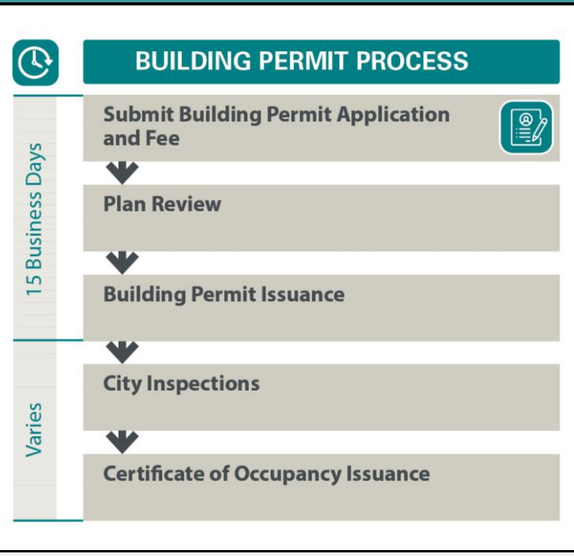
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Page break	2.7.U Appendix N	RIO RANCHO DEVELOPMENT PROCESS MANUAL UPDATE **Drainage Report** **Yes No** ☐ ☐ Drainage Report drafted to the standards noted in the Development Process Manual and revised to address any comments from preliminary plat review.	
	Page break	2.7.U Appendix N	RIO RANCHO DEVELOPMENT PROCESS MANUAL UPDATE **Covenants** **Yes No** ☐ ☐ Draft of covenants that notes private improvements to be maintained by association and dues to be paid by association members if proposing privately owned and maintained infrastructure typically dedicated to and maintained by the City (if applicable)	
	add "Legal description"	2.7.V APPENDIX O GRANT OF DRAINAGE EASEMENT	**2.11.X Grant of Drainage Easement** This easement grant is made and executed this _____ day of _____ 20___, by and between _____, hereinafter called the "Grantor" and the City of Rio Rancho, New Mexico, a municipal corporation, hereinafter called the "City". 1. The Grantor is the owner of the following described real property within the City of Rio Rancho, legal description: Unit___, Block_____, Lot_____. 2. For good and valuable consideration, the receipt of which is hereby acknowledged, Grantor does hereby	2.11.X.1. added "…Rio Rancho, legal description Unit, Block, Lot."
	where is this?	2.7.V APPENDIX O GRANT OF DRAINAGE EASEMENT		
	confirm consistency with Appendix G and Appendix P in it's entirety. see examples	2.7.W Appendix P		
	"c-row" on appendix G (page 2-121)	2.7.W Appendix P	ROADWAY R-O-W C-ROW CYAN CONTINUOUS ROADWAY RIGHT-OF-WAY LINES	
	"c-rowp" on appendix G (page 2-122)	2.7.W Appendix P	PRIVATE STREET R.O.W. C-ROWP WHITE PHANTOM2 PRIVATE RIGHT-OF-WAY LINES	
	these should be sub paragraphs of line item 1, not new numbers.	2.8.C.II.a. Pre-Design Phase	a. Dividing the entire subdivision into projects for each of the "stand alone" parts (each project will have its own separate pre-construction), or b. Assuring construction of required infrastructure in accordance with Section 9 of SSCAFCA's Drainage Policy.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	space	2.8.C.II.c.vi Final Inspection	Upon acceptance by the City the one year warranty period commences for the structure. The developer/contractor shall be responsible for O&M during the warranty period. Before City takes over responsibility for O&M there will be a post warranty inspection to ensure that the structure condition is as designed and no outstanding issues remain.	
	remove this quote or add an additional after "Map".	2.8.D.V Development Within Flood Hazard...	The following floodplain note must be placed on the plat if a LOMC has not been issued by FEMA: "Portions of the subject property lie within a designated area of special Flood Hazard as shown on the most recent National Flood Insurance Program's Flood Insurance Rate Map. Until such time that a LOMC is issued by FEMA, flood insurance may be required."	
	should be sub-paragraphs of item 1, not new numbers	2.8.D.IX.c LOMR	1. The typical required submittal for map revisions because of physical changes is as follows: a. General description of the changes (dam, diversion channel, detention basin, etc.) b. Construction plans for as-built condition, if applicable. c. New hydrologic analysis accounting for the effects of the changes. d. New hydraulic analysis using the new flood discharge values resulting from the hydrologic analysis. e. Revised delineations of the flood plain boundaries or floodway.	
	add "and SSCAFCA"	2.8.E Vacation Procedures	Discussion of the proposed vacation with the SSCAFCA staff is recommended prior to application filing. The purpose of the discussion is to review City and SSCAFCA policies and procedures applicable to the proposal so that incomplete, inadequate, and inappropriate applications are avoided. City staff may be included in this discussion.	
	where is this?	2.8.F.I Infrastructure Allocation Drainage Mgmt Plan	3. The Allocation Plan shall be prepared and/or amended by or under the direct supervision of a professional engineer registered in the State of New Mexico and competent in the areas of surface water hydrology and hydraulics. The design work referenced above shall be performed in accordance with the City Ordinances, Policies and DPM. 4. The Allocation Plan shall be based upon fully developed conditions, [excepting properties excluded under paragraph G (9)] taking into consideration the current elements of the applicable City land use master plan(s), or other reasonable land use models, as they relate to the benefited area, and other relevant known factors, such as changes in zoning or development trends not reflected on the master plan(s). 5. The Allocation Plan shall specifically identify and address, but not be limited to, the following: a. land use assumptions	
	of	2.8.F.II. REVIEW AND APPROVAL PROCEDURE	e. The cost allocation of the required drainage infrastructure identified by the Allocation Plan for each new development shall be identified on the approved infrastructure list for the new	
	add comma.	2.8.F.II. REVIEW AND APPROVAL PROCEDURE	e. The cost allocation of the required drainage infrastructure identified by the Allocation Plan for each new development shall be identified on the approved infrastructure list for the new development and shall be required as a condition to final plat, final site plan approval, or building permit approval.	
	insert "City"	2.8.F.II. REVIEW AND APPROVAL PROCEDURE	9. Appeals; SSCAFCA Executive Committee a. Any applicant aggrieved by a decision or actions of the City Engineer or absence of such decision,	
	may	2.8.F.II. REVIEW AND APPROVAL PROCEDURE	Executive Engineer or his designee, or of which the members may have knowledge or experience, and may affirm, reverse or modify the decision appealed from, and attach as	

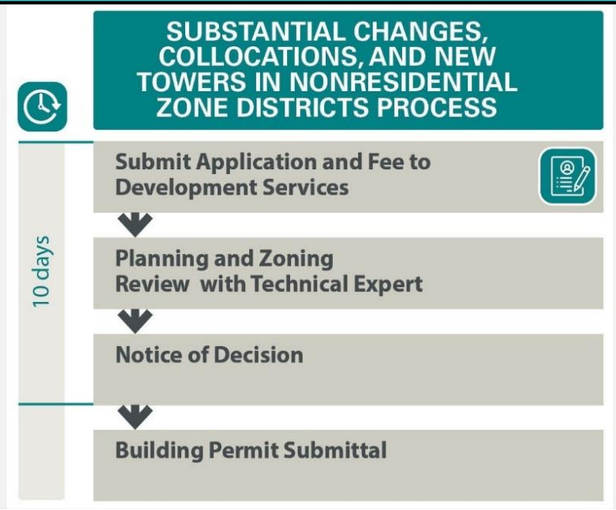
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	from	2.8.F.II. REVIEW AND APPROVAL PROCEDURE	appropriate in compliance with the policies of §§ 1 et seq. to safeguard persons and property from storm water runoff. Each decision of the Executive Committee shall be in writing and shall	
	add quotes around "Redrawn for Record".	2.9.A.II. PROCES S FOR DEVELOPER PROJ ECTS	"Redrawn for Record" shall be placed on that sheet.	
	add quotes around "Redrawn for Record".	2.9.A.II. PROCES S FOR DEVELOPER PROJ ECTS	3. A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land Surveyor with the "Record Drawing Certification (Appendix C)" approval block included will then be submitted to the City. On any sheet where a change to the original construction drawings has been made "Redrawn for Record" shall be placed on that sheet.	
	it's	2.10.A Appendix A	4. Justification, including the scope of the request, and addressing criteria for granting a variance: a. There exists a special circumstance(s) applicable to the property, including it's exceptionally irregular size, shape, too narrow, too shallow or steep	
	this should be combined with letter a.	2.10.A Appendix A	~~2.10.A~~2.11.A **Appendix A Zoning Variance Checklist** Submittal Requirements (All information must be clear and legible) 1. Completed Land Use Application. 2. As applicable, a building permit. 3. A letter of authorization from the property owner stating that he/she is aware of the zoning variance being requested and that the applicant may act as his/her agent, if the applicant is other than the property owner. 4. Justification, including the scope of the request, and addressing criteria for granting a variance: a. There exists a special circumstance(s) applicable to the property, including its exceptionally irregular size, shape, ~~too~~ narrowness, ~~too~~ shallowness, or steepness. b. Other exceptional physical conditions whereby the strict application of the zoning ordinance requirements would result in a practical difficulty or unnecessary hardship that would deprive the owner of the reasonable use his/her land or building.	
	what is submitted?	2.10.A Appendix A		
	this paragraph is almost a duplicate of the last paragraph of 2.10.A. Are they both needed?	2.10.A Appendix A	Moved to end of Appendix B. The intent is that these may be printed as separate checklists for applicants.	
	pattern	2.10.A Appendix A	iv. The applicant must demonstrate that the existing zoning is inappropriate because: 1. there was an error, mistake or is necessary to correct an injustice that occurred when the existing zone map pattern was created, including the placement of a R- allowed in any adjacent zone.	
	Add number 7 here.	2.10.A Appendix A	7. Site Plan, Site Plan Checklist, and related drawings only if SU zoning is requested.	
	(see appendix E)	2.10.A Appendix A	7. Site Plan, Site Plan Checklist, and related drawings only if SU zoning is requested. (See Appendix E)	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	authorization?	2.10.D Appendix D Conditional Use Checklist	1. Completed application form, supporting documentation and applicable f 2. Owner authorization letter, if applicable	
	authorization?	2.10.D Appendix D Conditional Use Checklist	**2.10.E Appendix E Zone Map Amendment for Special Use Zone District Checklist** 1. Completed application form, supporting documentation and applicable fee 2. Owner authorization letter, if applicable	
	aren't Site Plans required for Special Use zoned projects?	2.10.D Appendix D Conditional Use Checklist	**~~2.10.E~~2.11.E Appendix E Zone Map Amendment for Special Use Zone District Checklist** 1. Completed application form, supporting documentation and applicable fee. 2. Owner authorization letter, if applicable. 3. Site Plan~~, if applicable~~. 4. A Water and Wastewater Availability Letter, if applicable 5. A written statement of justification [Title XV – Land Usage, Chapter 150 – General Provisions] a. A rezoning must be consistent with the health, safety, morals, and general welfare of the City b. The applicant for a rezoning must provide a sound justification for the rezoning, with the burden	
1.30.25- Staff	Missing appendices 2.7.G-V	TOC	Updated.	
	Master Plans- At a minimum conceptual Grading & Drainage, Circulation and Utilities layouts will be needed and an updated land use map if changes are proposed.	2.3.A.I Annexation Process	Master Plans Master Plans are prepared by either the City or private sector and submitted to the City for review and approval. Master Plans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres. For subdivisions that are 20 acres or less, master plans may be less detailed, and certain sections may be omitted per staff discretion and approval. At a minimum Master Plans shall require conceptual Grading & Drainage, Circulation and Utilities layouts and an updated land use map maybe required, if changes are proposed.	
	Corridor Plans- Occasionally, they are prepared by the private sector for a specific development project when development of an arterial is identified in the Traffic Impact Analysis.	2.3.B. Land Use Plans	Corridor Plans Corridor Plans cover a smaller geographic area of the City such as a transportation corridor. Corridor Plans often address specific issues such as architectural control, design guidelines, buffering and transportation access elements. Corridor Plans are usually created by the City to address specific issues as noted above. Occasionally, they are prepared by the private sector for a specific development project~~.~~ when development of an arterial is identified in the Traffic Impact Analysis.	
	Site Development Plan- The site development plan, as required by zoning,	2.3.A.I Annexation Process	Project Specific Site Plans The site development plan as required by Zoning, specifies the present characteristics of a particular parcel of land and its surroundings and describes intended activities and their potential impact on the community. The terms “site plan” and “site development plan” are interchangeable.	
	Add language in line item 4. For public parks, the Developer...	2.5.B.II. Inspections and Acceptance	4. For Public Parks, t~~T~~he Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The developer shall not transfer and record the deed prior to the completion of improvements and final inspection.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove the following language- Discussion of Hydrologic Model / Methodology (must use ~~current version of AHYMO or equivalent hydrologic modeling program i.e. HEC-HMS)~~	2.7.N Appendix I Drainage Report Checklist	Discussion of Hydrologic Model / Methodology (must use ~~current version of AHYMO or equivalent hydrologic modeling program i.e~~. HEC-HMS)	
	Conclusions Table- Sections 2.2.2 through 2.2.8 Refers to the old DPM chapters. Please check these references throughout	2.7.N Appendix I Drainage Report Checklist	All weather access addressed **Conclusions** Compliance with local criteria Compliance with City of Rio Rancho DPM Chapter 3 ~~(Chp.2)~~ and SSCAFCA criteria	
	Waste and Water Availability statement- Change Utility Commission to Utility Department	2.7.T Appendix M Checklist for Submittal of Preliminary Bulk Plats	**Water and Wastewater Availability Statement** **Yes** **No** ☐ ☐ Statement of water and wastewater availability issued by the Department of Public Works noting approval by the Utilities ~~Commission~~Department. NOTE: This should be received prior to submittal of Preliminary Plat.	
1.23.25-HBA				
	Masterplans- This is currently not the case. Several developments below 20 acres are being required to provide master plans.	2.3.A.I Annexation Process	• Master Plans Master Plans are prepared by either the City or private sector and submitted to the City for review and approval. Master Plans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres. For subdivisions that are 20 acres or less, master plans may be less detailed, and certain sections may be omitted per staff discretion and approval.	
JaLiker	2 years is more appropriate given construction time frames and PNM delays, at what stage of construction is a preliminary plat locked in?	2.4.A.III. preliminary Plat Extension Procedure	No change.	Preliminary Plats are approved for one year and can be extended with no cost for an additional three times, for a total for four years.
JaLiker	Building Permit Process flowchart- This is a very vague time frame. Permits used to be issued in 3 weeks. The varies section should have a dedicated time frame once fees are paid.	2.5.D.I.b. Building Permit Process	Revised to reflect 15 business day review.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
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	The Development Services Departments routes to the appropriate Departments for review of proposed system level infrastructure and proportionate share calculations- I don't believe proportionate share is in the current City ordinance?	2.9.A.II Development Agreement Process	No content change.	Proportionate share is defined and the process for calculation is within the sections listed below: R.O. 2003: 150.23(J); 150.24; 150.25; 150.30(A)(2); 150.30(B)(4)(c); 150.30(B)(10); 150.34(B)(1)(b)(3);
	Can there be a procedure for obtaining an additional address on a property if you have a casita rental or mother -in-law's quarters?	2.9.B. Change of Address	No content change.	The Post Office and Utilities set forth the guidelines for addressing ADU's. This is not related to affordable housing.
PW	Change from 2024 to 2025	1.4 DPM Update Procedures	The DPM is intended to evolve as the need for new or updated standards arise. The document was most recently revised in 2025. The content of the DPM was prepared jointly by both private sector users and City staff members. DPM users are encouraged to submit suggestions, corrections, and proposed modifications in writing at any time.	
PW	I think there should be a definitions chapter to section 2.	Contents	2.2 Definitions	
PW	Should this be changed to "pecuniary interest" instead? If so, there should be a definition accordingly.	2.3.D. Appeals	No content change.	R.O. 2003 150.08 states aggrieved parties may appeal.
PW	Annexation of Territory ….municipality arbitration, boundary commission, and petition.- Add a colon here.	2.3.A.I Annexation Process	New Mexico State Statutes (NMSA 1978) Section 3-7 Annexation of Territory establishes three different methods of annexing territory to a municipality, arbitration, boundary commission, and petition.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
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PW	Add a “than” here	2.3.B. Land Use Plans	These plans encompass large geographic areas of the City providing a higher degree of detail than the comprehensive plan. Area plans establish planning criteria and land use goals specific to the physical development consistent with the Principles and Policies of the Comprehensive Plan. Area plans are	
PW	Change appropriate feeds to “fees”	2.3.B.I.b. Land Use Plan Process	Land Use Plan applications are reviewed through the following process. Applications and appropriate fees are submitted to the Development Services Department. Applications may be submitted by the property owner, their agent, or City Staff. City staff will review the application for completeness and inform the applicant of	
PW	The Planning and Zoning Board makes a final decision at a public hearing- This sentence needs to be re-worded. The first sentence of this paragraph references Zone Map Amendments, The PZB does not make the final decision on ZMA's.	2.4 Decisions Requiring a Public Hearing	For zone map amendments, the Planning and Zoning Board makes a recommendation, but the Governing Body, which serves as the ultimate decision-maker, makes the final decision at a public hearing.	
PW	Without the submittal of complete engineering plans -for consistency with the Appendix M checklist, this should read "preliminary construction plans"	2.4.A.II. Preliminary Plat Procedure	Preliminary Plats provide the proposed subdivision and improvements. When a development is not ready for construction, a Preliminary Plat can be considered without the submittal of preliminary construction plans; if,	
PW	…applicable. except Limited-Time Businesses who are operating a business temporarily. – Add come here	2.6.A.III. Commercial Business License Process	business registration or licensing fee, and fire inspection fee based on square footage of location, as applicable, except Limited-Time Businesses who are operating a business temporarily.	
PW	Change approval to decision	2.6.D.II. Administrative Garage Conversion Process	Applicants submit an application to the Development Services Department office. The Development Services Zoning Division review and decide on the application. Staff provide notice of decision ~~approval~~ to the applicant.	
PW	Is furnished a requirements of model homes?	2.6.E Model Home/Sales Office	Struck furnished	
PW	add "which will" here. Remove the "s" from inspects.	2.6.H.II. Special Event Permit Process	Recreation and Community Services Department review and decide on the application. If approved, the applicant pays any required permit fees, the permit is issued, and the event may commence. If the event includes the use of tents or canopies, a Fire Inspection must be scheduled with the Fire Rescue Department which will inspect tents and canopies prior to the event.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Flowchart-Change approval to notice of decision	2.6.I.IV. Substantial changes. Zone Districts		
PW	Add close parathesis	2.7.A.I.General Requirements	In addition to the required plans, review submittals may include additional technical reports, studies or analysis including but not limited to Drainage Reports, Drainage Implementation Plan, Geotechnical Report, Traffic Impact Study (TIS, and/or Water and Sewer Availability statements). These may be required by Rio	
PW	Add comma to..”such as creeks railroads..	2.7.A.III.a.v. Conceptual Layout	Unusual Features: Identify unusual features, such as creeks , railroads, and irrigation ditches, that might	
PW	Line Item 1. Is the Executive Summary discussed in line item 3, bellow?	2.7.A.III.b.i.!. Introduction	Yes, clarified reference to executive summary	
PW	should "not" be added? to read "Though a development may NOT meet these thresholds...	2.7.A.III.c.i. Applicability/Traffic Impact Analysis Threads	TIA will be required for a given development proposal. Though a development may not meet these	
PW	throughout the DPM, there are many instances where sentences do not include a period to close. This is one of many examples. Probably not a big issue. Just an observation.	2.7.B.IV.i.ii. Calculations	Fixed throughout document.	
PW	Line item 4. Change to “low”	2.7.B.IV.j. Irrigation Plans	If the service pressure is too high, a pressure reducing valve may be necessary. If the service pressure is too ~~high~~ low, a booster pump may be necessary.	
PW	Change- Shall with two small letter ‘l’ not the number 1	2.7.D. Digital Record Drawing Requirements	date. The AutoCAD file shall depict the final Record Drawings with the rights-of-way and the project/subdivision tied to the state plane coordinates. These submitted files shall ~~sha11~~ include all survey data as stated below. The files shall contain the following information and shall be in the City’s schema for	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Line item 11, change from jitters to gutters	2.7.D.II.b. Street, Storm Drains, Grading and Drainage Plans	Elevations shall be provided at all drainage control points (. detention overflow point, tops and bottoms of detention basins, drain rim, valley gutters ~~jitters~~, curbs, etc.).	
PW	All line-item comment- If this colon is indicating the following items, they should be subsets of this, not new numbers.	2.7.D.II.c. Water Plans	Fixed formatting Street centerline station and offset dimensions to: a. All fire hydrants and fittings (i.e. valves, bend, tees). b. Main line at all changes in horizontal and vertical alignment. c. All horizontal control points (i.e. centerline intersects, PC, PT). d. Dimension to all operating nuts referenced to the water main on valves with offset operating devices. e. If the designed topography does not allow for the service standards to be used, centerline station and offset to each service tap; size of tap and dimension to nearest side property line are required. If topography allows for the standard to be used, then a survey point I only required at the end of the service for location purposes. f. Note centerline station, offset and elevations to all changes in vertical alignment (i.e. dips, bends, etc. required to avoid conflicts with other utilities). g. The installed water pipe material and diameter shall be shown on as-built plan and/or profile sheets. h. Station, location and limits of utility encasements, caps, pipe supports, etc.	
PW	Detailed criterial 'three' types of plan…s this intended to refer to Final Plat, Preliminary Plat, and Construction Plans, the latter of which might include the 8 other documents/plans listed?	2.7.E. Recordable Documents	Struck three	
PW	Line item 3. Cable One, Qwest Communications, PNM Electric Services and New Mexico Gas Services- Is this still correct?	2.7.E.VI.b.ix. Certifications/ Signatures	Updated	
PW	Line item 3. .. You should investigate the availability of such permits before you- add 'by the'	2.7.E.VI.b.ix. 1.Disclosure of statement format	Building permits, wastewater permits, or other use permits must be issued by the City officials before improvements are constructed. You should investigate the availability of such permits before you purchase, lease, or otherwise acquire an interest in the property. You should also determine whether such permits are required for construction of additional improvements before you occupy the property.	
PW	Line item 22. .. Change form the New Mexico..to "from"	2.7.E.VI.b.ix. 1.Disclosure of statement format	Include here the approved summary of the opinion received by the City from ~~form~~ the New Mexico State Engineer regarding:	
	Line item 28. .. Add "by the City" for consistency	2.7.E.VI.b.ix. 1.Disclosure of statement format	Include here the approved summary of the opinion received by the City from the Soil & Water Conservation District on:	
PW	Line item 36. Fire Protection- "should there be a discussion on HOA developed parks and costs to the lot purchaser for maintenance?"	2.7.E.VI.b.ix. 1.Disclosure of	(state whether the fire department is full-time or semi-staffed or volunteer)	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	..full-time, semi staff, or volunteer.	statement format		
PW	There are several layer names throughout this chart that are missing descriptions, and certain duplications. Remove EXST Remove suplciate row of Power	2.7.L Appendix G CAD File Layering Conventions	C-TRAF-PM-SOY-EXST | Existing-Traffic-Solid Yellow Paint Removed duplicate row	
PW	Hydrology Table - is AHYMO still utilized?	2.7.N Appendix I Drainage Report Checklist	No removed.	
PW	Miscellaneous Table- Operations/Maintenance requirements…missing text Remove duplicate row	2.7.N Appendix I Drainage Report Checklist	~~Compliance with SSCAFCA criteria~~ Compliance with City of Rio Rancho DPM (Sections 2.2.2 through 2.2.8) and SSCAFCA criteria	
PW	Grading and Drainage Plan Checklist- page break so all items are contained in the same location.	2.7.O Appendix J Grading and Drainage Plan Checklist	Limits of existing floodplain based on effective Flood Insurance Rate Map: include a copy of the FIRM and provide reference to Panel number	
PW	Reformat sentence	2.7.Q EROS I ON CONTROL AND STORMWATER POLLUTION	(put "Y" yes or "NA" not applicable comment or reference a "footnote" for review letter)	
PW	Line Item 2. Is 18" accurate? It seems like a large deviation.	2.11. S. Appendix L Engineers Certification Checklist for Subdivisions	No Change.	Updated plans are requested by staff when field conditions result in deviations from approved dimensions. If the 18" measurement reflects a change from the original design, revised plans will be submitted to accurately document the as-built condition.
PW	are these still accurate? NM Gas? Fix Formatting and add breaks to so all information is contained in a page	2.7.U. Appendix N Checklist for Submittal of Final Plats	☐ ☐ Certification of franchised utility companies (Xfinity, CenturyLink, Sparklight, PNM, NM Gas) and ~~Department of Public Works~~City of Rio Rancho Utilities Department ☐ ☐ Certification of County Treasurer that all current and previous property taxes have been paid in	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Line Item 4. Add Legal Description	2.7.V. Appendix O Grant for Drainage Easement	A perpetual legal description easement on the areas designated on this plat as "drainage easement" ["detention area"] is hereby dedicated to the City of Rio Rancho for the purpose of permitting the conveyance of storm water runoff and for the purpose of constructing, maintaining, operating, removing,	
PW	Required Indemnification Note: The written notice provided for herein- where is this located?	2.7.V. Appendix O Grant for Drainage Easement	It is located below in the description Required Indemnification Note: The Grantor agrees to defend, indemnify, and hold harmless, the City, its officials, agents and employees from and against any and all claims, actions, suits, or proceedings of any kind brought against said parties for or on account of any matter arising from the drainage facility provided for herein or the Grantor's failure to construct, maintain, or modify the drainage facility under this covenant. The written notice provided for herein shall be accomplished by mailing same to: The Grantor may change said address by written notice, certified mail, return receipt requested to the City Engineer, Rio Rancho City Hall, 3200 City Center Circle NE, Rio Rancho, New Mexico 87144. IN WITNESS WHEREOF, the parties have set their hands and seals this _____day of _____20____, GRANTOR By:_____ Title: _____ REVIEWED BY THE CITY OF RIO RANCHO LEGAL DEPARTMENT _____ City Manager ACKNOWLEDGMENTS STATE OF NEW MEXICO)) SS. COUNTY OF SANDOVAL) The foregoing instrument was acknowledged before me this _____ day of _____, 20_____, by _____ (Name of Grantor) _____ Notary Public My Commission Expires:_____	
PW	confirm consistency with Appendix G and Appendix P in it's entirety. see examples Change C-RW to c-row.	2.7.W. Appendix P CAD Standards and Naming Conventions	ROADWAY R-O-W C-ROW CYAN CONTINUOUS ROADWAY RIGHT-OF-WAY LINES PRIVATE STREET R.O.W. C-ROWP WHITE PHANTOM2 PRIVATE RIGHT-OF-WAY LINES	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
		for Digital and Plat submittals		
PW	Line item 2,3. Fix formatting issues.	2.8.C.II.a.Pre-Design Phase	1. Partial Acceptance: When application for design and construction of public infrastructure improvements is made, the developer indicates on the application if partial acceptance of the proposed construction will be requested. Partial acceptance will be a topic for discussion at the Pre-Design Conference. Each subdivision for which partial acceptance of improvements is requested will be examined at the Pre-Design Conference to determine what parts, if any, can function adequately without the remaining parts. These will be designated the "stand alone" parts. If no "stand alone" parts can be determined, then the infrastructure improvements cannot be partially accepted. If "stand alone" parts are identified, the developer may achieve partial acceptance of the infrastructure improvements for these parts by: a. Dividing the entire subdivision into projects for each of the "stand alone" parts (each project will have its own separate pre-construction), or b. Assuring construction of required infrastructure in accordance with Section 9 of SSCAFCA's Drainage Policy	
PW	remove this quote or add an additional after "Map".	2.8.D.V. Development within Flood Hazard..	The following floodplain note must be placed on the plat if a LOMC has not been issued by FEMA: "Portions of the subject property lie within a designated area of special Flood Hazard as shown on the most recent National Flood Insurance Program's Flood Insurance Rate Map. Until such time that a LOMC is issued by FEMA, flood insurance may be required."	
PW	Fix formatting Line Item 1. should be sub-paragraphs of item 1, not new numbers	2.8.D.IX.c. Letter of Map Revision (LOMR)	The typical required submittal for map revisions because of physical changes is as follows: ~~2.~~a. General description of the changes (dam, diversion channel, detention basin, etc.) ~~3.~~b. Construction plans for as-built condition, if applicable. ~~4.~~c. New hydrologic analysis accounting for the effects of the changes. ~~5.~~d. New hydraulic analysis using the new flood discharge values resulting from the hydrologic analysis. ~~6.~~e. Revised delineations of the flood plain boundaries or floodway. Fixed formatting	
PW	Add language- SSCAFCA	2.8.E. Vacation Procedure of ROW Easements	Discussion of the proposed vacation with the SSCAFCA staff is recommended prior to application filing. T purpose of the discussion is to review City policies and procedures applicable to the proposal so that incomplete, inadequate, and inappropriate SSCAFCA applications are avoided. City staff may be included	
PW	Line Item 4. G (9)- Where is this?	2.8.F.I. Infrastructure Allocation Drainage Management Plan	4. The Allocation Plan shall be based upon fully developed conditions, [excepting properties excluded under paragraph 2.9.F.II.4.i~~G(9)~~] taking into consideration the current elements of the applicable City land use master plan(s), or other reasonable land use models, as they relate to the benefited area, and other relevant known factors, such as changes in zoning or development trends not reflected on the master plan(s).	
PW	Line item (e)- change or to of. And add comma to plat, final site plan approval. Line item 9. Insert "City" Change my to may Change form to from	2.8.F.II. Review and Approval Procedure	. The cost allocation of ~~or~~ the required drainage infrastructure identified by the Allocation Plan for each new development shall be identified on the approved infrastructure list for the new development and shall be required as a condition to final plat, final site plan approval, or building permit approval.	

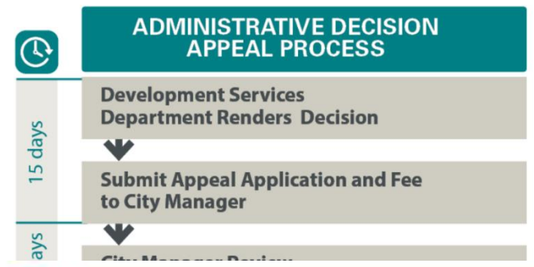
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
			Appeals; SSCAFCA Executive Committee a. Any applicant aggrieved by a decision or actions of the Engineer or absence of such decision, may appeal such decision to the Executive Committee of City SSCAFCA. Such appeal shall be made by notice of appeal in writing addressed to the Chairperson of the Executive Committee and delivered to SSCAFCA within 30 days after the date the decision was mailed to the applicant. The Chairperson of the Executive Committee shall notify the applicant and the Executive Committee Members of the date, time, and place of the appeal hearing at least five day prior to the hearing date. Such hearing shall be conducted not earlier than ten days no later than 30 days after the filing of the notice of appeal. At the hearing, the Executive Committee may consider such facts, exhibits , and engineering principles as may be presented by the appellant or the Executive Engineer or his designee, or of which the members may have knowledge or experience, and may affirm, reverse or modify the decision appealed from, and attach as condition to their decision such requirements as in their opinion may be necessary or appropriate in compliance with the policies of §§ 1 et seq. to safeguard persons and property from storm water runoff. Each decision of the Executive Committee shall be in writing and shall state reasons therefore. A copy of the decision shall be promptly mailed to the applicant and to the Executive Engineer and City Engineer.	
PW	Add quotes for Redrawn for Record.	2.9.A.II. Process for Developer Projects	A set of Final Record Drawings stamped and sealed by a Professional Engineer or Registered Land Surveyor with the "Record Drawing Certification (Appendix C)" approval block included will then be submitted to the City. On any sheet where a change to the original construction drawings has been made "Redrawn for Record" shall be placed on that sheet.	
PW	Line item 4. a) -change to "it's" Line item 4. b) -combine with line item 4. a) The applicant attests the following is submitted- What is submitted?	2.10 A. Appendix A Zoning Variance List	4. Justification, including the scope of the request, and addressing criteria for granting a variance: a. There exists a special circumstance(s) applicable to the property, including it's exceptionally irregular size, shape, too narrow, too shallow or steep b. Other exceptional physical conditions whereby the strict application of the zoning ordinance requirements would result in a practical difficulty or unnecessary hardship that would deprive the owner of the reasonable use his/her land or building 5. An accurate site plan showing: a. The location of any buildings on the property in relation to property lines and other buildings b. Adjoining property, abutting streets and alleys, and a north directional arrow should be indicated c. Property dimensions and site conditions d. Parking spaces e. Height of the structure With the submittal of the application and checklist, the applicant attests that the following is submitted. Failure to provide the requested information or falsifying information may result in a continuance or denial of your case. Attach additional sheet(s) if necessary. The above Variance checklist is submitted.	
PW	"With the submittal of the application & checklist, the applicant attests that all requirements are submitted. Failure to adequately provide requested information or falsifying information may result in a continuance or denial of your case (attach additional sheet(s) if necessary."- this paragraph is almost a duplicate of the last paragraph of 2.10.A. Are they both needed?	2.10.B. Appendix B Zone Map Amendment Checklist	**2.11.E Zone Map Amendment Checklist** ~~*With the submittal of the application & checklist, the applicant attests that all requirements are submitted. Failure to adequately provide requested information or falsifying information may result in a continuance or denial of your case (attach additional sheet(s) if necessary.*~~ ***The following is a checklist of submittal requirements for obtaining a Zone Map Amendment:*** ☐ A completed application form signed by the owner or agent. ☐ If the application is being submitted by an agent, a letter of authorization from the property owner must accompany the application.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Line item 3. iv) -change patter to pattern Add 7 to line item 7.	2.10.B. Appendix B Zone Map Amendment Checklist	iv. The applicant must demonstrate that the existing zoning is inappropriate because: 1. there was an error, mistake or is necessary to correct an injustice that occurred when the existing zone map pattern was created, including the placement of a R-1 or transitional zone on an antiquated plat filed before the City's incorporation and adoption of its own Zoning Code or on land annexed by the City, or 2. changed neighborhood or community conditions justify the change, or 3. a different use category is more advantageous to the community, as articulated in the Comprehensive Plan or other City master plan, even though (1) or (2) above do not apply. Applicant's reliance on this provision requires proof that (a) there is a public need for a change of the kind in question, and (b) that need will be best served by changing the classification of the particular piece of property in question as compared with other available property. 4. The cost of land or other economic considerations pertaining to the applicant shall not be the determining factor for a change of zone. 5. Location on a collector or major street is not in itself sufficient justification of apartment, office, or commercial zoning. 6. A zone change request which would give a zone different from surrounding zoning to one small area, especially when only one premise is involved, is generally called a "spot zone." Such a change of zone may be approved only when: a. the change will clearly facilitate realization of the Comprehensive Plan and any applicable adopted sector development plan or area development plan; or b. the area of the proposed zone change is different from surrounding land because it could function as a transition between adjacent zones: because the site is not suitable for the uses allowed in any adjacent zone due to topography, traffic, or special adverse land uses nearby; or because the nature of structures already on the premises makes the site unsuitable for the uses allowed in any adjacent zone. 7. Site Plan, Site Plan Checklist, and related drawings only if SU zoning is requested.	
12.12.24	In Chapter 2 Procedures, Section 2.3.B Land Use Plans, the following has not been added and revised: For subdivisions that are 20 acres or less, master plans may be less detailed and certain sections may be omitted per staff discretion and approval. Also, in the Procedures section, master plans should always be two words. In a few areas it has been referred to as "masterplans", which is incorrect. (per Michelle's 11/21 email to Jessica	2.3.B Land Use Plans	Added language per City staff request for clarity on subdivisions 20 acres or less. Performed a 'find and replace' and corrected all instances of the use of the term 'masterplan' to reflect the desired change to 'master plan'.	
12.9.24	In Table 1, under Street Name Changes, add "As petitioned by the public."	Table 1		

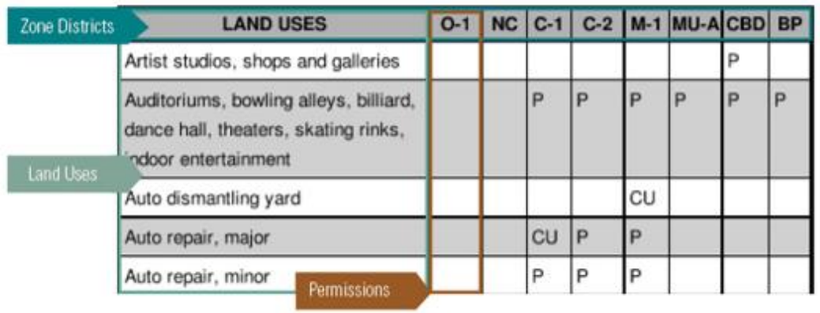
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	In Table 1, under Street Name Changes, add "R" under staff for administrative review	Table 2		
	In Table 1, under Mobile Home / Sales Office, added space between A and building permit	Table 3		
	Revised "Community Services" to "Development Services"	Admin Decision Appeal Process flowchart		
	Remove DRC meeting step, fee from application step, and public notice step from Final Plat process flowchart.	Final Plat Process flowchart		

	R= Review and/or Recommend D = Review and Decide AD = Appeal Review and Decision < > = Public Hearing	Mailed Notices	Posted Signs	Published	City Staff	A
POLICY DECISIONS						
Annexation of Land	An annexation of land request is required to add any new land area into the City Limits.	X	X	X	R	<
Land Use Plans	Land Use Plans are Masterplans and Specific Area Plans that lay out a specific development scenario for a site, including future land use, utilities, drainage, and transportation. A masterplan may be required for any development that is at least 10 acres in size. A specific area plan is required for any development that is at least 1,000 acres in size.	X	X	X	R	<
Land Use Plan Amendments	A plan amendment is required to update or change elements of established Masterplans or Specific Area Plans.	X	X	X	R	<
DECISIONS REQUIRING A PUBLIC HEARING						
Subdivisions	A request for subdivision is required for dividing a portion of land into lots or for consolidating one or more parcels into a larger lot.					
Bulk Plats	A bulk plat is required for the division of land that is primarily intended to facilitate transfer to intermediate land holders, not to create parcels available for development without further subdivision approvals.	X	X	X	R	<
Preliminary Plats	A preliminary plat is required for the division of land intended to create parcels available for development.	X	X	X	R	<
Preliminary Plat Extensions	A preliminary plat extension is required for plats that have expired or have not been acted upon within one year of their approval.	X	X	X	R	<
Final Plats	A final plat approval is required prior to the filing of a plat for record with the appropriate County Clerk.				R	<
Vacation Plats	A vacation plat is required when no new lots are being created and lot lines, rights-of-way, or easements are being eliminated.	X	X	X	R	<
Subdivision Variances	A subdivision variance is required when a deviation from the design standards of Rio Rancho Municipal Code Section 155.40-46 is requested.	X	X	X	R	<
Street Name Changes	Street name change requests are required to alter the name of any public or privately-owned street as petitioned by Public.	X			R	<

Model Homes/Sales Offices	Model homes and sales offices require a model home and sales office permit approval. Temporary model home sales offices in the C-1: Retail Commercial Zone District require a Conditional Use Permit. A building permit is also required.





RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
		Land Use Table diagram		
	Replace “discrepancy” with “public hearing”	2.4.F	Variances may follow an administrative or a public hearing process depending on the scale of the request and how drastically the proposed design would deviate from the requirements. The administrative variance process is used for requests that impact less than 10% of the area, height, dimension, distance, parking, or setback requirements and for requests to convert a garage into living space. The applicability of the administrative variance process is found in Rio Rancho Municipal Code (R.O. 2003) Section 150.06(D). All other variance requests go through ~~the discretionary process~~a public hearing and are reviewed by the Planning and Zoning Board. The processes for each are outlined below.	
			Utilities Signature Block: Sparklight Date Public Service Company of New Mexico Date Lumin Date Sparklight Date Comcast Date Qwest Communications Date Ezee Fiber Date	

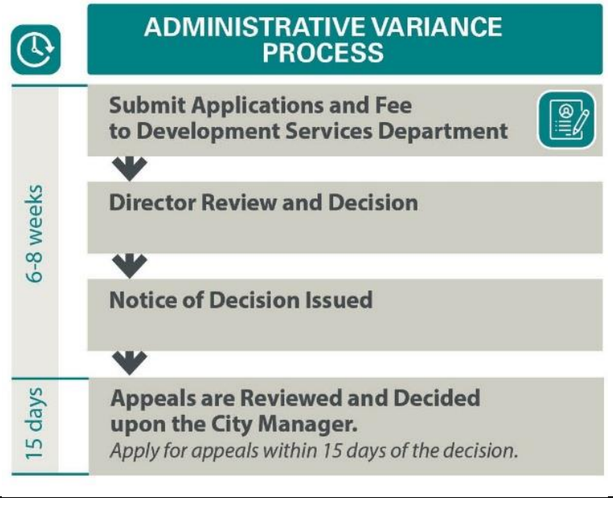
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Revise formatting	2.7.E.VI.a and b	2.7.E.VI. FINAL PLAT DETAILED REQUIREMENTS The following detailed requirements for Final Plats are in addition to the general requirements for all plats given in Section 3.3.3. 2.7.E.VI.a. Scale Must be either 1" = 100', or 1" = 50' (1" =50' preferable, when practical) 2.7.E.VI.b. Additional Data Required – Construction Plans 2.7.E.VI.b.i.Plat Boundary In addition to the boundary items required by Subsection B, both record and measured distances and bearings must be shown and identified for all courses in the plat boundary on Final Plats. 2.7.E.VI.b.ii. Plat Area	
10.31.24				
	Add "R" here for administrative review	Chp 2.1-Table 1	POLICY DECISIONS Annexation of Land — An annexation of land request is required to add any new land area into the City Limits. — X | X | X | R | <R> | <D> | Section 2.3.A	
	Add another line for Street Name Change for adopted by Resolution. <D> is GB , mail out notices	Chp 2.1-Table 1	Street Name Change for adopted by Resolution — Street name change requests are required to alter as petitioned by Public. — X | <D> | Section 2.4.B	
	Clarify language- The revocable written authorization from the city to use, work in, or otherwise occupy public right-of-way; detailing the specific time, place, and other restrictions for the allowed use. Change to ROW Use Permit	Chp 2.1-Table 1	CONSTRUCTION PERMITS Right-of-Way ~~Encroachment~~ Use Permit — ~~An encroachment permit~~Use Permit is required for the authorization from the city to use, work in, or otherwise occupy public right-of-way; detailing the specific time, place, and other restrictions for the allowed use ~~construction of walls, fences and/or footings in the public right of way to allow private use of public right-of-way on a conditional, revocable basis.~~ — D	
	Change curb permit to application Change construct of crossing to cut the curb.	Chp 2.1-Table 1	Curb Cut — A curb cut, application ~~permit~~ is required to cut the curb ~~construct of crossing~~ of any sidewalk or public right-of-way to give access to any premises. — D	
	Add following language- “This permit is required for”… Change registration to permit.	Chp 2.1-Table 1	Childcare Facilities — This permit is required for Childcare facilities, including daycare facilities, and in home childcare services, require a childcare facility approval. Facilities caring for seven (7) to twelve (12) children are required to obtain a conditional use permit. — D — Section 2.6.C Community Residential Care Facilities — This permit is required for Residential Care Facility permit ~~Registration~~ is required for the licensing of facilities and providers who provide care for people with special needs within the city. — D — Section 2.6.C	
	Add language- A building permit is also required.	Chp 2.1-Table 1	Model Homes/Sales Offices — Model homes and sales offices require a model home and sales office permit approval. Temporary model home sales offices in the C-1: Retail Commercial Zone District require a Conditional Use Permit. A building permit is also required.	
	Add language- and face changes.	Chp 2.1-Table 1	Sign Permit — A sign permit is required to construct, place, erect or modify a sign. A permit is not required for general maintenance, face changes, or the erection of certain temporary construction signs.	
	Add and/or alcohol	Chp 2.1-Table 1	Special Event Permits — Special event permits are required when any of the following occurs at an event: • Selling or vending of food and/or alcohol • Dedicated safety resources are necessary • Tents or other structures are erected • Traffic flow and access is impacted	
	Change language to attend	2.2 A Development Review Committee Process	Development departments. Additional representatives, such as staff from Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA), utility companies, or Rio Rancho Public Schools, may attend ~~be invited~~ when their presence is necessary or desirable for any specific project or questions before the DRC. Staff	

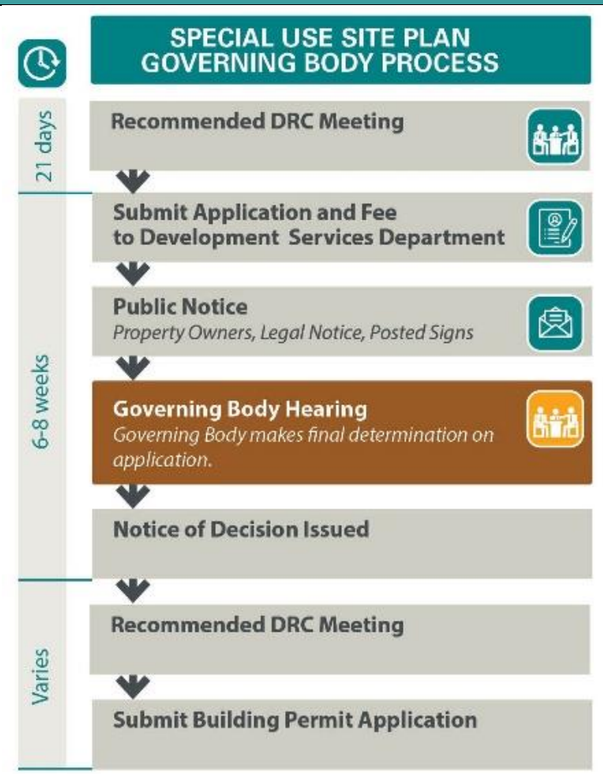
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Site Signge - Change from 15 to 7 days.	2.2 B Public Notice	Site sign posted notices shall use signs furnished by the City at the time of submittal. The applicant is responsible for posting and maintaining one or more signs at least 7 ~~15~~ days prior to the date of the applicable hearing. The applicant is responsible for removing the signs within 5 days after the hearing is completed. Applicant must sign the sign posting agreement and provide photos of the signs posted on site to staff.	
	Change Community Development to Development Services			
	Change Master Plans, remove the word second.	2.3 Policy Decisions	**2.3 Policy Decisions** Development applications classified as Policy Decisions refer to those that implement large City goals and policies contained within officially adopted plans, including the Comprehensive Plan, Master Pplans, and Specific Area Plans. Policy Decisions include annexations and land use plan approvals. Such applications are reviewed by the Planning and Zoning Board at a public hearing. The Planning and Zoning Board makes a recommendation of approval or denial to the Governing Body. The Governing Body makes the final decision at a ~~second~~ public hearing. The general process of policy decisions is laid out below. Applicants can expect a policy decision development application process to take 3 to 5 months from the date the application is submitted to final approval.	
	Change Master Plan, and remove this language- “but usually more than 100 acres”	2.3 B Land Use Plans	• Master Pplans Masterplans are prepared by either the City or private sector and submitted to the City for review and approval. Masterplans address the Principles and Policies of the Comprehensive Plan, but specific to a defined area within the City; at least 10 acres ~~but usually more than 100 acres~~.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Replace "upon" with "by" all throughout	2.4 Decision Requiring a Public Hearing		

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove Recommended DRC Meeting Remove Fee	2.4.A.III.b. Preliminary Plat Extension Process		
	Remove language- “and fees”	2.4.IV.b. Final Plat Process	Final plat approval is requested by the following process. Applications ~~and fees~~ are submitted to the Development Services Department. City staff reviews the application for completeness and lets the applicant	

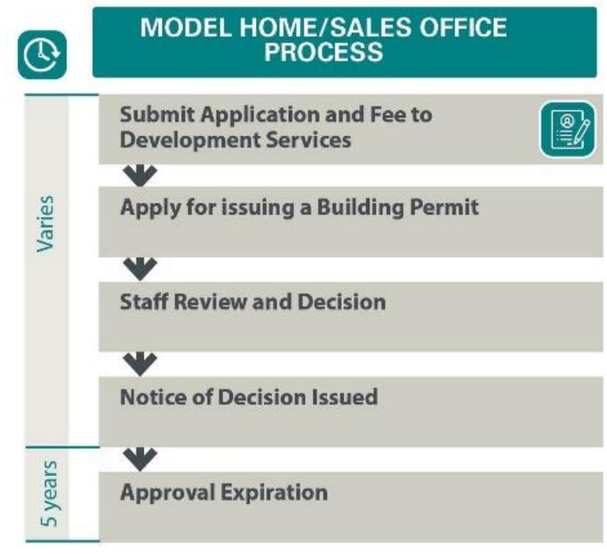
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove Recommended DRC Remove fee Remove Public Notice	2.4.A.IV.b. Final Plat Process		
	Remove this language- “mere inconvenience upon the property owner, or difficulty caused to one’s personal comfort”	2.4.A.VI. Subdivision Variances	A subdivision variance provides an exemption from the strict application of the subdivision design standard found in Rio Rancho Municipal Code (R.O. 2003) Sections 155.40-46. Per Rio Rancho Municipal Code Section 155.60, Financial gain or loss, monetary savings, ~~mere inconvenience upon the property owner, or difficult caused to one’s personal comfort~~ cannot be considered solely as a basis for a variance request. Rulings	
	Change code section to 150.06 Remove this language – “ and whether the variance is deemed to provide an improved design. Replace the word discretionary with public hearing	2.4 F Variances	A zoning variance provides an exemption from the strict application of area, height, dimension, distance, parking, or setback requirements. Variances are not granted for use requirements. Per Rio Rancho Municipal Code Section 1560.06, financial gain or loss, monetary savings, mere inconvenience upon the property owner, or difficulty caused to one’s personal comfort cannot be considered as the sole basis for a variance request. Rulings consider the existence of unusual conditions ~~and whether the variance is deemed to provide an improved design~~. Variances may follow an administrative or a public hearing ~~discretionary~~ process depending on the scale of	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Pluralize applications	2.4.F.II. Administrative Variance Process		

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Add Recommend DRC Meeting	2.4.G .III. Special Use Site Plan Governing Body Process		
	Remove “3 acres or less” language	2.5.B Park Permits	**2.5.B Parks Permits** Parks permits are required for parks and recreational facilities ~~3 acres or less~~ which will be owned and maintained by the City of Rio Rancho or private entities. Park and recreational requirements and design standards are found in Chapter 6 Parks and Trails.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove Building Permit and just leave it as "Submit Application and Fee" Remove Impact Fees Paid			
	Remove “building” language	2.5.B.II. Inspections and Acceptance	2.5.B.II. INSPECTIONS AND ACCEPTANCE i. City of Rio Rancho ~~Building~~ Inspectors shall inspect all permitted park improvements as per their published process.	
	Change to Development Services Planning and Zoning Division throughout	Throughout Chp. 2	forms completed to the City Clerk’s Office. The City Clerk staff review the application to verify completeness and accuracy. Completed applications are forwarded to Development Services Development Services-Planning and Zoning ~~Zoning~~ Division for review and approval of the application in compliance with local law.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Change to- City Clerk reviews and checks for completeness and forwards to DSD	2.6.C.II. Residential care facilities and childcare facilities process		

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Change Second step to Apply to be issued a Building Permit	2.6.D.II. Administrative Garage Conversion Process		
	Change Second step to Apply to be issued a Building Permit	2.6.E.II. Model home/sales office process		

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	In place of Approval Issued- move Special Permit Issued here. Fire inspection of tents and canopies as applicable is the last step.	2.6.H.II. Special event permit process		
	Change to structures that do not exceed 120 square feet	2.6 J Fences, walls and Small Accessory Permits	All fences, walls and accessory structures that do not exceed 120 ~~smaller than 200~~ square feet require a zoning plan review by obtaining a permit. Accessory structures are structures detached from and located on	
	Change to Permit Issued	2.6.J.II. Fence, wall, and small accessory structure permit process		

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove the following language	2.7. E.III.m Disclosure Statement	A disclosure statement is required of all plat packages ~~except Abbreviated Process Plats [City of Rio Rancho Ordinance Chapter 155.26 (A)]~~. The Preliminary and Final Plat shall be accompanied by a disclosure	
	Add Ezee Fiber to the Signature Block Remove City signature block section	2.7. E.III.n.signature permits	**Utilities Signature Block:** ~~Cable One~~ Sparklight Date Public Service Company of New Mexico Date Lumin Date Sparklight Date ~~Xfinity~~Comcast Date ~~**City Signature Block:**~~ ~~City of Rio Rancho Utilities Date~~ ~~Development Services Department Director Date~~	
	Unbold- spliced plat sheets are not acceptable	2.7.E.IV. Recordable Document Submittal Materials	Spliced plat sheets are not acceptable.	
	Remove the following language	2.7.E.VI.b.ix. Certifications/ Signatures:	~~x. Certification by the Park Recreation and Community Services Department Director or his/her designee that park dedication requirements have been met.~~ ~~xi. Certification by the Development Services Department Director or his/her designee that requirements have been met for change in City of Rio Rancho ownership or rights, involving any rights-of-way, grants of easement, or public lands to be altered by the plat.~~ ~~xii.~~x. Certification by the Planning and Zoning Board Chairman of plat approval noting date and time of the Planning and Zoning Board approval. ~~xiii.~~xi. Certification of the City Clerk of the date the plat was approved either by the Planning and Zoning Board~~, or administratively by the Development Services Department Director.~~	
	Add as applicable to building permit	2.10.A Appendix A Zoning Variance Checklist	• Completed Land Use Application • As applicable, a building permit. • A letter of authorization from the property owner stating that he/she is aware of the zoning variance	

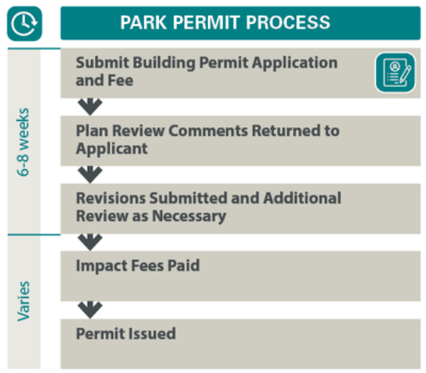
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Add site plan under this section	2.10 E Appendix E Zone Map Amendment for Special Use Zone District Checklist	• Owner verification letter, if applicable • Site Plan, if applicable.	
	Add Ezee Fiber to the Signature Block Remove City signature block section	2.7. E.III.n. Signature Permits	**Utilities Signature Block:** ~~Cable One~~ Sparklight Date Public Service Company of New Mexico Date Lumin Date Sparklight Date ~~Xfinity~~Comcast Date ~~**City Signature Block:**~~ ~~City of Rio Rancho Utilities Date~~ ~~Development Services Department Director Date~~	
Oct 2024				
	Chapter 154.83 B (2) should also be listed here. See attached please. "Require the issuance of one or more permits, licenses, or inspections by any governmental entity for the event and/or event activities (e.g., business license, tent/canopy inspection, temporary food service permit, etc.,)"	2.9 H Special Event Permits	**2.6.H Special Event Permits** The purpose of a special event permit is to allow for the facilitation of a successful special event while ~~would~~ minimizing any impacts of the event on community members and to ensure the City's ability to provide emergency services to the public at all ~~line~~times. Special event permits are required when any of the following ~~occurs~~requires a permit: • ~~Selling or vending of food~~ • Selling or vending of alcohol • Dedicated safety resources are necessary • Tents or other structures are erected • Traffic flow and access is impacted Additional permit(s), license(s), or inspection(s) such as a business license, tent/canopy inspection, temporary food service permit, may also be required depending on the specifics of the event and/or event activities.	
	The Fire and Rescue dept does not require scheduling a fire inspection 30 days prior to the event. Typically, they inspect the day of or the day before. If the applicant knows when the tent will be set up, they can schedule the inspection at any time.	2.9 H.II Special Event Permit Process	2.6.H.II. SPECIAL EVENT PERMIT PROCESS Special event permits are requested by the following process. Applicants submit an application to the Development Services Department no less than 30 days prior to the proposed special event date. The City Clerk, Development Services Planning and Zoning Division, Fire Department, Police Department, and Parks, Recreation and Community Services Department review and decide on the application. If approved, the applicant pays any required permit fees, the permit is issued, and the event may commence. If the event includes the use of tents or canopies, a Fire Inspection must be scheduled ~~30 days prior~~with the Fire Rescue Department ~~to the event to~~ inspects tents and canopies prior to the event.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Special event Process Flowchart- The City Clerk's office is included in the review process but they are not listed.	2.9 H.II Special Event Permit Process Flowchart	2.6.H.II. SPECIAL EVENT PERMIT PROCESS Special event permits are requested by the following process. Applicants submit an application to the Development Services Department no less than 30 days prior to the proposed special event date. The City Clerk, Development Services Planning and Zoning Division, Fire Department, Police Department, and Parks, Recreation and Community Services Department review and decide on the application. If approved, the applicant pays any required permit fees, the permit is issued, and the event may commence. If the event includes the use of tents or canopies, a Fire Inspection must be scheduled ~~30 days prior~~ and the Fire Rescue Department ~~to the event to~~ inspects tents and canopies prior to the event.	
	There is $35.00 fee assessed and a permit is issued.	2.9 H.I Special Event Permit	2.6.H.II. SPECIAL EVENT PERMIT PROCESS Special event permits are requested by the following process. Applicants submit an application to the Development Services Department no less than 30 days prior to the proposed special event date. The City Clerk, Development Services Planning and Zoning Division, Fire Department, Police Department, and Parks, Recreation and Community Services Department review and decide on the application. If approved, the applicant pays any required permit fees, the permit is issued, and the event may commence. If the event	
	○ Special event Process Flowchart need to add- "A permit is issued". ○ The building inspection division also requires an applicant submittal. Sign Permit Process Flowchart- ○ The fee is determined, and payment slip sent after the review to confirm compliance to code. ○ A permit is issued.	2.9 H.II Special Event Permit Process Flowchart		
	Typically, the applications are submitted once the new business has submitted for building permit to construct the building.	2.9 F.II Sign Permit Process	2.6.F.II. SIGN PERMIT PROCESS Sign permits are requested by the following process ~~which may occur concurrently or before a building permit is requested~~. Applicants submit an application to the Development Services Department. Development Services Zoning Division review and decide on the application.	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	○ assesses a $67.00 fee and sends the payment slip to the applicant. This is not an annual fee. ○ An administrative permit or a conditional use permit is issued. ○ A zoning field inspection is done for daycares but not for res. facilities before the Fire and building inspection is done and is also required before zoning signs off on the business registration	2.9.C.II Residential Care Facilities and Childcare Facilities Process		

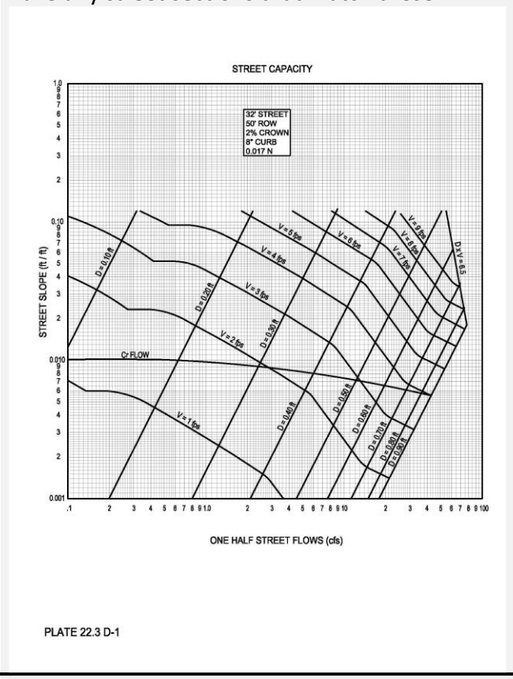
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Appendix A Project/Plan Submittal Letter Appendix P 2.11 Development Application Checklist Appendices .....2-198 Appendix A Zoning Variance Checklist Appendix E		2.8 Public Infrastructure Improvements ..... 2-182 2.8.A Development Agreements ..... 2-182 2.8.B Application for Construction within Public Right-of-Way ..... 2-184 2.8.C Grading and Drainage Improvements ..... 2-186 2.8.D Drainage Submittals ..... 2-191 2.8.E Vacation Procedure for Rights-of-Way and Easements ..... 2-194 2.8.F Storm Drainage Infrastructure Allocation ..... 2-196 2.9 Record Drawings ..... 2-201 2.10 Development Application Checklists Appendices ..... 2-203 2.10.A Appendix A Zoning Variance Checklist ..... 2-203 2.10.B Appendix B Zone Map Amendment Checklist ..... 2-203 2.10.C Appendix C Site Plan Checklist ..... 2-204 2.10.D Appendix D Conditional Use Checklist ..... 2-205 2.10.E Appendix E Zone Map Amendment for Special Use Zone District Checklist 2-205	
	Indent after lettering to make sure all text starts at the same place.	2.10.P Appendix J	Formatting has been fixed. R. Pond(s) 100-year water surface elevation outlined and indicated on plan. S. Finish building floor elevation(s) or pad elevation(s) with complete NAVD 88 designations, when applicable. T. Elevations along property lines including relationship to adjacent top of curb. U. Details of ponds, inverts, rundowns, curb cuts, water blocks, emergency spillways, retaining walls, pond outlets, safety fences, slopes, and all other significant drainage structures with contours, cross-sections and spot elevations. All cross-sections must be drawn to a standard engineering scale and adequately dimensioned.	
	Remove ABQ DPM Reference	2.10-Submittal Req.	Vicinity Map Legend ~~(reference ABQ DPM Chapter 27 for recommended standard symbols)~~ Local Drafting Standards ~~(reference ABQ DPM Chapter 27)~~ Project Name	
	○ Indent after lettering to make sure all text starts at the same place for A-Rough Grading ○ Indent for points after Erosion Control and storm water pollution.	2.10.Q-Erosion Control	Formatting has been fixed.	

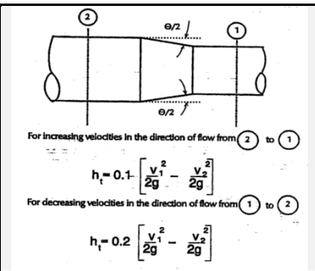
RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	○ Indent after lettering to make sure all text starts at the same place for B-Phased Development		Provide the corresponding information for the following phases of development: A. Rough grading (1) Grading plan with limits of soil disturbance outlined. (2) Erosion protection and stormwater pollution prevention practices indicated. (3) Supporting data, calculations, references and details drawn to scale or adequately dimensioned. (4) Erosion control and stormwater pollution prevention notes: (a) The contractor is to ensure that no soil erodes from the site onto adjacent property or public right-of-way. This should be achieved by implementing Best Management Practices (BMP's) to protect the soil from wind, and water erosion. B. Phased development (1) Grading plan with limits of soil disturbance outlined for each phase of development and numbered in sequential order of events. (2) Erosion protection and stormwater pollution prevention procedures indicated for each phase. (3) Supporting data, calculations, references and details drawn to scale or adequately dimensioned.	
	Indent after lettering to make sure all text starts at the same place.	2.7 Q - Appendix K Engineers Certification Checklist for Non-Subdivision Development	Formatting has been fixed. (1) Completed Information Sheet - see Information Sheet. (2) Provide as-built finished floor and/or pad (3) Provide as-built spot elevations on the property line and/or limits of phase development (points of significant grade changes) to demonstrate compliance with the approved drainage report or drainage plan. (4) Provide copies of construction approval from the appropriate government agencies for construction within their right-of-ways and/or easements. (5) Outline the as-built drainage basin(s) (including roof areas) supported with sufficient spot elevations and roof drain locations. (6) Provide as-built elevations and dimensions for the following structures: (a) Pond(s) (include as-built volume calculations) (b) Pipe inlet(s) and outlet(s) (include as-built capacity calculations)	
	Format Multi-Level List	2.10 S-Appendix Engineers Certification Checklist for Subdivisions	Formatting has been fixed. (1) Completed Information Sheet - see Information Sheet. (2) As-Built Information: (a) Pad elevations (b) Top of Curb Elevations at critical locations	
	Indent after lettering to make sure all text starts at the same place. Check Font	2.10 V-Appendix for Drainage Easement	Formatting has been fixed. 1. The Grantor is the owner of the following described real property within the City of Rio Rancho Unit Block Lot . 2. For good and valuable consideration, the receipt of which is hereby acknowledged, Grantor does hereby grant and deliver to the City of Rio Rancho a perpetual easement over and across a portion of Grantor's property for the purpose of permitting the flow, conveyance, and discharge of storm water runoff. [For the purpose of constructing and maintaining a storm water detention facility]. 3. The land affected by the grant of this easement and right-of-way is more particularly described as follows:	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Add new park permit	2.5.B Park Permit	Added new park permit application for private parks 3 acres or under. **2.5.B Parks Permits** Parks permits are required for parks and recreational facilities 3 acres or less which will be owned and maintained by the City of Rio Rancho or private entities. Park and recreational requirements and design standards are found in Chapter 6 Parks and Trails. **2.5.B.I. PARKS PERMIT PROCESS[1]** Park permits application submittal begins the review and approval process. Applications are submitted to the Development Services Department and routed for review by applicable City departments. Review comments are returned to the applicant and resubmittal of revisions may be required. After all review comments are resolved, the applicant pays any required impact fees, the permit is issued, and construction may commence.  	

RR DPM UPDATE – Chp 2 Procedures Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
		2.5.B.II Park Permit 2.5.B.II. Inspections and Acceptance	**2.5.B.II. INSPECTIONS AND ACCEPTANCE** i. City of Rio Rancho Building Inspectors shall inspect all permitted park improvements as per their published process. ii. Inspections and testing of backflow preventers shall be conducted as required in Rio Rancho Municipal Code Chapter 54 Backflow Prevention And Cross Connection Control Program. iii. PRCS staff will inspect parks and improvements throughout construction, and at substantial and final completion as shown in Chapter 6 of this DPM. See Section 2.8.C for process and minimal inspection list to be conducted by PRCS Staff. PRCS will accept the park and or trail after final inspection and completion, receipt of playground audits and any corrections they have identified, verification of all required permitting and inspection, and acceptable establishment of seeded or sod turf areas when applicable. [1] Existing procedures taken from Appendix II.5-1 Parks and Recreational Trails Development Process Summary 2-43 RIO RANCHO DEVELOPMENT PROCESS MANUAL UPDATE iv. The Developer will transfer and record the deed for the park and or improvements, after which PRCS Staff will take over full ownership and maintenance. The developer shall not transfer and record the deed prior to the completion of improvements and final inspection. v. The one-year warranty period shall begin on the date that the Deed is recorded. **2.5.B.III. ACCEPTANCE OF PARK INFRASTRUCTURE** i. The developer submits park construction plans to the Development Services Department. ii. Plans are routed to appropriate Departments for review, approval, and inspections. iii. Final inspection approval memo forwarded to the Engineering Division of DSD for acceptance by the City.	
		Table 1 Summary of Development Procedures	Add Parks permit to Table 1 Summary of Development Procedures RIO RANCHO DEVELOPMENT PROCESS MANUAL UPDATE **Table 1 Summary of Development Procedures** Application/Permit Type | Applicability (R= Review and/or Recommend; D = Review and Decide; AD = Appeal Review and Decision; < > = Public Hearing) | Notifications: Mailed Notices, Posted Signs, Published | Review/Decision Authority: City Staff, Planning and Zoning Board, Governing Body | Procedures Commercial & Multifamily Building Permits | A building permit is required whenever a building or structure is erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished. No electrical wiring, plumbing or mechanical work and gas work may be installed, repaired or maintained in or on such building or structure without a permit. All re-roofs and roof coatings require a building permit. | D | Section 2.5.A.II Park Permit | Parks permits are required for parks and recreational facilities 3 acres or less which will be owned and maintained by the City of Rio Rancho or private entities. | D | Section 2.5.B	

RR DPM UPDATE – Chp 3 Drainage, Flood & Erosion Control Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
YPM	Referring to "Runoff coefficients are based on a characterization of the watershed area into land treatment classifications. Runoff coefficients may be determined following the procedure outlined in the current version of the New Mexico Department of Transportation Drainage Design Manual (NMDOT DDM, Section 403.3)" - For subd. There used to be a calculation on how to figure out the % D. I think this needs further discussion.	3.3.C.II. Runoff Coefficients	No change recommended.	The reference to NMDOT DDM already supports this.
	Reference is no longer in draft, clarify reference: Construct and/or financially guarantee the required drainage improvements prior to building permit/subdivision plat approval. If these drainage improvements benefit other properties within the drainage basin, the methodology for prorating cost outlined in Section 3.6.F of this chapter can be used.	3.8.C	Struck reference for clarity **3.8.C Lateral Erosion Envelope** Encroachment into the LEE Line will require the following: 1. Update the existing LEE Line Study. 2. Identify the drainage improvements required to reduce the LEE Line. 3. Construct and/or financially guarantee the required drainage improvements prior to building permit/subdivision plat approval. If these drainage improvements benefit other properties within the drainage basin. 4. Provide construction plans for the required drainage improvements and related SSCAFCA Quality of Life Master Plan improvements, if applicable. For information regarding LEE, visit SSCAFCA's website: https://www.sscafca.org/resources.	
JN	Hyperlink to SSCAFCA Resources website https://www.sscafca.org/resources/ for B. Vertical Location	3.3.LL.I.b.ii. Pg. 3-120	**3.8.B Multiple Use of Rights-of way and Easements Criteria** Multiple uses are encouraged for drainage rights-of-way and drainage easements including, but not limited to, utility corridors, wildlife habitat, open space and recreation trails. Where multiple uses are planned by the city, another public agency, or a public utility, the city may require that dedication statements include language which permits said specified multiple uses and Watershed Management Parks amenities in addition to the primary drainage function. Land required to be dedicated for drainage rights-of-way shall include those land areas necessary for drainage control, flood control, erosion control, Watershed Management Park amenities, recreation trails, sanitary sewer corridors and necessary appurtenances. The following is the criteria for the subject encroachment: To determine the feasibility of installing underground utilities in an existing drainage way or arroyo, consultation with the underlying land owner is required. ~~SSCAFCA supports the Quality of Life Master Plan for Watershed Park. To accomplish the Master Plan's objective of creating an open space network of joint use improvements, Watershed Park amenities shall be provided as replacement value to the public for the intrusion caused by the utility construction. The types of amenities required shall be determined on a case-by-case basis. SSCAFCA's Resources Website: https://www.sscafca.org/resources/~~https://www.sscafca.org/resources/	
JaLikar	3:1 side slopes should be able to be graveled not rip rap – referring to: b. Rock graveled faces of berms and levees must have side slopes not steeper than 3:1 (horizontal to vertical)	3.3.J Pg. 3-88	Struck reference to rip rap and replaced with gravel b. Rock graveled~~rip rapped~~ faces of berms and levees must have side slopes not steeper than 3:1 (horizontal to vertical)	

JaLikar	None of these tables apply because the City doesn't have any street sections that match these.  	3.3.H.II.c. Pg. 3-67	They are just examples.	Figures throughout this chapter have been updated where they could be.
SSCAFCA	Add SSCAFCA's Resources Website	3.8.B. Multiple Use of Rights-of way and Easements Criteria	Link to SSCAFCA's website was added SSCAFCA supports the Quality of Life Master Plan for Watershed Park. –To accomplish the Master Plan's objective of creating an open space network of joint use improvements, Watershed Park amenities shall be provided as replacement value to the public for the intrusion caused by the utility construction. The types of amenities required shall be determined on a case-by-case basis. SSCAFCA's Resources Website: https://www.sscafca.org/resources/	
SSCAFCA	Fix spelling	3.3 Hydrology	**3.3 Hydrology** For the purposes of this chapter, all hydrologic modeling completed for the purposes of determining requirements related to drainage, flood control and erosion control for developments larger than 40 acres in the City of Rio Rancho shall follow the guidelines as required by SSCAFCA. Again, consultation with the City of Rio Rancho and SSCAFCA representatives is required to ensure expectations are set at the onset of modeling and analysis pertaining t~~o~~he any development.	
SSCAFCA	Crooked figure	3.4.III.b. Transition Loss	Alignment of figure was corrected	Figure has been adjusted.

				
SSCAFCA	½ is the exponent to s	3.4.B.V.e. Junctions	Equation was corrected FACTORS FOR CLOSED CONDUITS FLOWING FULL Manning's Formula: $Q = \frac{1.486}{n} AR^{2/3}S^{1/2}$ $K = \frac{Q}{S^{1/2}} = \frac{1.486\ AR^{2/3}}{0.013}$, for pipe $K = 35.6259\ d^{8/3}$ for box $K = 114.3077\ \frac{A^{5/3}}{p2/3}$ $Q = K\ s^{1/2}$ $s = \frac{[Q]^2}{K}$ Where: Q = discharge in cfs s = friction slope A = area of conduit R = hydraulic radius of conduit n = 0.013 d = diameter of pipe " = height of equivalent box w = width of equivalent box p = wetted perimeter	
SSCAFCA	Update reference to Bernoulli equation, and remove reference to a form that is not included in the DPM	3.4.C.II. Water Surface Calculations	3.4.C.II.a. General Water surface profile calculations must be calculated using the Bernoulli energy equation (see Section 3.4.B.II~~B-2~~) combined with the momentum equation for analyzing confluences and functions. ~~See Section 2.2.8 for forms used in hand calculations.~~ For use in expediting such calculations, computer programs are	
SSCAFCA	Reference section does not exist	3.4.C.II. Water Surface Calculations	Struck missing reference from line item. 3. Where a discharging or outletting channel or conduit is on a mild slope, the water surface is generally controlled by the outlet ~~(see Section B-2.1)~~.	
SSCAFCA	Remove 2 after ft.	3.4.C.III. Head Losses	Equation was corrected	

			$Q = \frac{1.486}{n} A R^{2/3} S_f^{1/2}$ in which Q = Flow rate, in c.f.s. n = Roughness coefficient A = Area of water normal to flow, in ft. R = Hydraulic radius S_f = Friction slope	
SSCAFCA	Update reference	3.4.C.IV. Channel Inlets	Reference was updated to reflect Section 4-4 these discontinuities. ~~Paragraph 18(h),~~ Corps of Engineers EM 1110-2-1061, Section 4-4. Open Channel Junction, h. Box and Pipe Culvert Inlets, has additional design criteria.	
SSCAFCA	The word “maximum” is repeated.	3.4.C.IV.d.iii. Transitions Between Channel Treatment Types	Deleted duplicate word. The maximum allowable rate of bottom width transition is 1 to 7.5 ~~maximum~~. Grout, dumped, or wire-tied material may also be used if approved on a case-by-case basis by the City Engineer. Grouted and wire-tied material require gravel filters as well.	
SSCAFCA	Reference does not exist in document.	3.4.C.V. Piers	Struck missing reference. during the preliminary design stages of a project for a determination of the appropriate width. Streamline piers should be used when heavy debris flow is anticipated. ~~Refer to Section 2.2.8 for design data regarding streamline piers.~~	
SSCAFCA	Reference does not exist in document.	3.4.C.V. Piers	Struck missing reference. Technology, July 1967. Refer also to Plates 22.3 C-5, 22.3 C-6, 22.3 C-7~~, and to the example problem in Section 2.2.8.~~ the same, deeper channels will convey water at a higher non-erodible velocity than shallower ones. ~~Additional information is provided in Section 2.2.8.~~	
SSCAFCA	Reference does not exist in document.	3.4.D.I. Design Flow (Q)	Struck missing reference. ~~iii. (Refer to the example problem in Section 2.2.8)~~	
SSCAFCA	References do not exist in document.	3.4.H. Sediment Transport and Channel Stability	Struck missing reference. Detailed qualitative analyses must be performed for any design requiring construction in a major arroyo. ~~Methods found in items C.7 and C.8 in the Bibliography at the end of Section 2. shall be used in sediment transport analyses.~~	
SSCAFCA	“This seems irrelevant to the City’s document, remember, we aren’t married to this document anymore.”	3.8.B Multiple Use of Right-of way and Easements Criteria	~~SSCAFCA supports the Quality of Life Master Plan for Watershed Park. To accomplish the Master Plan’s objective of creating an open space network of joint use improvements, Watershed Park amenities shall be provided as replacement value to the public for the intrusion caused by the utility construction. The types of amenities required shall be determined on a case-by-case basis. SSCAFCA’s Resources Website: https://www.sscafca.org/resources/~~	
SSCAFCA	Remove Executive Director	3.8.B.I. Utilities	All designs shall be submitted to and require approval by the City Engineer ~~and/or SSCAFCA Executive Engineer or their designee(s).~~	

	None of the Plate images pertaining to Streets – apply because the City doesn't not have any street sections. Page no:3-67	Plate 22.3 D-1	The Plates are meant to be referenced and templates.	
SSCAFCA	Make sure all diagrams are legible and not pixelated	Throughout the Chapter	Updated where possible.	
SSCAFCA	The purpose of "these" criteria…	3.1 Introduction	Fixed grammar error The standards, guidelines and criteria presented herein are provided to facilitate the planning, design, construction and operation of both public and private drainage control, flood control, and erosion control facilities within the community. The criteria are not intended as a substitute for good engineering judgment; imagination and ingenuity are encouraged. The purpose of these criteria is to provide guidance for a majority of design circumstances, however it should be understood that situations will arise in which these criteria are not appropriate or require modification due to unique conditions. Where necessary, coordination between the Southern Sandoval County Arroyo Flood Control	
SSCAFCA	Add Criteria Manual after SSCAFCA	3.3A Considerations	The SSCAFCA Hydrology Criteria Manual sets forth criteria for the design of SSCAFCA constructed facilities and facilities that will ultimately be owned by SSCAFCA but constructed by others. This also	
SSCAFCA	Add language- "to determine additional constraints on discharge rates, if any, due to downstream infrastructure constraints."	3.3.B. Storm Drainage Release Rate	Unless further restricted by downstream or specific infrastructure limitations, the peak discharge permitted from a developed property in the event of a 100-year, 24-hour storm shall be the amount of the historic or pre-developed peak discharge in all watersheds of the City of Rio Rancho. Drainage infrastructure capacity downstream of any given development may govern the allowable discharge. To determine additional constraints on discharge rates, if any, due to downstream infrastructure constraints, coordination with the owner of the downstream infrastructure is required.	
SSCAFCA	Rational Equation Formula- double-check equation numbering - what does "D" refer to? This may have to be updated.	3.3.C Rational Method	That is how the equations are labeled (D-1, D-2, D-3, etc..)	
SSCAFCA	NOAA Atlas 15 is coming out soon. I'd recommend doing a "latest edition" phrase here. If this changes in Atlas 15, table will need to change Table 2 and Table 3 needs to change	3.3.C.V. Intensity	concentration for drainage areas up to 40 acres in size will not exceed 15-minutes. Rainfall intensities corresponding to a 15-minute time of concentration ~~are listed in Table 2. Rainfall intensities based on precipitation values for the City jurisdiction derived from~~can be found in NOAA Atlas (latest edition)~~14~~, Rainfall depths for Equation D-3 ~~are listed in Table 3. The rainfall depths provided in Table 3 are for multiple recurrence intervals and storm durations. Those values are adapted from~~can be found in NOAA Atlas (latest edition)~~14~~, Precipitation - Frequency Atlas of the United States, Volume 1: Semiarid	
SSCAFCA	Add language- In SSCAFCA's Criteria Manual	3.3.D Rainfall-Runoff Modeling	Rainfall-runoff modeling for drainage areas greater than 40 acres in size is to be conducted using the U.S. Army Corps of Engineers HEC-HMS software following the procedures outlined in SSCAFCA's Criterial Manual http://www.sscafca.org/resources.	
SSCAFCA	Links not working- maybe add link t the actual website.	3.3.E Procedure For Probable Maximum Flood	• New Mexico Office of the State Engineer/Interstate Stream Commission https://www.ose.state.nm.us/dams/CONMreps/VOLUME%20II/Volume%20II%20Appendix%20G.pdf • GIS Probable Maximum Precipitation (PMP) Tool Documentation https://www.ose.state.nm.us/dams/CONMreps/VOLUME%20II/Volume%20II%20Appendix%20G.pdf	
SSCAFCA	Add language - that meet OSE's jurisdictional criteria Change Office of the State engineer to OSE.	3.3.E.I. Procedure For Probable	The OSE has jurisdiction over the design and construction of non-federal dams that meet OSE's jurisdictional criteria. This authority for the safety of dams is contained primarily within Chapter 72, NMSA 1978. All dams must conform to the OSE criteria as demonstrated by correspondence issued by	

		Maximum Flood		
SSCAFCA	Portion of the formula is missing. Remove Language -in use of SSCAFCA. Where is Plate 2.2.8 B-1 ?	3.4.B.II.a. Determination of Control Water Surface Elevation	When specific energy (E) is substituted for the quantity (V^2 + D) in the above equation and minor losses are ignored and the result rearranged, $\frac{\quad}{2g}$ ~~One format for calculating hydraulic grade line profiles and considered acceptable is shown on Plate22.8 B-1.~~	
SSCAFCA	Who are we referring to as City Engineer? Is it Public Works or DSD?	Throughout the chapter.	Staff Response: Propose update to reference DSD throughout chapter. Examples: The design standards set forth in this manual are promulgated by the Development Services Department~~City Engineer~~ or designee of the City of Rio Rancho pursuant to the authority granted to him/her in t (Ctrl) o Rancho Code of Ordinances Title V: Public Works, Chapter 51 - Water and Wastewater Rules and Rates, Section 51.24 - Main Extension Policy, Including Subdivisions. The administration of these standards including interpretation, enforcement, revision, waiver, and variance is hereby delegated to the ~~City Engineer~~ Development Services Department or designee or an appointed representative. Standards included in this manual do not supersede applicable Federal and State requirements. In addition, these standards shall meet the requirements of all local and regional authorities such as the Southern Sandoval County Arroyo and Flood Control Authority (SSCAFCA). **5.1.C Effective Date of Standards** These standards shall be effective immediately upon the ~~City Engineer~~ Development Services Department or designee's signature and shall supersede all former applicable engineering standards for utilities design and construction.	
SSCAFCA	Fix al image formatting so they're not crooked.	Throughout the chapter.	Formatting of images fixed.	Formatting of images fixed.
SSCAFCA	Can we get away from the term "Plate"?	3.4.B.III.b. Transition Loss	Kept the term "Plate" to match references.	
SSCAFCA	Change language to read "or ROW/facilities that will be dedicated to SSCAFCA" Line item 2. Add language- "Additionally, downstream grade control may be required to retain channel stability"	3.4.B.IV.i. Outlet Structures	For discharge into SSCAFCA ROW/facilities that will be dedicated to SSCAFCA, please refer to SSCAFCA Criteria Manual and coordinate directly with SSCAFCA staff. For outlet into City maintained channels/ponds, follow the following guidance. 1. Where a storm drain discharges into a detention reservoir, the designer should check with the City Engineer for up-to-date criteria as to location and type of structure to be used. 2. When a storm drain outlets into a natural channel, an outlet structure will be provided which prevents erosion and property damage. Additionally, downstream grade control maybe required to retain channel stability and velocity of flow at the outlet should match as closely as possible with the	
SSCAFCA	State Engineer regarding the criteria to be used in designing these structures. -What are we referring to as criteria here?	3.4.B.IV.I Debris Basins	~~function effectively. Refer to the City Engineer and State Engineer regarding the criteria to be used in designing these structures.~~	

SSCAFCA	This is design document, consider deleting this section/material on Operations?	3.4.B.IV.m. Safety	the conduit. ~~Debris basins must be cleaned out on a regular basis, however, if they are to continue to function effectively. Refer to the City Engineer and State Engineer regarding the criteria to be used in~~ ~~**3.4.B.IV.m. Safety**~~ ~~Entry into any of these structures should be in accordance with OSHA requirements.~~	
SSCAFCA	Capitalize City Engineer	3.4.B.V.b. Flapgates	~~Flapgates~~ are discouraged and will only be used on a case by case basis and with approval from the City Engineer.	
SSCAFCA	Change language from maybe to are Change formula to read correctly.	3.4.B.V.e. Junctions	Junctions will only be permitted on mains storm drain lines that are ≥42 inches. Junction locations cannot be more that 24' from the downstream manhole. An exception to this requirement are laterals with slopes of 5% or greater. The City Engineer approval will be required for this exception and all other variances.	
SSCAFCA	Are these defined terms- mild to steep, critical?	3.4.C.II.a. General	***Mild Slope – The channel slope is less than the critical slope. The normal depth is greater than the critical depth. Flow is subcritical (Froude number less than one) downstream conditions can influence upstream flow.*** ***Normal Depth – The depth of flow under uniform flow conditions.*** ***Steep Slope - The channel slope is greater than the critical slope. The normal depth is less than the critical depth. Flow is supercritical (Froude number greater than one) upstream conditions are not affected by downstream conditions.*** ***Critical Depth – The depth at which the specific energy of the flow is at a minimum and the Froude number is one.*** ***Critical Slope – The slope at which the normal depth equals the critical depth.***	
SSCAFCA	Where are these references located?	3.4.C.III.b. Junction Loss	Junction losses will be evaluated by the pressure plus momentum equation and must conform to closed conduit angle of confluence criteria, Section 3.4.B.V~~B-5~~. ~~Refer to Section 2.2.8 for cases and alternate solutions.~~	
SSCAFCA	Subsection F- transitions where is it located? … having a minimum depth of three feet and the downstream.. Calculate scour Depth of SCAFFCA's SEDG. Paragraph 3- as directed by the City Engineer.	3.4.C.IV.b. Surface Inlets	Drainage ditches or swales immediately upstream of a surface inlet shall be provided with erosion protection consisting of concrete lining, rock riprap or other non-erosive material as directed by City Engineer.	
SSCAFCA	Paragraph 18(h), Corps of Engineers EM 1110-2-1061- google this and it says this manual is for design and construction of earth levees	3.4.C.IV.c. Direct Pipe to Channel	joints. Continuously reinforced channels shall be designed to accommodate any extra stress resulting from these discontinuities. ~~Paragraph 18(h),~~ Corps of Engineers EM 1110-2-1061. Section 4-4. Open Channel Junction, h. Box and Pipe Culvert Inlets, has additional design criteria.	
SSCAFCA	Add language- and protect the channel entrance from being flanked. Change language to protected Not sure what bottom width transition means Add language- and downstream grade control in the natural channel, as needed to prevent channel instability. Not sure what Maximum rate of bottom width transitions means	3.4.C.IV.d.iii. Transitions Between Channel Treatment Types	The mouth of the transition should match the earth channel section as closely as practicable. Wing dikes and/or other structures must be provided to positively direct all flows to the transition entrance and protect the channel entrance from being flanked.	

	Where is section 2.2.8 -Data regarding streamline pipers located?		12 feet in length and extending full width of the channel section must be provided. Grouted riprap must be at least 12 inches thick. Dumped riprap must be properly sized, graded and protected protected with gravel filter blankets. The maximum allowable rate of bottom width transition is 1 to 7.5 maximum. Grout, dumped, or wire-tied material may also be used if approved on a case-by-case basis by the City Engineer. Grouted and wire-tied material require gravel filters as well. Concrete Lining to Earth Channel Transition The transition from concrete lined channels to earth channels will include an energy dissipator as necessary to release the designed flows to the earth channel at a relatively non-erosive condition and downstream grade control in the natural channel, as needed to prevent channel instability.	
SSCAFCA	What do you mean by upstream curve?	3.4.C.V.d.i. Superelevation	***Easement Curve – A curve whose degree of curvature is varied either uniformly or according to a definite pattern to give a gradual transition between a tangent and a simple curve which it connects or between two simple curves.***	
SSCAFCA	Delete parenthesis	3.4.C.V.e. Freeboard	1. Rectangular Channels will not be used except with City Engineer's approval)	
SSCAFCA	Mention something about provide buffer for the LEE?	3.4.C.V.f.i. Unlined Channels	Maximum side slopes are determined pursuant to an analysis of soil reports. However, in general, slopes should be 6:1 or flatter with erosion protection measures. Provide a buffer for the LEE.	
SSCAFCA	Add- language - Maintenance access roads may also be paved if they are to be included as a quality of life feature for usage by the general public.	3.4.C.V.f.iv. Channel Maintenance and Access Road	A maintenance and access road having a minimum of 12 feet top width shall be provided on both sides of improved channels. The roads should be sloped away from the channel, and roadway runoff carried in a controlled manner to the channel. In some cases the City Engineer may require additional width. Channel maintenance and access roads shall be surfaced with gravel base course. The thickness of said base course shall be 6 inches. Maintenance access roads may also be paved if they are to be included as a quality of life feature for usage by the general public.	
SSCAFCA	Add Q in parenthesis. Line item 1.- Add "basin" Line item 2. Add "Contribution" Line item 4. Fix formula format.	3.4.D.I. Design flow (Q)	**3.4.D.I. DESIGN FLOW (Q)** The Design Q for storm inlet design should be determined based on the following procedures. 1. Outline the drainage area basin on a map with an appropriate scale. 2. Outline the drainage area tributary contribution to each proposed storm inlet, designating this area with the corresponding subarea number and with a letter (2A, 2B, 2C, etc.). Drainage areas should be differentiated by color or line type. 3. Calculate the tributary area in acres for each storm inlet or battery of storm inlets. 4. Assuming satisfactory drainage area relationships, the storm inlet design Q will be calculated as follows: (a) $Q_{DES} = \frac{Q_P}{A_T} A$	
SSCAFCA	So don't use the nomographs? Use a fraction of the flow from the nomograph? Can we find one for a 6" curb?	3.4.D.II.a. Street Flow Carrying Capacity	Updated nomographs.	
SSCAFCA	Line item 2.c. Add language "to the curb line"	3.4.E Street Hydraulics	c. Flow depths in the event of the 10-year design discharge may not exceed 0.33 feet at the curb line in any collector or arterial street. One lane free of flowing or standing water in each traffic direction must be preserved on arterial streets.	

SSCAFCA	Line item 4.- Fix numbering and defined what a "major arroyo" is? Line item 5. – Fix numbering.	3.4.F Berms and Levees	(1) Berms and levees must be provided with freeboard for the 100-year design flow based on the following guidelines: (a) For flow depths less than 3.0 feet and not involving a major arroyo; minimum freeboard is 2.0 feet. (b) For flow depths 3.0 feet and greater and, involving a major arroyo; minimum freeboard is 3.0 feet. (c) If the berm or levee structure is necessary to protect existing property or structures from a FEMA flood plain, FEMA criterion must be complied with in the design and construction of the structure.	
SSCAFCA	Where is section C-2.5 located?	3.4.G.III. Side Channel Weirs	The Los Angeles District Corps of Engineers, as mentioned in Section 3.4.V.IV.~~C-2.5~~, has developed a side channel spillway inlet. The City may require this type of structure for drains outletting into their facilities. The Corps' procedure for designing a side channel spillway is as follows: spillway crest a distance equal to the water depth as determined in 3c., above, minus the assumed head on the spillway.	
SSCAFCA	Consider defining Critical Facilities	3.6.D Floodplain Development	***Critical Facility*** – Essential infrastructure or buildings whose disruption or damage could cause significant harm, disruption or loss of life and ~~s~~Shall include hospitals, schools and other buildings used	
SSCAFCA	Where is section 9. Located?	3.6.F Erosion and Stormwater Pollution Control	Regulations. See Chapter 2.10.Q for detailed information on the Stormwater Pollution Prevention Plan. All required stormwater pollution improvements/drainage infrastructures must be constructed at the start of	
SSCAFCA	Consider defining High Hazard Structures	3.7.B Easements	***High Hazard Structure – A structure whose failure or mis-operation would likely cause loss of human life.***	
SSCAFCA	and erosion control facilities both public and private shall be regularly inspected and maintained… I would not set requirements for public facilities here	3.8.A.I. GENERAL	All private drainage control, flood control and erosion control facilities ~~both public and private~~ shall be regularly inspected and maintained. Accumulations of silt, trash, litter or stagnant water which create a	
	To determine the feasibility of installing underground utilities in an existing drainage way or arroyo, consultation with the underlying land owner is required.	3.8.B Multiple Use of Rights-of way and Easements Criteria	To determine the feasibility of installing underground utilities in an existing drainage way or arroyo, consultation with the underlying land owner is required. ~~Underground utility lines will be allowed in and adjacent to arroyos when appropriately permitted. SSCAFCA values the natural environment and desires to protect and maintain the wildlife and plant habitat along the arroyos. As a result, SSCAFCA is performing planning work to identify selected arroyos to be kept in their natural state. Arroyos such identified shall have no sewer line or other utility development in or adjacent to the arroyo.~~ SSCAFCA supports the Quality of Life Master Plan for Watershed Park. To accomplish the Master Plan's objective of creating an open space network of joint use improvements, Watershed Park amenities shall be provided as replacement value to the public for the intrusion caused by the utility construction. The types of amenities required shall be determined on a case-by-case basis. The utility line shall be designed and constructed to reduce the failure potential to the maximum extent practicable. Design, permitting, construction, operation and maintenance of utility lines are the responsibility of the Utility Owner and Operator; including, but not limited to, the construction of drainage improvements necessary to protect the utility and ~~the Watershed Park~~ amenities associated with the utility.	

	Add to the following section: All utilities planned to be installed within SSCAFCA's right-of-way require an Agreement with SSCAFCA.	3.8.B.I. UTILITIES	All utilities in a All utilities planned to be installed within SSCAFCA's right-of-way require an Agreement with SSCAFCA. ~~SSCAFCA~~/City facility require an easement granted by SSCAFCA/City for construction, operation and maintenance. The easement shall include the following language: The Utility Owner (Utility) is responsible for operations and maintenance of all Utility owned facilities. Any damage to any drainage facilities or downstream arroyos as a result of the installation, operation or maintenance of Utility owned facilities is the responsibility of the Utility Owner, including environmental mitigation of any spills, leaks or blockages of Utility owned facilities. All designs shall be submitted to and require approval by City Engineer and/or SSCAFCA Executive Engineer or their designee(s).	
	Is the city requiring the disconnection of impervious areas? ..not just for single-family subdivisions	3.9.C Stormwater Quality Volume		Staff is looking for clarification on what this question is asking. The question is referring to the sentence "Permeable areas (e.g., landscaped depression, lawn, parking lot island, depressed median, planter box, etc.) used to disconnect impervious surface shall be identified on construction plans." So, they are asking if the City requires a landscape strip or something between the street and a building for all developments? Do you want to add language in this section to require this?
	I think there should be a "definitions" section for Chapter 3	Contents Page	There is.	
	Add comma in Drainage facilities	3.3.B.II. Definitions	***Drainage Facilities*** - means public facilities used for conducting storm waters to, through and from a drainage basin to the point of final destination, and any related improvements, as defined in the Allocation Plan including, but not limited to, any or all of the following: bridges, pipes, conduits, culverts crossing structures, arroyos, waterways, inlets, swales, ditches, gulches, channels, temporary or permanent retention and detention areas, water quality features, lateral erosion line and stability measures removal and/or replacement of existing facilities, as well as easements and rights-of-way necessary to accommodate the same.	
	such as the Gibson method shown Plate 2.2.3 B-2,- Is this the correct reference? This should be 22.3 B-2 to match the Plate graphic	3.4.B.II.b. Transition Loss	small, and the use of more accurate methods, such as the Gibson method shown Plate ~~22.3 B-2~~ ~~2.2.3 B-2~~, will be acceptable.	
	Update all tables to read the correct Plate numbers and Table numbers respectively	Throughout the document	Updated throughout the document.	

	Add "Reference Plate 22.3 B-3"	3.4.B.III.e. Bend Loss	**3.4.B.III.e. Bend Loss** Bend losses will be calculated from the following equations: $h_b = K_b \left[\frac{V^2}{2_g} \right]$ PLATE 22.3 B-3	
	This should be 22.3 B-4 to match the Plate graphic.	3.4.B.III.Special Cases	In any case the reduction in size must result in a more economical system. Where conduits are to be decreased in size due to a change in grade, the criteria for locating the transition will be as shown on Plate 22.3 B-4 ~~2.2.3 B-4.~~	
	PLATE 2.2.3 B-5 -Where are these Plates referenced in text? Partially filled circular conduit sections- Should this be PLATE 2.2.3.B-6? Factors for Circular Conduits flowing partly full- Should this be PLATE 2.2.3 B-7	3.4.B.V.e Junctions	Plate numbers were updated.	
	Is Section 3.4.C.III. referenced as Section C-3?	3.4.C.I. General Hydraulic Criteria	Updated cross reference accurately Section 3.4.C.V.d below must be followed to reduce super elevations and to eliminate initial and compounded wave disturbances. It is generally desirable to design a channel for a Froude number of just under 2.0. In areas within the City of Rio Rancho jurisdiction this is not always possible because of steep terrain. If the Froude number exceeds 2.0, any small disturbance to the water surface is amplified in the course of time and the flow tends to proceed as a series of "roll waves". Reference is made to Section 3.4.C.V.d. for criteria when designing a channel with a Froude number that exceeds 2.0.	
	Change language to discharges.	3.4.C.II.b. Determination of Controlling Water Surface Elevation	When a channel on a steep slope discharges into a facility that has a water surface depth greater than the normal depth of the channel, calculate pressure plus momentum for normal depth and compare it to the pressure plus momentum for the water surface depth at the outlet according to the equation, P_n + $M_n \sim P_o + M_o$.	
	See Subsection "f" below titled "Transitions"- Where is this subsection?	3.4.C.IV.b. Surface Inlets	Updated cross reference accordingly. has developed a side channel spillway inlet. The City may require this type of structure when outletting into one of their facilities, and its use should be considered for city channels if high waves above the normal water surface cannot be tolerated. See Subsection 3.4.C.IV.d below titled "Transitions" for the Corp's procedure and criteria.	
	Section 5- Where is this section?	3.4.C.IV.c. Subcritical Flow	~~Junctions involving direct pipe connection to a channel must conform to the criteria listed in Section 5 of the closed conduit criteria.~~ Additionally, pipe and box culvert inlets to channels shall be isolated by expansion	

	Section 2.2.8- Where is this section located?	3.4.C.IV.d.i. Subcritical Flow	Updated cross reference accordingly. Head losses for transitions with converging walls in subcritical flow conditions can be determined by using either the P + M method or the Thompson equation, both of which are shown in Section 3.4.G.IV. For transitions, both methods are applicable in all cases and will give the same results.	
	Refer to Plate 2.2.3 C-1 and to the example problem in Section 2.2.8., Where are these located?	3.4.C.IV.d.i. Supercritical Flow	Refer to Plate 22.3 C-1 and to the example problem in Section 2.2.8.	
	Refer to section 2.2.8-Where is this located? Plate 2.2.3 C-2- This should be 22.3 C-2 to match the Plate graphic. Plate 2.2.3 C-3 and 2.2.3 C-4 - This should be 22.3 C-3 and 22.3 C-4 to match the Plate graphics.	3.4.C.V.a. General	Plate 22.3 C-2 is a graphical representation of the method presented above. Plate 22.3 C-3 and 22.3 C-4 are a	
	Line Item 3. … Refer also to Plates 2.2.3 C-5, 2.2.3 C-6 and 2.2.3 C-7, and to the example problem in Section 2.2.8. – "This should be 22.3 C-5, 22.3 C-6, and 22.3 C-7 to match the Plate graphics." Where is section 2.2.8 located?	3.4.C.V.e. Freeboard:	Roll waves are intermittent surges on steep slopes that will occur when the Froude Number (F) is greater than 2.0 and the channel invert slope (S_o) is greater than the quotient, twelve divided by the Reynolds Number. When they do occur, it is important to know the maximum wave height at all points along the channel so that appropriate wall heights may be determined based on the experimental results of roll waves as identified by Richard R. Brock, so that the maximum wave height can be estimated. For details, see "Development of Roll Waves in Open Channels", Report No. KH-R-16, California Institute of Technology, July 1967. Refer also to Plates ~~22.3 C-5, 22.3 C-6, 22.3 C-7~~ ~~2.2.3 C-5, 2.2.3 C-6 and 2.2.3 C-7~~, and	
	Table 2.2.3 B-I.- Where is this located?	3.4.C.V.f.ii. Composite Linings	weighted coefficient must be determined using the roughness factors for the materials as given in ~~Table 2.2.3 B-I~~SSCAFCA's Sediment and Erosion Design Guide. If the lining materials are represented by the subscripts	
	Where is section 2.2.8 located?	3.4.D.I. Design Q	~~iii. (Refer to the example problem in Section 2.2.8)~~	
	Please refer to Plates 2.2.3 D-1 to 2.2.3 D-4 i… This should be 22.3 D-1 to 22.3 D-4 to match the Plate graphics.	3.4.D.II.a. Street Flow Carrying Capacity	Please refer to Plates 22.3 D-1 to 22.3 D-4 inclusive, for nomographs giving street capacities for some typical street sections. These nomographs have been developed for 8" curb heights. Be aware that the City of Rio Rancho standard height is 6".	
	Plates 2.2.3 D-5 to 2.2.3 D-7,- This should be 22.3 D-5 to 22.3 D-7 to match the Plate graphics.	3.4.D.II.b. Street Flow Carrying Capacity	Size and type of storm inlet should be determined by physical requirements and by inlet flow capacities giver in Plates 22.3 D-5 to 22.3 D-7, inclusive. Criteria used, if other than those recommended in this section, must be cited and accompanied by appropriate calculations.	
	Plate 2.2.3 D-8 and Plate 2.2.3 D-9 f- need to referenced as 22.3 D-8 and 22.3 D-9 to match the Plate graphic. Plate 2.2.3.D-12 -where are these? Plate 2.2.3 D-9- This should be 22.3 D-9 to match the Plate graphic.	3.4.D.II.c. Connector Pipe and "V" Depth Calculation	Given the available head (H), the required connector pipe size can be determined from culvert equations, such as those given in King & Brater, Handbook of Hydraulics, Section Four, 5th Edition. Plate 22.3 D-8 can be Please refer to Plate 22.3 D-9 for a graphical solution to the above equation for curb faces of 10 inches. Select a connector pipe size for each storm inlet, and determine the related head loss (H_1, H_2) by means of a culvert equation, or by Plate 22.3 D-9 ~~2.2.3 D-9~~. The sum of head losses in the series should not exceed the available head, i.e.,	

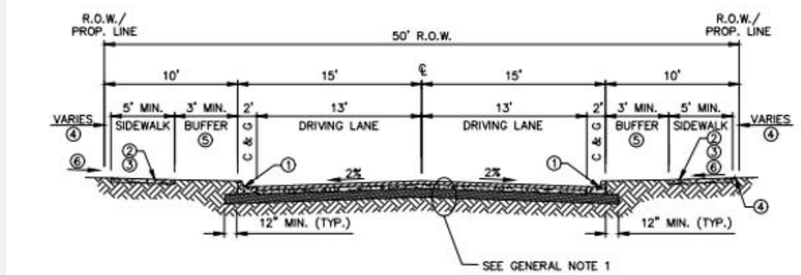
	Line Item- 2. Change Property to Right-of-Way	3.4.D.II.d.i. General	Storm inlets will be located within street rights-of-way unless otherwise approved by the City Engineer. All storm inlets which must be located outside street right-of way lines in order to intercept storm waters under existing conditions are considered "must" storm inlets. Right-of-way or an easement for such storm inlets must be acquired. Storm inlets may be located outside dedicated streets to accommodate future street widenings and should be designed to intercept storm water under existing conditions. a. Storm inlets to be constructed off the paved portion of the roadway but within the street right-of way lines must be made operable by grading the roadway to permit storm water to flow to the basin. Street remodeling of this nature will be performed during construction.		
	Plates 2.2.3 D-l through 2.2.3 – need to referenced as Plates 22.3 D-1 through 22.3 D-7? Change grading to grating. Debris “off the street Plate 2.2.3 D-7 needs to be referenced as 22.3 D-7 to match the Plate graphic. Plate 2.2.3 D-5 and Plate 2.2.3 D-5 need to be referenced as 22.3 D-5 and 22.3 D-6 to match the Plate graphics.	3.4.D.II.d.ii. Storm Inlets	The selection of type, number, and spacing of storm inlets should be based on Plates 22.3 D-l through 22.3 and the following instructions. Be aware that the City of Rio Rancho standard street curb heights are 6”and this may require design and construction adjustments. City standard storm inlets "Type A, B and C" are combination inlet(s) with both curb opening and grating. Storm inlet "Type D" is a grating only inlet. Basin gratings tend to accumulate debris and clog. The curb opening both limits debris accumulation and offsets lost capacity due to clogging of the grating. Except for certain valley applications, combination basins should be used. Due to main line clogging, grating only basins should be used in valley applications where main line pipe diameters are 24" or less or where quarter full pipe velocities are less than 2.5 f.p.s. "Type A" storm inlets should be used for single inlet applications and as the first inlet in a battery of inlets. The "Type A" basin performs the function of sweeping debris off the street upstream of the grating and minimizing clogging. "Type A" inlets are used with standard curb and gutter. "Type B" storm inlets are generally placed downstream of and/or in conjunction with "Type A" storm inlets on streets other than arterials and collectors. This type storm inlet has potential to collect substantial runoff when the grating is clean. If "Type B" basins are used alone, without a "Type A" within 150 feet upstream, the capacity shown in Plate 22.3 D-7 should be reduced 15% due to clogging. "Type B" storm inlets are used with standard curb and gutter. 22.3 D-5 and 22.3 D-6 should be reduced 15% for clogging. "Type C" storm inlets are used with standard curb and gutter.		
	Line Item 4. Plates 2.2.3 D-1 through 2.2.3 D-4 these need to be referenced as Plate 22.3 D-1 through 22.3 D-4 to match the Plate graphics. Line item 4.a) delete “to” Line item 6. Plate 2.2.3 E-1 and Plate 2.2.3 E-2 need to be referenced as 22.2 E-1 and 22.2 E-2 to match the Plate graphic.	3.4.E. Street Hydraulics	4. Plates 22.3 D-1 through 22.3 D-4 may be used where applicable in the hydraulic design of streets. T-intersections, radical slope changes and intersections are potential locations for hydraulic jumps when upstream slopes are steeper than critical slope. a. When conditions indicate that a hydraulic jump or that the effects of superelevation will allow runoff to exceed street hydraulic design criteria, provisions must be made for treatment of the problem. The warping of street sections and the construction of deflector walls for these purposes is prohibited unless specifically authorized by the City Engineer. 5. Intersections and other radical changes in street cross section and slope require special consideration whenever the flow depth/street slope relationship results in flows occurring in the supercritical flow regime. The critical slope line shown on the street rating curves is used to determine on which side of critical depth the flow occurs and if slope or cross section changes will allow the flow to cross through critical depth from supercritical. 6. If flow is likely to cross into the subcritical flow range, then Plate22.3 E-1, "Tail Water vs. Froude Number" is used to determine the height and Plate 22.3 E-2, "Length of Jump vs. Froude Number" figure is used to determine jump length. The height of jump should not exceed curb height and shall be contained within the street right-of-way.		
	Section C-2.5- Where is this located? Line item 4. ..determined in c., above- where is this located? Line item 8. b., above- where is this located?	3.4.G.III. Side Channel Weirs	The Los Angeles District Corps of Engineers, as mentioned in Section 3.4.V.IV.~~C-2.5~~, has developed a side channel spillway inlet. The City may require this type of structure for drains outletting into their facilities. spillway crest a distance equal to the water depth as determined in 3e., above, minus the assumed head on the spillway.		

	Line item 3- Plate 2.2.8 B-3 – Should be referenced as 22.8 B-3 to match plate graphics.	3.4.G.IV. Pier Extensions	Using the spillway length determined above, the overflow spillway is laid out (see Plate 22.8 B-3) using widths determined by trial. Upon completing the layout, the spillway widths at 20-foot intervals are taken from the drawing and the outflow is checked. See computation on Plate 22.8 B-3.	
	items C.7 and C.8 in the Bibliography at the end of Section 2.2.3- Where are these located? Does there need to be additional instructions for the worksheet?	3.4.H Sediment Transport	~~5. Street Hydraulics~~ ~~a. See Reference C-1~~ ~~b. See Reference C-4~~ ~~6. Berms and Levees~~ ~~a. See Reference C-6~~ ~~b. See Reference C-7~~ ~~c. See Reference C-8~~	
	Line item 4. Change to tined finish Fix formatting	3.4.H.I. Channels	(4) Concrete Finish i. The surface of the concrete lining shall be provided with a tined finish. Pneumatically applied "shotcrete" is an acceptable concrete lining alternative and does not require a tinned finish, but it must be preapproved by the City. Precautions shall be taken to guard against excessive working or wetting of finish. Fixed formatting $\frac{A_s}{\text{long}} / \frac{A_c}{\text{long.}} \geq .005$ (a) ii. Ratio of transverse steel area to concrete area not including additional thickness of sacrificial concrete $\frac{A_s}{\text{transv.}} / \frac{A_c}{\text{transv.}} \geq .0025$ (b) (c) Note: In (a) and (b) above As = crossectional area of steel in the direction indicated; Ac = crossectional area of concrete in the direction indicated. Longitudinal = long.; transverse = transv.	

	Line item 3. is there missing text here? Should the word "or" be removed?	3.6.E Violations As to Construction	Removed word “or”	
	Where is Section.9 referenced?	3.6.F Erosion and Stormwater Pollution Control	Regulations. See Chapter 2.10.Q for detailed information on the Stormwater Pollution Prevention Plan. All required stormwater pollution improvements/drainage infrastructures must be constructed at the start of	
	Line item 3…please reference paragraph instead of mentioning in this DPM	3.6.G Erosion and Stormwater Pollution Control	in the off-site flow, ~~shall be~~ determined from the sediment bulking factors as defined in the hydrologic analysis procedures in section 3.4,~~this DPM~~ will be the minimum volume of sediment	
	Line item 10. - Maintenance of these facilities shall be the responsibility of the owner of the property served. Include this maintenance note on the plan. Which note are we referencing, is it Section 3.7.D.1	3.6.J Private Storm Drain Improvements	Yes it is Section 3.7.D.1	
	Chief administrative officer- is this correct?	3.6.D.III. Grant of Drainage Easement	REVIEWED BY THE CITY OF RIO RANCHO LEGAL DEPARTMENT _____ _____ ~~Chief Administrative Office~~City Manager	
	City Engineer Executive Director or their designee- should this read "City Engineer and/or SSCAFCA Executive Engineer or their designee(s)"?	3.b.B.I. Grant of Drainage Easement	All designs shall be submitted to and require approval by City Engineer and/or SSCAFCA Executive Engineer or their designee(s).	
	Line item 2. Is the SAS erosion accurate?	3.8.B.I.b.ii. Longitudinal Placement	a. Place the utility at ~~a depth below the existing arroyo bottom equal to or greater than the SAS erosion control zone. Under no circumstances shall the utility be placed less than 8-feet below the bottom of the arroyo.~~ a depth of 8 feet or the depth of scour for the 100-year discharge (the “SAS Erosion Control Zone”), whichever is greater. The depth shall be measured from the minimum elevation of the channel bed.	
	Line item 2. Add ‘of’ in between users the agency..	3.8.B.I.b.a. Design Criteria for Trail systems	Trails shall have signage notifying users of the agency operating and maintaining the trail (i.e. Utility	
	Section 3.6. F reference is not correct	3.8.C. Lateral Erosion Envelope	This section is no longer in the document.	

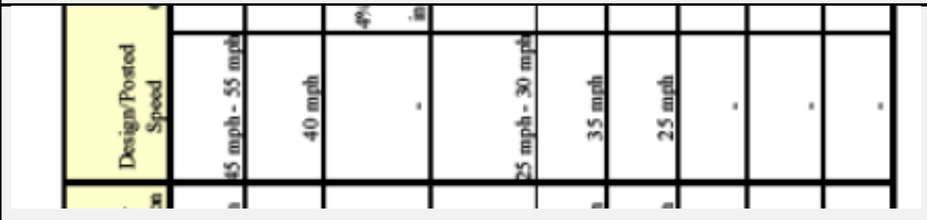
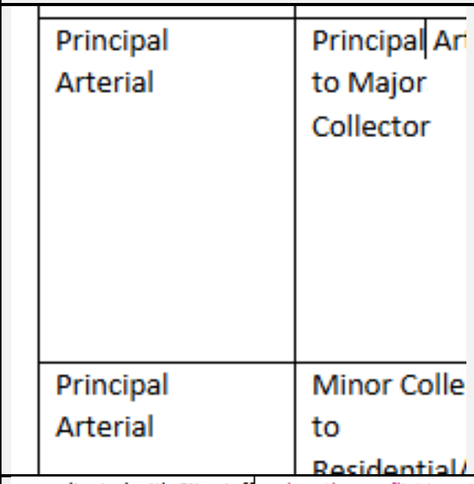
	EPA GSI/LID- Change to GI/LID Line item 5. – Where are references for Street Hydraulics located?	3.9.C. Stormwater Quality Volume	**EPA GI/LID Resources:** EPA Green Infrastructure Green Infrastructure in the Semi-Arid West Green Infrastructure Opportunities that Arise During Municipal Operations **New Mexico GI/LID Resources:** Street hydraulics references located in Bibliography.	
	Revise chapter and subchapter titles and table of content link		Table of Contents revised. STORMWATER QUALITY AND LOW IMPACT DEVELOPMENT ..... 3-128 3.3.MM General ..... 3-128 3.3.NN Applicability ..... 3-128 3.3.OO Stormwater Quality Volume ..... 3-128 3.3.PP Low Impact Development ..... 3-130 BIBLIOGRAPHY 3-130	
	STORMWATER QUALITY DESIGN STORM/EVENT. The ninetieth percentile storm event for new development and the eightieth percentile storm for redevelopment using the methodologies specified in EPA publication number 832-R-14-007, or developed for site-specific application using methodology described therein or based on a site-specific predevelopment hydrology and associated storm event discharge volume specified therein.	3.3 B.I-Definitions	~~***Water Quality Storm Event*** **-** 0.6 inches of precipitation within a six-hour period. This is approximately equivalent to the average annual precipitation event and represents the 80th percentile rainfall event (i.e., approximately 80% of the total annual rainfall occurs in storm events with 0.6" or smaller precipitation depth).~~ ***STORMWATER QUALITY DESIGN STORM/EVENT:*** *The ninetieth percentile storm event for newdevelopment and the eightieth percentile storm for redevelopment using the methodologies specified inEPA publication number 832-R-14-007, or developed for site-specific application using methodology*	
	Remove Water Quality Storm event and move Stormwater Quality Design Storm/Event language between Stormwater Constituents and Storm Water Quality Treatment Rate.	3.3 B.I-Definitions	***Storm Water Quality Constituents*** - dissolved and suspended nutrients, metals, oils, greases, biological agents, etc. ***STORMWATER QUALITY DESIGN STORM/EVENT:*** *The ninetieth percentile storm event for newdevelopment and the eightieth percentile storm for redevelopment using the methodologies specified inEPA publication number 832-R-14-007, or developed for site-specific application using methodology described therein, or based on a site-specific predevelopment hydrology and associated storm event discharge volume specified therein.* ***Storm Water Quality Treatment Rate (SWQR)*** - the peak rate of flow from the water quality storm event.	

	Change cross reference to 2.10 Q.	Section 3.3.AA Erosion and Stormwater Pollution Control	**3.3.AA Erosion and Stormwater Pollution Control** All grading within the City of Rio Rancho must be performed in a manner which prevents the movement of significant and damaging amounts of sediment onto adjacent property and public facilities by both water and wind, and minimizes the impacts to stormwater runoff quality. Every project involving the grading of more than 1.0 acre or the importation or excavation of more than 500 cubic yards of soil must be accompanied by an erosion control plan accepted by the City Engineer. All grading shall conform with EPA Stormwater Regulations. See ~~Section 9~~ Chapter 2.10 Q of this chapter for detailed information on the Stormwater Pollution Prevention Plan. All required stormwater pollution improvements/drainage infrastructures must be constructed at the start of the project.	
	Spell check of Sediment Transport	3.3AA Means of Erosion Control	4. SEDIMENT ~~TRASPORT~~ TRANSPORT Sediment generation, transport and deposition shall be considered in the drainage and flood control system analysis and design and in determining downstream capacity.	
	Spell Check of Stormwater in Header	Stormwater and Low Impact Development	STORMWATER ~~STORM WATER~~ QUALITY AND LOW IMPACT DEVELOPMENT	
	Fix indenting for Headers 3.3MM, 3.3NN and 3.3OO	3.3MM-3.3OO	Formatting has beenFixed. **3.3.MM General** Stormwater runoff is generated from rain and snowmelt events that flow over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. The runoff picks up pollutants like trash, chemicals, oils, and dirt/sediment that can harm our rivers, streams, lakes, and wetlands.	

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
AB	Pg 4-11 - Figure 4 - remove note about "No On-Street Parking Permitted. Mater Plan Approval Required for On-Street Parking Allowance"	Figure 4 Pg 4-11	Removed note about no-street parking from figure. *Figure 4 Local Road Section*  TYPICAL STREET SECTION – RESIDENTIAL STREET	
AB	Pg 4-18 - 4.5.F.II.a.4 - projects design speed should be based on functional classification	4.5.F.II.a.4 Pg 4-18	4.5.F.II. COORDINATION WITH THE CITY 4.5.F.II.a. Meeting with the City of Rio Rancho Development Services Department The Developer may meet with City staff prior to beginning the pavement marking and signing design to discuss the project in detail. This discussion should address all applicable pavement marking and signing related items, as noted below. 1. Identify current design standards that will control the design. 2. Verify which pavement marking materials are to be used. 3. Verify that traffic signs will use the following criteria: a. All sign posts shall be square tube perforated sign posts. b. Use street light poles to mount signs when possible. c. Signs to be installed per City of Rio Rancho Standard if available. 4. Verify the project's design speed and posted speed limit. ~~d.~~a. Projects design speed should be based on functional classification. ~~4.~~5. Clarify the limits of the project and determine how the new design will match into the existing roadway. ~~5.~~6. Confirm the primary City of Rio Rancho Development Services Department contacts for the project. ~~6.~~7. Overall project schedule.	

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
AB	Pg 4-26 - Table 4.2 - Design Speeds should reflect speed limits in section 4.4.A.I Transportation System	Table 4.2 Pg 4-26	Table has been updated. **Street Type** / **Min. Width** / **Curb & Gutter** / **Driving Lane** / **Parking Lane** / **Median Width** / **Bicycle Lane** / **Sidewalk Width** / **Buffer Separation** / **Design/Posted Speed** Principal Arterial: 156 ft / STD DWG CG-01 / 11 ft / - / Varies by # of Lanes / 6 ft / 6 ft / 5 ft min / 45 mph ~~65~~5 mph Minor Arterial: Varies Min 86 ft Max 106 ft / STD DWG CG-01 / 11 ft / - / 22 ft / 6 ft / 6 ft / 5 ft / 40 mph min Intersections (750 ft. distance): Additional 30 ft (15 either side) / - / - / - / - / - / - / - / - ~~Minor~~Business Collector ~~(prop.)~~: Varies Min 80 ft Max 102 ft / STD DWG CG-01 / 15 ft / 9 ft (parallel) 14-30 ft (angle) / - / - / Varies Min 14 ft Max 20 ft / N/A / ~~25 mph~~ 30 mph min Major Collector: 68 ft / STD DWG CG-01 / 11 ft / - / 11 ft / 5 ft / 5 ft min / 3 ft min / 35 mph min	
AB	List should include SAMM (State Access Management Manual)	4.5.A.V Pg 4-15	**4.5.A.V. DEVELOPMENT OF PLANS AND SPECIFICATIONS** Project design and construction, unless otherwise indicated, shall be in accordance with the latest edition and current revision of the following publications: • Design Criteria, Standard Details, and Standard Construction Specifications as provided/required by the City of Rio Rancho. • APWA Uniform Standard Specifications and Details for Public Works Construction as distributed by American Public Works Association New Mexico Chapter. • Manual on Uniform Traffic Control Devices for Streets and Highways as distributed by the U.S. Department of Transportation, Federal Highway Administration. • A Policy on Geometric Design of Highways and Streets as distributed by the American Association of State Highway and Transportation Officials (AASHTO). • Roadside Design Guide as distributed by the American Association of State Highway and Transportation Officials (AASHTO). • Highway Capacity Manual and the current Highway Capacity Software, as distributed by the Transportation Research Board. • State Access Management Manual (SAMM) , as distributed by the New Mexico Department of Transportation.	
AB	Section should have picture from SAMM about intersection spacing	4.7.A.II Pg 4-29	No change	We recommend not including a picture from SAMM regarding intersection spacing. The DPM already references SAMM, which ensures consistency and allows for future updates without requiring changes to the DPM. Additionally, the images in SAMM related to intersection spacing are low quality and may not reproduce clearly.

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
AB	rename appendices if they are inserted by chapter to avoid repeat Appendix names (found locations where appendix names were repeated)	Pg 4-46		
YPM	Referring to "Intersections shall have at least one streetlight over each of the stop-controlled approaches." -Lately CoRR has liked these over the opposite side of the stop condition not on the same side. **Which is correct?**	4.5.F.IV.a.vi. Streetlight Design Details	No change	The current language is referring to the approach not specifying with side of the road. The detail is clear.
Staff	List all references used in this manual and as applicable to CORR roadway and multimodal design such as MUTCD, ITE Trip Gen 11th Edition (or newest), AASHTO Roadside Design Guide, and any multimodal guides as applicable. See all references in current version of DPM.	4.1.A Purpose	Listed in 4.5A.V. DEVELOPMENT OF PLANS AND SPECIFICATIONS	
Staff	What does this mean?	4.4.A Functional Classification and Level of Service	may require roadway improvements (for example, increased number of lanes, restricted turning movements, etc.) to an increased LOS classification and associated functional classification.	
	We should not be exceeding 1000 veh per day on local roadways. Anything that is anticipated to carry over 1000 veh per day should be designed as a collector	4.4.A.I.e Local Road System	2-Way ADT Range 50 – 1,000	
Staff	good for planning level but not necessarily true for some undeveloped parts of CORR.	4.4.A.I.e Local Road System	Principal Arterial | 7,500 | 6** | 30,000 – 60,000 | 8 | --- * Length may be variable as a function of degree of home frontage on the road. ** Guidance is for planning level only. Requirement may vary after consultation with CoRR staff.	
Staff	LOS D is considered acceptable for most situations, however if development in the surrounding area is sparse, the City may require that intersections function more efficiently in the near future to allow for future growth. If a development recommends improvements that only allow LOS D, the City may require additional work to maintain good operation. The City currently requires that all new developments'	4.4.C.I.f Methodology 1.b	~~Where high volumes prevent adequate operation of a two-way stop-controlled intersection (LOS E or worse), a signal warrant analysis shall be completed according to current MUTCD standards. If the intersection consists of two roads with one through lane in each direction, then the theoretical performance of a roundabout shall also be calculated. Consult with the City if a roundabout is feasible and recommended for two through lanes in each direction. Estimated ADTs for all system streets shall be included in the report. In some cases, a crash analysis may be requested by City staff to help identify unsafe conditions in the project area that may be exacerbated by an increase in traffic.~~	

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	access points and any necessary auxiliary lanes follow the design guidelines in the NMDOT State Access Management Manual (SAMM), unless there is an adopted policy for an adjacent corridor that supersedes the SAMM. All internal roads shall be sized appropriately for their projected traffic. In general, the city will require two lanes in each direction only for roads with a projected ADT above 18,000 vehicles, so long as intersections operate at LOS D or better.			
	Staff comment - I'm not sure if this is the best place but I want to make it clear that roadways that are anticipated to exceed 1000veh per day should be designed as collectors.	4.5.A.III Design for Future Traffic Volumes	This was updated in table 2.1 above.	
Staff	These design speeds do not exist in table 4.2. We should also speak to minimum posted speeds. Local roads should be 25mph posted and collectors should not have posted speeds of less than 30mph. I see them included. / The addition of minimum posted speeds will require a table update…	4.6.C Design Speeds and Posted Speeds		
	Change to Principal throughout	4.19 Appendix A		
	Delete language	4.5.E.I.a Residential/Commercial Developments	coordinated with City staff~~, unless the conflict is a streetlight or wet utility in which case City staff will lead the coordination~~. The Developer shall record minutes of all meetings and provide the City with	

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Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	replace with “Development Services”	4.5.F.II.a Meeting with the City of Rio Rancho Department of Public Works	4.5.F.II.a. Meeting with the City of Rio Rancho Development Services Department	
	replace with “Development Services”	4.5.F.II.a.6 Meeting with the City of Rio Rancho Department of Public Works	6. Confirm the primary City of Rio Rancho Development Services Department contacts for the project. 7. Overall project schedule.	
	Add language, ”include references to the SAM and other overarching planning documents”.	4.5.A.III Design for Future Traffic Volumes	design features may be required based on further coordination and direction from City staff. The New Mexico Department of Transportation establishes access management requirements which will protect the functional integrity of the state highway system. The state access management manual provides procedures and standards to preserve and protect the public health, safety and welfare, and to maintain smooth traffic flow. The Developer may be required to complete a detailed capacity analysis to	
	Remove Hyperlink for Ordinances and Guidelines	4.4.B.II. Street Naming	4.4.B.II. STREET NAMING The naming of streets shall be coordinated with the City of Rio Rancho Development Services Department. Street naming shall be in accordance with the ordinances and guidelines set by Development Services.	
	Point back to Table 3 in the Procedures Section	4.4.C Traffic Impact Analysis Procedures	Developers are required to discuss proposed projects with City staff prior to beginning any traffic impact analysis. Please refer Table 3 Traffic Impact Analysis Level of Effort, Chp.2 for more information. This is to enable discussion and determination of parameters to be used and to open communications between City staff and the Developer. Such communication will help in identifying land uses with traffic characteristics that are in the entire community's best interests. Coordination with City Staff is outlined in the procedures chapter and begins with the Development Review meeting. Developers shall initially provide a trip generation report and a site plan for staff to review to determine if further traffic impact analysis is required. For roads with a projected ADT above 18,000 vehicles, the City may require two lanes in each direction so long as intersections maintain operation at LOS D or better.	
	Add language- including adopted plans such as master plans, area plans, neighborhood plans, etc.	4.5.A.Road Functional Classification and Typical Section	4.5.A.I. ROAD FUNCTIONAL CLASSIFICATION AND TYPICAL SECTION During development review and following the requirements outlined in the procedures chapter 2.7.A of the Development Process Manual, the roadway functional classification shall be identified in the materials outlining the proposed project including adopted plans such as master plans, area plans, neighborhood plans, etc. If the classification is not identified, the Developer must submit a classification for approval to the City.	

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove all Hyperlinks	4.5.A.V. Development of Plans and Specifications	APWA Uniform Standard Specifications and Details for Public Works Construction as distributed by American Public Works Association New Mexico Chapter. Manual on Uniform Traffic Control Devices for Streets and Highways as distributed by the U.S. Department of Transportation, Federal Highway Administration. A Policy on Geometric Design of Highways and Streets as distributed by the American Association of State Highway and Transportation Officials (AASHTO). Roadside Design Guide as distributed by the American Association of State Highway and Transportation Officials (AASHTO). Highway Capacity Manual and the current Highway Capacity Software, as distributed by the Transportation Research Board. Standard Specifications for Highway and Bridge Construction as distributed by the New Mexico Department of Transportation (NMDOT). Information Guide for Roadway Lighting as distributed by the American Association of State Highway and Transportation Officials (AASHTO). Guide for Development of Bicycle Facilities as distributed by AASHTO. Urban Bikeway Design Guide as distributed by NACTO. Design Criteria, Standard Details, and Standard Construction Specifications as provided/required by the City of Rio Rancho.	
	Remove ..of public Works from the Header. Remove shall and add may. Line item 6. Remove of public works.	4.5.F.II.a. Meeting with the City of Rio Rancho Department	**4.5.F.II.a. Meeting with the City of Rio Rancho Department ~~of Public Works~~** The Developer may ~~shall~~ meet with City staff prior to beginning the pavement marking and signing design to discuss the project in detail. This discussion should address all applicable pavement marking and signing related items, as noted below. 1. Identify current design standards that will control the design. 2. Verify which pavement marking materials are to be used. 3. Verify that traffic signs will use the following criteria: a. All sign posts shall be square tube perforated sign posts. b. Use street light poles to mount signs when possible. c. Signs to be installed per City of Rio Rancho Standard if available. 4. Verify the project's design speed and posted speed limit. 5. Clarify the limits of the project and determine how the new design will match into the existing roadway. 6. Confirm the primary City of Rio Rancho Department ~~of Public Works~~ contacts for the project. 7. Overall project schedule.	
	Remove shall and add may.	4.5.F.II.b. Post Meeting Communication	The Developer ~~shall~~ may send to City staff any follow-up material that may be needed, particularly information that modifies or changes the concepts that were discussed during the original pre-design meeting. For example, the Developer will:	

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Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove the following language- Where intersection control is not likely in the near future, right-of-way may be reserved or underground conduit and pull boxes may be constructed. If signalization will be required in the near future, foundations for the poles may be constructed. See Chapter 2.7 – Submittal Requirements.	4.5.F.V.a. Traffic Signals and Roundabouts	The City will decide what the appropriate treatment is based on criteria that includes, but is not limited to, safety, efficiency, construction and operating costs, and available right-of-way. ~~Where intersection control is not likely in the near future, right-of-way may be reserved or underground conduit and pull boxes may be constructed. If signalization will be required in the near future, foundations for the poles may be constructed. See Chapter 2.7 – Submittal Requirements.~~	
	Remove the following language- arterial and collector streets.	4.5.F.V.b. Markings	~~4.5.F.V.b.~~ -Markings Street markings in accordance with the MUTCD shall be included in the construction of new ~~arterial and collector streets.~~ For new construction, the marking layout must be shown in the plans and included in the work to be performed by the contractor. The Developer shall layout the proposed signing and striping plan in the field for verification by City staff. See Appendix 4.19 A for guidance on Intersection stop bars, yield marks, crosswalks, and lane designation symbols.	
	Remove the language of the Review Process	4.5.H.I. Review Process	~~4.5.H.I. REVIEW PROCESS~~ ~~One PDF set of plans must be submitted with "As-Built" redline markings to the Development Services Department for review within thirty (30) days of substantial completion of the project.~~ ~~One (1) Copy of test results, certifications, registrations, and reports shall be submitted for review and comment prior to approval by the City.~~ ~~Once the "redline As-Builts" are approved and accepted by the Inspection Supervisor a letter of acceptance shall be issued.~~	
	Add language ..for collector and residential roads, for arterials, follow ASHTO.	4.6.B.II. Cross Slope	with 0.01 foot per foot (1%) minimum and 0.03 foot per foot (3%) maximum for collector and residential roads. For arterials, follow ASHTO. The minimum cross slope at intersections may be reduced to 0.005	
	Remove Line item 3- Traffic Calming	4.7.B.I. General	~~3. Traffic Calming – This use is typically limited to traffic circles located at local street intersections.~~	
	Change 'islands' to 'medians' throughout Remove word may. Add language – in accordance with SAMM	4.12.B. Islands for Limited Movement Accesses	Acceleration and deceleration lanes ~~may~~ in accordance with SAMM will be required to be incorporated into the design. Medians ~~Islands~~ must be provided with vertical curbs. Additional right-of-way or easement may be required to accommodate these designs.	
	Add language- ' temporary joint access may be allowed'	4.14. B Joint Access	**4.14.B Joint Access** Joint access will be required for two adjacent developments where a proposed new access will not meet the spacing requirements set forth in this section. Joint access must be approved by the City. Temporary joint access may be allowed.	
	Define Corner Clearance	4.14.C. Driveway Corner Clearance	At an intersecting street or highway, the dimension measured along the edge of the traveled way between the centerline of the intersecting street and the centerlines of the first adjacent access points on the approach and departure sides of the intersection Source: SRCA NM	

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Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	Remove Section	4.14.F. Variances	~~4.14.F Variances~~ ~~City of Rio Rancho may grant variances from these driveway criteria.~~	
	Remove Bicycle Policy. Add language- Nationally accepted guidelines	4.17.A.I. General	4.17.A.I. GENERAL The City of Rio Rancho ~~bicycle policy~~ follows the nationally accepted guidelines, AASHTO Guide for the Development of Bicycle Facilities. In addition to the AASHTO guide, the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide may be referenced as appropriate.	
	Remove section	4.18.C.IV.e. As an Impact Attenuator	~~4.18.C.IV.e. As an Impact Attenuator~~ ~~Dense shrub masses, by their slower decelerating effect, cause less damage and injury to car and driver than do solid barriers. However, they may require 2 to 3 years to become firmly rooted and well grown. In the median, multiple rows of dense shrubs are effective, if space is available.~~	
	The 2 year time frame is good but doesn't match the preliminary plat time frame. These 2 approvals should have the same time frame.	4.5.A.VII. Time Limitation of Approval		
	Should there be discussion here about location of lights for all classifications of roads?	4.5.F.IV. Lighting and Signing	Assuming Bryan was reviewing an old version, Section 4.5.F.IV talks about lighting for different roadways. 4.5.F.IV. LIGHTING AND SIGNING 4.5.F.IV.a. Streetlight Design 4.5.F.IV.a.i. Streetlights – Required Streetlights shall be required for all public roadways being developed or constructed unless as noted in Section (4.5.F.IV.a.i). In addition, streetlights may be required for lots and parcels which are being improved or altered, depending on the nature and extent of the work. Illustrations of streetlights generally required are shown on City of Rio Rancho Standard Drawings.	
JaLikar	This is currently not enforced on a uniform basis. Can half sections be discussed around developments? Full sections will require construction of all utilities (water and sewer) which could make development costs too high to build.	4.5.G.I. Roadway Improvements	staff. Once the analysis is approved, the developer will be required to construct ~~full width~~ improvements along the project's frontage, as determined by the TIA, and provide the necessary pavement tapers in	
JaLikar	This seems short sided and could hamper developers from looking to Rio Rancho to develop.	4.5.G.II. Water and Sewer Improvements	No change.	This section is focused on ensuring water and sewer services inside of City limits.
JaLikar	Can this be applied to local roads where homes are built on antiquated platted lots?	4.6.B.III. Graded Shoulders	No change.	Individual single family lots developed on antiquated lots may have graded shoulders. Home builders developing on multiple lots consecutively should be putting in paved road improvements.

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Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
JaLikar	Can I non typical paved section be added for areas of development with antiquated platted lots?	Table 4.2 Street Standards	No proposed changes.	Requests for deviations can be made.
JaLikar	and corresponding handicap ramps should comply with ADA	4.6.H Sidewalks	Sidewalks shall be designed in accordance with the current City of Rio Rancho Standard Details. All newly constructed sidewalks and corresponding ramps shall be in compliance with the Americans with Disabilities Act (ADA) requirements and take into account Public Rights-of-Way Accessibility Guidelines.	
JaLikar	Can intersection that are previously platted and don't comply be grandfathered in? It could be impossible to acquire necessary lots to correct intersections.	4.7.A.I. Intersection Angle	No change.	For intersection safety, it is important for roadways that are more than 10% perpendicular to be realigned.
	Overall comment- Change all table numbers and references to Table 4.. to match Chapter . and add the necessary chapter cross references correct.	Throughout the chapter	Updated table number.	Table numbers have been updated throughout the chapter.
	Add reference of 2.7 A for procedure Ference section. Is this referencing "Section 2, Subsection 4.3" in this DPM? Or another publication? Should it read "2.7.A.iii?	4.5.A.III Design for Future Traffic Vol	The primary design consideration for roadways is the handling of vehicular traffic. When streets are built or reconstructed, they will be designed with sufficient traffic handling capacity to accommodate a future level of traffic volumes. Section 2.7.A.iii ~~Section 2, Subsection 4.3 Design Hour Volumes and Section 2, Subsection 3.0~~ Traffic Impact Analysis Procedures describe in greater detail the acceptable process that shall be followed in determining the capacity of roadways and intersections used in the design process.	
	Change chapter reference from Chapter 6 to 7.	4.5.C. Survey and Data Acquisition	**4.5.C Survey and Data Acquisition** The development of a survey for the purposes of roadway design shall be completed in accordance with Chapter 7 ~~6~~ Survey and Permanent Monumentation of the Development Process Manual.	
	Add section 4.19 to lane designation symbols	4.5.F.V.b. Markings	Street markings in accordance with the MUTCD shall be included in the construction of new arterial and collector streets. For new construction, the marking layout must be shown in the plans and included in the work to be performed by the contractor. The Developer shall layout the proposed signing and striping plan in the field for verification by City staff. See Appendix 4.19 A for guidance on Intersection ~~stop bars, yield marks, crosswalks, and lane designation symbols~~	
	Delete the word merely	4.5.G. Subdivision Infrastructure Requirements	**4.5.G Subdivision Infrastructure Requirements** The following information has been provided to assist the development community in determining the extent of public infrastructure that will be required in conjunction with a planned residential development. The information ~~merely~~ is to be used as a guide, and additional coordination and discussions with the City's Department of Public Works and Development Services will be required.	
	Change reference to 4.5.A.v	4.6.A. Design Criteria	**4.5.G.I. ROADWAY IMPROVEMENTS** The Developer will be required to construct full roadway improvements adjacent to and surrounding the project's boundaries. The roadway typical sections for the road system adjacent to the project's boundaries will need to be established by the developments Traffic Impact Analysis (TIA), as necessary – see Section 4.4.C of this	

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Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
			4.6.A Design Criteria The criteria presented within this section are major controlling factors in the design of streets. It is expected that designers will carefully apply, with attention to detail, these criteria to individual design circumstances. Suitable transitional elements must be provided between changes in geometric configuration, pavement and curb character, and drainage carrying aspects of the ultimate street design. In the following, the major criteria governing design speed, horizontal and vertical geometrics, sight distance, curvature and superelevation, gradients, and comfort controls are presented. The guidelines contained herein are intended to provide direction in the design of transportation facilities. While most of the design parameters that should be used are provided in the following pages, unusual conditions may occur in some projects. When additional guidance and explanation is needed, the designer should refer to the list of publications already included in Section 4.5.A.v. of this chapter or	
	AASHTO's A Policy on Geometric Design of Highways and Streets- should this be a hyperlink?	4.6.D. Horizontal Curves	No change.	The document is not available online so no hyperlink can be provided.
	AASHTO's A Policy on Geometric Design of Highways and Streets- should this be a hyperlink?	4.6.E. Vertical Alignment	No change.	The document is not available online so no hyperlink can be provided.
	AASHTO's A Policy on Geometric Design of Highways and Streets- should this be a hyperlink?	4.6.G. Clear Zones, Guard Rails and Curbs,	No change.	The document is not available online so no hyperlink can be provided.
	AASHTO's A Policy on Geometric Design of Highways and Streets- should this be a hyperlink?	4.7. A. VII. Intersection Sight distance	No change.	The document is not available online so no hyperlink can be provided.
	Change language to TIA where it says traffic analysis	4.7. A. VIII. Left Turn Lane Storage	The left turn storage length shall be determined by a ~~traffic analysis~~T.I.A for both signalized and unsignalized intersections. The minimum storage length shall not be less than 75 feet for unsignalized intersections or 160 feet for signalized intersections, unless agreed upon with the City. If ~~analysis~~ T.I.A indicates that these minimums are not adequate, then the storage length shall meet the 95th percentile queue.	
	Change language to TIA where it says traffic analysis	4.7. A. IX. Right Turn Lane Storage	**4.7.A.IX. RIGHT TURN LANE STORAGE** The right turn storage length shall be determined by a T.I.A ~~traffic analysis~~ for both signalized and unsignalized intersections. The minimum storage length shall not be less than 75 feet for unsignalized intersections or 160 feet for signalized intersections, unless agreed upon with the City. If analysis indicates that these minimums are not adequate, then the storage length shall meet the 95th percentile queue.	
	Where is section 2 located?	4.7. A. XI. Lane Requirements	The determination of functional classification is required to determine the number of lanes and the lane configuration for intersections. The outputs of a TIA should also be referenced in support of this determination. See section 2.7.A.III of Procedures chapter for analysis requirements.	
	Where is Section 2.2 located?	4.7. A. XIII. Intersection	Detailed drainage design must follow the requirements of Chapter 2.8.C; however, the designer should specifically investigate intersection design to assure that design flows will not overtop curbs resulting in damage outside the right-of-way.	

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
		Cross Slope/Grading		
	noted below in section 8.2.2.1 - Is this referencing the AASHTO paragraph? If it's intended to reference a paragraph in this DPM, Chapter 8 does not exist.	4.18.B.I.a. S ight Triangles	Yes this references an AASHTO Paragraph.	
	AASHTO Roadside Design Guide- Add Hyperlink Delete “of” from line item 6.	4.18.B.II.a. Offset Distances For Trees	For design speed less than 50 MPH, minimum clearances for newly planted trees, shrubs and cacti with an ultimate trunk diameter of more than 4 inches shall meet the clear zone requirements ~~of~~ unless one of the reasons listed above will allow for a lesser distance.	
	as a result Xeriscaping is not recommended for landscaping in conjunction with roadway improvements.- Is this accurate? Or is it intended to read "as a result, Oasis planting is not recommended...."h	4.18.B.VII. Xeriscaping	from lush (or oasis) areas to drought tolerant planting areas. Oasis areas are ~~not encouraged due to high-water requirements within the City's right-of-way and as a result Xeriscaping is~~ not recommended for landscaping in conjunction with roadway improvements, due to high-water requirements within the City's right-of-~~-~~way.	
	Paragraph 2 is confusing. Perhaps the sentences discussing polyethylene and PVC pipes should also state "unless they are under constant or intermittent pressure".	4.18.B.VIII. Irrigation Pipelines	Pipelines carrying water under constant pressure will be buried to a minimum depth of twenty-four (24) inches. Those that are under intermittent pressure will be buried to a minimum depth of eighteen (18) inches. Polyethylene lines will be buried to a minimum depth of eight (8) inches, PVC lines will be buried to a minimum depth of twelve (12) inches unless they are under constant or intermittent pressure.	
	Delete word approved	4.18.C.III. PLANTING RECOMMENDATIONS AND CONSIDERATIONS	Gray water irrigation can be appropriate for some landscape installations. Gray water is regulated by the New Mexico Environment Department (NMED) and may require a permit. Use of reclaimed water (treated sewage) may be used if ~~approved~~ by the City of Rio Rancho and signed to indicate non-potable water.	
	If the entirety of this chart cannot fit on one page, there should be a note stating that "chart continues on next page".- Reformat table .	4.19 Appendix A	**Intersection Stop bars/Yield Marks, Crosswalks, and Lane Designation Symbols** **Functional Classification** / **When to Mark** Major Roadway / Minor Roadway / Stop Bars / Yield Marks * / Crosswalks Markings* / Lane Designation Symbols (Arrows and ONLY)** Principle Arterial / Principle Arterial to Major Collector / Stop Bars always at all stop controlled approaches / At signalized intersections where pedestrian signals are present; / Approaches should receive lane designations at multilane approaches and where through lanes become through-left or through right lanes; Dedicated turn bays on major and minor approaches should be marked with Arrow, Only, Arrow appropriately spaced and repeated as necessary through turn bay; Through left lanes should be marked with at least two designations; Through right markings should only be used as deemed necessary. Single lane approaches do not require lane designation symbols. The use of through arrows is discouraged unless required due to intersection alignment or lane shifts. Yield Marks at all roundabout approaches. / At roundabouts where pedestrian crossings exist; and Stop controlled approaches where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist. Principle Arterial / Minor Collector to Residential/Local / Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections. / At signalized intersections where pedestrian signals are present; At roundabouts where pedestrian crossings exist; … / Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist. Yield Marks at all roundabout approaches. Minor Arterial / Minor Arterial to Major Collector / Stop Bars always at all stop controlled approaches / At signalized intersections where pedestrian signals are present; Yield Marks at all roundabout approaches. / At roundabouts where pedestrian crossings exist; and Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist. Minor Arterial / Minor Collector to Residential/Local / Crosswalks locations, multi-lane approaches, and all approaches to all-way stop controlled intersections. / At signalized intersections where pedestrian signals are present; / Turn bays on major and minor approaches at signalized intersections should be marked with Arrow, Only, Arrow appropriately spaced and repeated as necessary through turn bay; Approaches should receive lane designations at multilane approaches and where through lanes become through-left or through right lanes; Dedicated turn bays on major and minor approaches should be marked with a single designation/arrow at entrance of turn bay/approach lane adjacent to holding bar. Through-right markings should only be used as deemed necessary. Single lane approaches do not require lane designation symbols. At roundabouts where pedestrian crossings exist; … / Only at stop controlled approaches within school zones where pedestrian facilities (sidewalks or multiuse trails) and pedestrian ramps exist Yield Marks at all roundabout approaches. Major Collector / Major Collector / Stop Bars always at all stop controlled approaches / At signalized intersections where pedestrian signals are present; Yield Marks at all roundabout approaches. / At roundabouts where pedestrian crossings exist; and	

RR DPM UPDATE – Chp 4 Transportation Comment log				
Date	Comment	**Section**	**Resulting Changes**	**Response, if necessary**
YPM	Referring to “The plans shall show and identify all streetlights” -This is typically provided by others and have never been required as part of the construction plans. Is this a new requirement? Also the actual conduit and connector runs are provided after. Can the street light be shown on the overall paving to help reduce the number of sheets created? Is a light letter still required if so it seem like if the conduits/conductor run sheets seem more appropriate on that vs construction plans.	4.5.F.IV.a.v. Streetlight General Plan Details	No change.	Include streetlight design on construction plans. This should also help out the permit folks.
YPM	Referring to “Intersections shall have at least one streetlight over each of the stop-controlled approaches.” -Lately CoRR has liked these over the opposite side of the stop condition not on the same side. Which is correct?	4.5.F.IV.a.vi. Streetlight Design Details	No change.	The current language is referring to the approach not specifying with side of the road. The detail is clear.
YPM	Can a clear table be provided? This is blurry	Table 4.2 Street Standards	Table has been updated.	
YPM	Referring to “For local roads, intersection spacing should maintain sight-distance requirements at a minimum.” -Should a minimum distance be provided?	4.7.A.II. Intersection Spacing	Sight-distance is already defined in the chapter. Reference has been added rather than adding a minimum as situations may change.	

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
YPM	Referring to "Whenever possible the water line should be placed below the storm sewer." Why under? I think we would want the water over the SD if possible	5.2.D.XIII. Separation from Storm Drains and Culverts	5.2.D.XIII. SEPARATION FROM STORM DRAINS AND CULVERTS Water mains shall maintain six (6) feet horizontal and two feet vertical separation from storm drains and culverts. Water mains crossing less than two (2) feet below a storm drain or culvert shall require additional protection such as the use of a pipe casing. Whenever possible the water line should be placed above the storm sewer.	
YPM	Referring to "Minimum radius of curvature for C-906 smooth-walled HDPE pipe" Why hdpe and not pvc?	5.2.D.Vii. Radius of Curvature	No change.	This specification was not identified as a concern by SSCAFCA or CoRR staff. No change at this time.
Staff	Staff requested the addition of a requirement to the DPM under the Utilities Section that if purple pipe/effluent/re-use lines are within 200 feet of development that the purple pipe be extended and used for irrigation. The caveats are that if the City determines there is not enough effluent water available that the line may not be required	5.2.D.VIII. Water Main Extensions	1. For the purposes of irrigation, if purple pipe/effluent/reuse lines are available within 200 feet of the development, in-place infrastructure is required to be extended and used for irrigation purposes within the development. 2. Exception: if the City determines there is not enough effluent water available for irrigation purposes on the property, the City may waive this requirement.	
JaLiker	numbering sequence is incorrect for section RESIDENTIAL SUBDIVISION HYDRANT LOCATION STANDARDS:	5.2.H.V. Pg 5-25	Numbering has been revised 5.2.H.V. RESIDENTIAL SUBDIVISION HYDRANT LOCATION STANDARDS: Fire hydrant locations will be reviewed and approved as part of the subdivision approval process and the following general design standards apply: 1. Start by locating a fire hydrant at the intersection of each public and/or private street entrance into the subdivision unless an existing fire hydrant meets spacing requirements. 2. Then space additional fire hydrants approximately 500 feet apart along all public and/or private streets within the subdivision and along all perimeter streets. 3. For cul-de-sacs, a fire hydrant shall be placed within 30 feet of the dead dead-end water main. If dead end lines lengths are such that additional hydrants are required, assure that a minimum of 30 feet along the line is required between the fire hydrant and the line termination.	
JaLiker	Can the termination location be behind C&G? Plumbing always dig behind curb instead of behind the utility easement on local roads.	5.4.F.IV.	No change.	The termination point is located at the end of the PUE, not at the back of curb. No change at this time.

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
DS	The City's policy on sanitary sewer main extensions is contained in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.24 Main Extension Policy, Including Subdivisions. When new sanitary sewer main extensions are required, sewer service connections shall be provided to all adjacent properties. These service connections shall: 1. Be sized appropriately for the anticipated future development needs of the adjacent property 2. Extend from the main to the property line 3. Be installed at an appropriate depth to serve future gravity flow from the adjacent property 4. Be properly capped and documented on as-built drawings 5. Include all necessary easements for future access and maintenance 6. Be installed in accordance with Standard Drawings S-6, S-7, and S-8	5.4.D.XX. Pg. 5-42	5.4.F.I. GENERAL Service connections to the City of Rio Rancho wastewater system shall conform to Article 51.08 of Chapter 51 of the Rio Rancho Code of Ordinances and Standard Drawings S-6, S-7, and S-8 on the City's website. When new sanitary sewer main extensions are required, sewer service connections shall be provided to all adjacent properties. These service connections shall: 1. Be sized appropriately for the anticipated future development needs of the adjacent property 2. Extend from the main to the property line 3. Be installed at an appropriate depth to serve future gravity flow from the adjacent property 4. Be properly capped and documented on as-built drawings 5. Include all necessary easements for future access and maintenance 6. Be installed in accordance with Standard Drawings S-6, S-7, and S-8	
DS	Add: When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall: 1. Be sized appropriately for the anticipated future development of the adjacent property. 2. Extend from the main to the property line 3. Be properly capped and documented on as-built drawings 4. Include all necessary easements for future access and maintenance 5. Be installed in accordance with Standard Drawing W-06 and related service connection details	5.2.E.I.	When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall: 1. Be sized appropriately for the anticipated future development of the adjacent property. 2. Extend from the main to the property line 3. Be properly capped and documented on as-built drawings 4. Include all necessary easements for future access and maintenance 5. Be installed in accordance with Standard Drawing W-06 and related service connection details	
DS	Check this reference: All water service laterals shall be installed in accordance with the Standard Detail Drawings in Appendix A.	5.2.E.V Pg 5-17	5.2.E.V. WATER SERVICE LATERALS All water service laterals shall be installed in accordance with the Standard Detail Drawings in Appendix 5.4.I ~~A~~.	

<table>
<tr><th colspan="4">RR DPM UPDATE – Chapter 5 Comment log</th></tr>
<tr><th>Date</th><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td>DS</td><td>Add the following language- When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall:
1. Be sized appropriately for the anticipated future development of the adjacent property.
2. Extend from the main to the property line
3. Be properly capped and documented on as-built drawings
4. Include all necessary easements for future access and maintenance
5. Be installed in accordance with Standard Drawing W-06 and related service connection details</td><td>5.2.D.VIII Water Main Extensions</td><td>When new water main extensions are required, water service connections shall be provided to all adjacent properties. These service connections shall:

1. Be sized appropriately for the anticipated future development of the adjacent property.
2. Extend from the main to the property line
3. Be properly capped and documented on as-built drawings
4. Include all necessary easements for future access and maintenance
5. Be installed in accordance with Standard Drawing W-06 and related service connection details</td><td></td></tr>
<tr><td>MC</td><td>5.2.D.VIII. WATER MAIN EXTENSIONS

The City’s policy on water main extensions is contained in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.24 Main Extension Policy, Including Subdivisions.</td><td>5.2.D.VIII.
Pg 5-15</td><td>5.2.D.VIII. WATER MAIN EXTENSIONS

The City’s policy on water main extensions is contained in the City of Rio Rancho Code of Ordinance Title V: Public Works, Chapter 51 Water and Wastewater Rules and Rates, Section 51.24 Main Extension Policy, ~~i~~ncluding Subdivisions~~:~~.</td><td></td></tr>
<tr><td>MC</td><td>5.1.K Availability Statement Process
Availability statements shall be obtained in accordance with the ~~Utilities Commission Policy Statement, “Guidelines for Issuing Water & Wastewater Letters of Availability.”~~ A copy of this document and a copy of the water and wastewater service availability information request form are included on the City’s website.</td><td>5.1.K
Pg 5-9</td><td>5.1.K Availability Statement Process
Availability statements shall be obtained in accordance with the Utilities ~~Commission Policy Statement, “Guidelines for Issuing Water & Wastewater Letters of Availability~~Department~~.”~~ A copy of this document and a copy of the water and wastewater service availability information request form are included on the City’s website.</td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.20? :Table 4.8 summarizes the minimum requirements of a lift station DAR.</td><td>5.4.G.II. D
Pg 5-47</td><td>5.4.G.II. DESIGN ANALYSIS REPORT (DAR)

In addition to meeting the requirements set forth in the “Recommended Standards for Wastewater Facilities, latest edition”, the design engineer shall submit a DAR to the City of Rio Rancho, Utility Department, for review.
1. Table 5.20 summarizes the minimum requirements of a lift station DAR.

<table><tr><th colspan="2">Table 5.20 Lift Station DAR Requirements</th></tr><tr><th>Item</th><th>Description</th></tr><tr><td>1.</td><td>Average Influent Station Flow, gpm</td></tr><tr><td>2.</td><td>Peaking Factor</td></tr><tr><td>3.</td><td>Wet Well Volume, gallons and cubic feet</td></tr><tr><td>4.</td><td>Average Flow Fill Time, minutes</td></tr><tr><td>5.</td><td>Peak Flow Fill Time, minutes</td></tr><tr><td>6.</td><td>Diameter of Proposed Force Main, inches</td></tr><tr><td>7.</td><td>Velocity in the forcemain under normal operating conditions (if multiple pumps are used,</td></tr></table></td><td></td></tr>
</table>

<table>
<tr><th colspan="4">RR DPM UPDATE – Chapter 5 Comment log</th></tr>
<tr><th>Date</th><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td>PW</td><td>Should this be Table 5.19?
Table 4.7 below shows the service connection sizes based on the development type</td><td>5.4.F.V
Pg 5-46</td><td>
5.4.F.V. SERVICE CONNECTION SIZES

Table 5.19 below shows the service connection sizes based on the development type.

<table>
<tr><th colspan="2">Table 5.19 Service Connection Sizes</th></tr>
<tr><th>Development Type</th><th>Service Connection Size (in)</th></tr>
<tr><td>Residential Lots</td><td>4 or 6</td></tr>
<tr><td>Commercial Lots</td><td>Minimum 6</td></tr>
<tr><td>Multiple Family Lots</td><td>Minimum 6</td></tr>
<tr><td>Industrial Lots</td><td>Minimum 6</td></tr>
</table>
</td><td></td></tr>
<tr><td></td><td>5.4.E.IX
Should this be Tables 5.17 and 5.18?</td><td>5.4.E.IX
Pg 5-44</td><td>
5.4.E.IX. FLOW CHANNEL

Flow channels shall be required in all manholes, connecting the inverts of the upstream and downstream pipe sections. The flow channel straight through a manhole shall be made to conform as closely as possible in shape, and slope to that of the connecting sewers. Flow channel height and slope requirements are shown in Tables 5.17 and 5.18 below.

<table>
<tr><th colspan="2">Table 5.17 Minimum Flow Channel Heights</th></tr>
<tr><th>Pipe Diameter (in)</th><th>Minimum Flow Channel Heights</th></tr>
<tr><td>< 15</td><td>½ of the pipe diameter (to pipe centerline)</td></tr>
<tr><td>≥ 15</td><td>¾ of the pipe diameter</td></tr>
</table>

<table>
<tr><th colspan="2">Table 5.18 Minimum Flow Channel Slopes</th></tr>
<tr><th>Type of Manhole/Flow Channel</th><th>Minimum Flow Channel Slope</th></tr>
<tr><td>Manholes on continuous slope, straight alignment pipelines</td><td>2.5% slope from entrance to exit</td></tr>
<tr><td>Manholes at changes in pipe size</td><td>Match soffits at entrance and exit of manhole</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th colspan="4">RR DPM UPDATE – Chapter 5 Comment log</th></tr>
<tr><th>Date</th><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td>PW</td><td>Should this be Table 5.16?
The minimum manhole diameters and standard frame and cover sizes for various pipe sizes are shown in Table 4.4 below</td><td>5.4.E.IV.
Pg 5-42</td><td>5.4.E.IV. MANHOLE DIAMETER

The minimum manhole diameters and standard frame and cover sizes for various pipe sizes are shown in Table 5.16 below.

Table 5.16 Minimum Manhole Diameters
<table><tr><th>Pipe Diameter (in)</th><th>Manhole Dept (ft)</th><th>Minimum Manhole Diameter (in)</th><th>Minimum Frame and Cover Diameter (in)</th></tr><tr><td>≤ 15</td><td>≤ 12</td><td>48</td><td>30</td></tr><tr><td>≥ 15</td><td>> 12</td><td>72</td><td>30</td></tr></table></td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.15?
The minimum manhole diameters Manholes shall be required along collection mains at distances not greater than the maximum manhole spacing as shown in Table 4.3 below.</td><td>5.4.E.IV
Pg 5-42</td><td>5.4.E.III. MANHOLE SPACING

Manholes shall be required along collection mains at distances not greater than the maximum manhole spacing as shown in Table 5.15 below.

Table 5.15 Maximum Manhole Spacing
<table><tr><th>Pipe Size (in)</th><th>Maximum Manhole Spacing (ft)</th></tr><tr><td>≤ 21</td><td>450</td></tr><tr><td>≥ 24</td><td>500</td></tr></table></td><td></td></tr>
<tr><td>PW</td><td>add "See Table 5.15".</td><td>5.4.E.II.
Pg 5-42</td><td>5.4.E.II. MANHOLE LOCATIONS

Manholes shall be installed at the following locations:
1. Changes of grade or slope
2. Changes of pipe size
3. Changes of horizontal or vertical alignment
4. Changes in pipe material
5. Pipe intersections except with service connections less than 8-inches in diameter
6. Service connections 8-inches in diameter and larger
7. The end of each public sewer line
8. At distances not to exceed the spacing shown in Table 5.15~~below~~</td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.14?:
Table 4.2 shows the minimum and maximum slopes required in different size gravity sewer pipes.</td><td>5.4.D.X.
Pr. 5-39</td><td>Updated table references:</td><td></td></tr>
</table>

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
			5.4.D.X. SLOPE AND VELOCITIES Sewers shall be laid with a constant and uniform slope between manholes. All changes in slope shall require a manhole at the slope change connection. Collection mains shall be designed with an adequate slope to achieve flow velocities of at least 2.0 ft/s when flowing full. Design velocities shall not exceed 10 ft/s. Table 5.14 shows the minimum and maximum slopes required in different size gravity sewer pipes. **Table 5.14 Minimum and Maximum Design Slopes** Pipe Size in inches / Minimum Design Slope %, (ft/ft) / Maximum Design Slope 5, (ft/ft) 8 / 0.500 (0.0050) / 8.50 (0.0850) 10 / 0.280 (0.0028) / 6.25 (0.0625) 12 / 0.220 (0.0022) / 5.00 (0.0500) 15 / 0.150 (0.0015) / 3.75 (0.0375) 18 / 0.120 (0.0012) / 2.80 (0.0280) 21 / 0.100 (0.0010) / 2.40 (0.0240) 24 / 0.080 (0.0008) / 2.00 (0.0200) 27 / 0.068 (0.00068) / 1.70 (0.0170) 30 / 0.060 (0.0006) / 1.50 (0.0150) 36 / 0.048 (0.00048) / 1.15 (0.0115)	
PW	Add "See Table 5.14".: Wastewater collection mains shall be designed to meet minimum slope and velocity requirements as set forth in these design standards.	5.4.C.V. Pg 5-35	5.4.C.V. WASTEWATER COLLECTION MAIN DESIGN FLOW CRITERIA The following is a list of the major design flow criteria for wastewater collection lines. 1. Wastewater collection mains shall be designed to convey the peak flow. 2. Wastewater collection mains shall be designed to meet minimum slope and velocity requirements as set forth in these design standards, see Table 5.14. 3. Wastewater collection mains designs shall avoid exceeding maximum slope and velocity conditions as set forth in these design standards, see Table 5.14. 4. The peak flow shall be determined using average day flows adjusted by a peaking factor and	

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Should this be Table 5.13?: Average daily flow estimates based on land development/use shall conform to Table 4.1. T	5.4.C.III. A Pg. 5-36	5.4.C.III. AVERAGE DAILY FLOWS Average daily flow estimates based on land development/use shall conform to Table 5.13. The average day values indicated in the table represent minimum estimates for determining design flows. Where a proposed development is known (based on specific applications and/or use), and the anticipated wastewater flows exceed the minimum forecast demands, the greater flow shall be used to determine the design flows. Where the project land does not fit within the tabulated categories, an average daily unit flow of 210 gallons per dwelling unit per day shall be used. **Table 5.13 Average Daily Wastewater Flow Estimates** **Type of Development/Land Use** / **Average Daily Flow** Residential — 175 gpd/DU Light Commercial — 1,230 gal/ac-day Heavy Commercial — 5,968 gal/ac-day Light Institutional — 226 gal/ac-day Heavy Institutional — 1,788 gal/ac-day Light Industrial — 447 gal/ac-day Medium Industrial — 1,680 gal/ac-day Heavy Industrial — 9,266 gal/ac-day	
PW	Is this accurate? Where is this?: 5.4.B Submittals A design or Utility Engineering report shall be completed and submitted to the Utilities Department unless waived by the City Engineer or designee. The requirements and format of this report are outlined and detailed in Section 2 of these standards.	5.4.B pg5-30	2.7.A.III.a.Utility Engineering Report[2] 2.7.A.III.a.i. Applicability The City Engineer or designee will require the preparation of a utility engineering report to assess the impacts and service demands of any project or development proposal connecting to the public water and wastewater systems. The utility report shall be prepared by a licensed engineer and include a technical report, preliminary plan, connection and isolation plan as outlined in the following subsections. 2.7.A.III.a.ii. Report Requirements For designs including water and wastewater system components, the utility engineering report shall provide an overview of the proposed project or development, proposed water and wastewater utility improvements, service demands and flows, system impact and feasibility, and basic design requirements, and include the information, as overviewed in the following sections:	

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
	Should this be Table 5.12? This table is not referenced in the text: Table 3.1 Chlorine Facilities Minimum Design Criteria	5.4.B Pg. 5-34	 **Table 5.12 Chlorine Facilities Minimum Design Criteria** Item / Design Criteria Low Level Chlorine — 0.2 ppm High Level Chlorine — 0.8 ppm Design Chlorine Dosage — 1.0 ppm Volume Turnover Maximum Time Required — 3 days Chlorine Monitoring — Constant, amperometric method	
PW	Remove delete duplicate parenthesis: 12. Screen ((sizing, below grade placement, material, etc).	5.3.D.II.	11. Well casing (sizing, below grade placement, material, etc). 12. Screen (sizing, below grade placement, material, etc). 13. Column pipe (sizing, below grade placement, material, etc). 14. Discharge piping plus head	
PW	"95% OF the"	5.3.C.II.	water is pumped. 1. The horsepower rating of each pump motor shall be such that the motor will carry continuously the maximum load that is possible to develop at any point on the pump curve without exceeding 95 % of the motor nameplate rating and without using the service factor. 5.3.C.III. DESIGN CRITERIA	
PW	Should this be Table 5.11? Table 2.11 shows the maximum spacing for fire hydrants. Spacing distance shall be measure along the centerline of the street or route, which the fire truck will most likely travel		Updated table references to 5.11: 5.2.H.VII. FIRE HYDRANT SPACING Table 5.11 shows the maximum spacing for fire hydrants. Spacing distance shall be measure along the centerline of the street or route, which the fire truck will most likely travel. **Table 5.11 Fire Hydrant Spacing** Type of Development/Land Use / Maximum Fire Hydrant Spacing (ft) Single-Family Residential — 500 Single- Family Residential Cul-de-sac — 350 Two story Townhouses and Apartments — 300 Commercial and Industrial Development — 300 Institutional Development — 300	
PW	See Table 5.11: When designing a fire hydrant layout, the “first” hydrant is to be located at street intersections and at the main entrance(s) into a subdivision, apartment complex, or commercial development. Additional hydrants must then	5.2.H.IV. Pg 5-24	Fire hydrants shall not be placed within six (6) feet of an above ground obstruction and shall have a included in the coverage analysis if its location is on the same side as the new development. 4. When designing a fire hydrant layout, the “first” hydrant is to be located at street intersections and at the main entrance(s) into a subdivision, apartment complex, or commercial development. Additional hydrants must then be spaced approximately evenly between these points at a distance not to exceed the maximum spacing between hydrants (see Table 5.11). Spacing is measured along route of travel of a fire engine. 5. Fire hydrants separated from a subdivision, building, or other development by continuous fence,	

<table>
<tr><th colspan="5">RR DPM UPDATE – Chapter 5 Comment log</th></tr>
<tr><th>Date</th><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td></td><td>be spaced approximately evenly between these points at a distance not to exceed the maximum spacing between hydrants. S</td><td></td><td></td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.10?: The required fire flow and maximum day flow rate shall be available in the system. The municipal fire flow required by the City for any one particular location varies depending on the land use and/or the building type or use. The number of hours that the required fire flow shall be available also varies depending on the land use. Table 2.10 outlines required fire protection flows</td><td>5.2.H.III.
Pg 5-24</td><td>Table references have been updated to 5.10
Revised reference to 2.10 to 5.10
5.2.H.III. FIRE FLOW DEMAND
The required fire flow and maximum day flow rate shall be available in the system. The municipal fire flow required by the City for any one particular location varies depending on the land use and/or the building type or use. The number of hours that the required fire flow shall be available also varies depending on the land use. Table 2.10 outlines required fire protection flows. It should be noted that this table is not all-inclusive for every type of development and/or land use. It is the responsibility of the design engineer or architect to coordinate all fire flow requirements with the City Engineer or designee and Fire Marshall, as the Utilities Department and/or the Fire Department may require a fire flow greater than those shown in Table 5.10.
<table>
<tr><th colspan="2">Table 5.10 Minimum Fire Flow Requirements</th></tr>
<tr><th>Type of Development/Land Use</th><th>Fire Flow Demand (gpm)</th></tr>
<tr><td>Single-Family Residential Development</td><td>1500</td></tr>
<tr><td>Multi- Family Residential Development</td><td>1500</td></tr>
<tr><td>Commercial Development</td><td>3000</td></tr>
<tr><td>Institutional Development</td><td>3000</td></tr>
<tr><td>Industrial Warehouse Development</td><td>4000</td></tr>
</table>
5.2.H.III. FIRE FLOW DEMAND
The required fire flow and maximum day flow rate shall be available in the system. The municipal fire flow required by the City for any one particular location varies depending on the land use and/or the building type or use. The number of hours that the required fire flow shall be available also varies depending on the land use. Table 5.10 outlines required fire protection flows. It should be noted that this table is not all-inclusive for every type of development and/or land use. It is the responsibility of the design engineer or architect to coordinate all fire flow requirements with the City Engineer or designee and Fire Marshall, as the Utilities Department and/or the Fire Department may require a fire flow greater than those shown in Table 5.10.
<table>
<tr><th colspan="2">Table 5.10 Minimum Fire Flow Requirements</th></tr>
<tr><th>Type of Development/Land Use</th><th>Fire Flow Demand (gpm)</th></tr>
<tr><td>Single-Family Residential Development</td><td>1500</td></tr>
<tr><td>Multi- Family Residential Development</td><td>1500</td></tr>
<tr><td>Commercial Development</td><td>3000</td></tr>
<tr><td>Institutional Development</td><td>3000</td></tr>
<tr><td>Industrial Warehouse Development</td><td>4000</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th colspan="5">RR DPM UPDATE – Chapter 5 Comment log</th></tr>
<tr><th>Date</th><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td>PW</td><td>Should this be Table 5.8?: Transmission mains shall adhere to the minimum cover requirements shown in Table 2.8</td><td>5.2.G.IV.
Pg. 5-21</td><td>Table references has been updated to 5.8:
5.2.G.IV. TRANSMISSION MAIN COVER
Transmission mains shall adhere to the minimum cover requirements shown in Table 5.8 and pipe bedding per Standard Drawing on the City's website, required by the City of Rio Rancho. As the transmission main size increases, the minimum cover requirements may increase. If finished grade cannot be identified a minimum of 18-inches additional cover is required.
Table 5.8 Minimum Cover Requirements
Condition | Depth of Bury (ft)
Paved Street (Top of Pavement) | 4
Unpaved and Maintained Street | 5
Unpaved and Unmaintained Street | 6
5-21 | WATER AND WASTEWATER INFRASTRUCTURE</td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.7?: Transmission mains shall be sized to carry the designed maximum day flow required without exceeding the velocities and headlosses shown in Table 2.7 below</td><td>5.2.G.II Pipe Sizing</td><td>Table references have been updated to 5.7:
5.2.G.II. PIPE SIZING:
Transmission mains shall be sized to carry the designed maximum day flow required without exceeding the velocities and headlosses shown in Table 5.7 below:
Table 5.7 Allowable Velocity/Headloss
Pipe Size (in.) | Max. Allowable Velocity (ft/s) | Max. Allowable Headloss (ft/1000 ft)
16 | 5 | 2
20 | 5 | 1.5
24 and larger | 5 | 1
Note: The above table is based on a Hazen-Williams pipe roughness coefficient of C = 120.</td><td></td></tr>
<tr><td>PW</td><td>Insert: "and TO maintain": 1. Where possible, all distribution mains shall be looped into the existing and proposed water distribution system to ensure at least two feed sources and maintain system pressure</td><td>5.2.F.IX
Pg 5-20</td><td>1. Where possible, all distribution mains shall be looped into the existing and proposed water distribution system to ensure at least two feed sources and to maintain system pressure</td><td></td></tr>
<tr><td>PW</td><td>Should this be Table 5.6? This table is not referenced in the text.: Table 2.6 Valve Spacing</td><td>5.2.F.VII.
Pg 5-18</td><td>Update table references:</td><td></td></tr>
</table>

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
			5.2.F.VII. VALVES Valves on mains 12-inch and smaller shall be gate valves and shall be the same size as the main lines. Gate valves shall be iron-bodied, resilient seat or epoxy coated double disc, with non-rising stem conforming to AWWA C-500 or C-509. Valves shall open counterclockwise and shall be rated for a design working pressure of 200 psi or 1½ times the working pressure whichever is greater. Double disc type valves shall be bronze mounted with parallel seats. All buried valves shall have one 2-inch square operating nut. Mechanical or push-on joints appropriate for buried installations shall be provided. **Table 5.6 Valve Spacing** **Type of Development/Land Use** | **Maximum Valve Spacing (Ft)** Residential | 750 Commercial and Industrial Development | 500	
PW	Should this be Table 5.5?: Distribution mains shall adhere to the minimum cover requirements shown in Table 4.5 and the Standard Drawing available on the City's website.	5.2.F.V. Pg. 5-18	Update table number.	Table numbering has been fixed throughout the chapter.
PW	Insert "5.4.I": All water service laterals shall be installed in accordance with the Standard Detail Drawings in Appendix A.	5.2.E.V. Pg 5-17	All water service laterals shall be installed in accordance with the Standard Detail Drawings in Section 5.4.I. Appendix ~~A5.4.I~~.	
PW	Insert "such": No physical connection shall be made between potable and non-potable sources. Any connection is considered a cross connection	Pg. 5-16	Updated.	
PW	Should this be Table 5.4?: The minimum radii of water line curvature are shown in Table 2.3 and Table 2.4 Minimum Allowable Bending Radius for AWWA C-906 HPDE Pipe	Pg. 5-14	Update table number.	Table numbering has been fixed throughout the chapter.
PW	Should this be Table 5.3?: The minimum radii of water line curvature are shown in Table 2.3 and Table 2.3 Minimum Radius of Curvature	Pg. 5-14	Update table number.	
	Insert "5.4.I": 1. Water lines are to be located within the public right-of-way and aligned in accordance with the "Typical Plan View for Streets" drawings in Appendix A. Water lines shall be located so they can be maintained without disturbing any sidewalk, curb, gutter, structure, or any other utility.	Pg 5-13	"Typical Plan View for Streets" drawings in Section 5.4.1. Appendix ~~A5.4.I~~. Water lines shall be located so they can be maintained without disturbing any sidewalk, curb, gutter, structure, or any	
PW	Should this be Table 5.2?: Table 2.2 Water Demand Peaking Factors	Pg. 5-11	Update table number.	Table numbering has been fixed throughout the chapter.

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Should this be Table 5.1?: Table 2.1 Average Day Water Demands for Non-Residential Applications	Pg 5-11	Update table number.	
PW	Should this be Table 5.1? Water infrastructure for all proposed commercial, industrial, and residential developments shall, at a minimum, be sized to provide Maximum Day Water Demand flows plus fire flow protection. The fire flow requirement shall apply to both private sprinkler systems and public fire hydrants. The average day water demand for residences within the Rio Rancho water utility is estimated at 300 gallons/day per residence. Using a peaking factor of 2.167, peak day water demands are calculated at 650 gallons/day per residence. Water demand estimations for non-residential applications are listed in Table 2.1.	5.2.C.II. Pg. 5-10	Update table number.	
PW	5.2.C.I. GENERAL REQUIREMENTS Where is this? . The sizing and routing of Master Plan lines must be coordinated with the "Water System Comprehensive Planning Model" for the City of Rio Rancho and approved by the Utilities Department. Specific requirements for providing water service to any parcel or development will be defined in a water (and sewer) availability statement/recommendation from the Utilities Department. The procedure for obtaining the availability statement is outlined in SECTION 1, SUBSECTION 1.11 AVAILABILITY STATEMENT PROCESS of this document.	5.2.C.I.1. Pg. 5-10	Department. The procedure for obtaining the availability statement is outlined in Section 5.1.K ~~*SECTION 1, SUBSECTION 1.11 AVAILABILITY STATEMENT PROCESS*~~ of this document.	
2.18.25 Wymer	Add definitions for Chapter 3	3.3.B.II. 3.3 B.I DEFINITIONS.	No change.	Definitions are located in 3.3.B.II. 3.3 B.I DEFINITIONS.
	Add the following language- All lots shall have access to a water service line	5.2.E.III. Point of Service	5.2.E.III. POINT OF SERVICE The Utilities Department shall determine the point of service to any premises. All lots shall have access to water service line. The Utilities Department shall be called upon for exact information regarding the service line location.	
PW	Check reference of Appendix A	5.2.E.V. Water Service Laterals	5.2.E.V. WATER SERVICE LATERALS All water service laterals shall be installed in accordance with the Standard Detail Drawings in Appendix 5.4.I ~~A~~.	

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW / DS	Mention- if curvilinear for the 12 gage tracer wire	5.4.D.X.VII. Locator Tape and Tracer Wire	**5.4.D.XVII. LOCATOR TAPE AND TRACER WIRE** Install detectable marking tape continuous over the top of the pipe. The marking tape shall be buried eighteen (18) inches over the top of the buried gravity or force main. If curvilinear, a 12 gage tracer wire shall also be buried along with the pipe.	
PW	Reference all tables and section of the chapter to read as Table 5.x and Section 5.x	Throughout the Chapter	Update made through out chapter. residence. Using a peaking factor of 2.167, peak day water demands are calculated at 650 gallons/day per residence. Water demand estimations for non-residential applications are listed in Table 5.1. These average day demands are derived from the land-use sewer design flows. These values assume that	
PW	Change reference in Line Item 1. To read as 5.4.I.	5.2.D.V. Alignment and Easement Requirements	**5.2.D.V. ALIGNMENT AND EASEMENT REQUIREMENTS** The following alignment and easement requirements shall be followed for water line designs. 1. Water lines are to be located within the public right-of-way and aligned in accordance with the "Typical Plan View for Streets" drawings in Appendix 5.4.I.A. Water lines shall be located so they can be maintained without disturbing any sidewalk, curb, gutter, structure, or any other utility.	
PW	Insert word "such"	5.2.D.XV. Cross Connections and Backflow Prevention	**5.2.D.XV. CROSS CONNECTIONS AND BACKFLOW PREVENTION** No physical connection shall be made between potable and non-potable sources. Any such connection is considered a cross connection. Refer to the City of Rio Rancho's Building Code for specific provisions regarding cross connections and backflow prevention. Backflow preventers shall be installed in accordance with Standard Drawings available on the City's website.	
PW	Change reference to read as 5.4.I	5.2.E.V. Water Service Laterals	**5.2.E.V. WATER SERVICE LATERALS** All water service laterals shall be installed in accordance with the Standard Detail Drawings in Appendix 5.4.I.A.	
PW	Add and "to" maintain	5.2.F.IX. Loop and Terminal Mains	System looping and terminal main requirements are summarized below: 1. Where possible, all distribution mains shall be looped into the existing and proposed water distribution system to ensure at least two feed sources and to maintain system pressure.	
PW	Line Item 4. Add and see Table 5.11	5.2.H.IV. GENERAL DES IGN S TANDARDS	4. When designing a fire hydrant layout, the "first" hydrant is to be located at street intersections and at the main entrance(s) into a subdivision, apartment complex, or commercial development. Additional hydrants must then be spaced approximately evenly between these points at a distance not to exceed the maximum spacing between hydrants See Table 5.11. Spacing is measured along route of travel of a fire engine.	
PW	Add 95% "of" the	5.3.C.II. PUMPING UNITS AND SIZE	1. The horsepower rating of each pump motor shall be such that the motor will carry continuously the maximum load that is possible to develop at any point on the pump curve without exceeding 95 % of the motor nameplate rating and without using the service factor.	
PW	Where is Section 2 located?	5.4.B Submittals	and detailed in ~~Section 2 of these standards.~~Chapter 2 of the DPM.	

RR DPM UPDATE – Chapter 5 Comment log				
Date	**Comment**	**Section**	**Resulting Changes**	**Response, if necessary**
PW	Line item 2. And 3. Design Standards refer to Table 5.14	5.4.C.V. WASTEWATER COLLECTION MAIN DESIGN FLOW CRITERIA	1. Wastewater collection mains shall be designed to convey the peak flow. 2. Wastewater collection mains shall be designed to meet minimum slope and velocity requirements as set forth in these design standards, See Table 5.14 3. Wastewater collection mains designs shall avoid exceeding maximum slope and velocity conditions as set forth in these design standards, See Table 5.14	
PW	Add reference to see Table 5.15	5.4.E.II. Manhole Locations	Manholes shall be installed at the following locations: 1. Changes of grade or slope 2. Changes of pipe size 3. Changes of horizontal or vertical alignment 4. Changes in pipe material 5. Pipe intersections except with service connections less than 8-inches in diameter 6. Service connections 8-inches in diameter and larger 7. The end of each public sewer line 8. At distances not to exceed the spacing shown below, See Table 5.15	
PW	Change footer to read correct chapter name.	Throughout the chapter	7-3 | SURVEYS AND PERMANENT MONUMENTATION	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
6.2(e) – substantive city park requirements should be determined by ordinance (not by a process manual). For example, the minimum park size acceptable to the city of 3 acres should not appear in a process manual – a city ordinance should document this restriction.	6.2(e)		The City's adopted Parks Master Plan outlines size requirements for various park typologies, specifying that neighborhood parks should range from 1 to 10 acres. The Development Process Manual (DPM) has long recognized a distinction between small and large neighborhood parks. Building on this foundation, the department is in the process of formalizing protocols to establish the minimum park size required for dedication that would trigger City management and maintenance responsibilities, based on available resources. It is common practice for cities to rely on lower-ranking plans or technical manuals to refine and implement more detailed standards, and this approach is consistent with standard planning practice.
6.6B.XIX(b) – is the city paying the developer to perform these services post city-acceptance of the park? How long of a period of time will the developer be required to provide these services? P. 6-46 In the fall, at the City's request, the Park developer will drain the system, and otherwise prepare the system for winter. In the spring, at the City's request, the Park developer will reactivate the system, repair any defects or damage and adjust the system. As these services are performed, the Park developer will inform and instruct the City	6.6.B.XIX. GUARANTEE Pg. 6-40		
6.6B.XIX(a) – damage to irrigation line breaks should only subject to the guarantee if the line break was due to defective material or workmanship. For example, the guarantee should not apply to breaks due to the city cutting the line during their regular maintenance procedures.	6.6B.XIX(a)	6.4.B.XIX. GUARANTEE 1. For a period of one (1) year from final acceptance of the facility, the Park developer will promptly furnish and install any damaged or inoperative materials or systems that ~~may~~ are found to be damaged, defective, or inoperable due to manufacture defects ~~in material or~~, improper installation or workmanship, but not regular wear or operation of the system or facility. Damage due to irrigation system line breaks shall be repaired and brought to original condition by the Park developer at no expense to the City.	
6.3.B.II.g.iii (and 6.3B.II.h.ii) – any plant and turf grass guarantee will require evidence that the irrigation system is operational and has been regularly used by the city per the requirements for the installed plant and turf grass.	6.3.B.II.g.iii (and 6.3B.II.h.ii)	No change.	This section outlines the standard warranty language used in all park development projects. While any plant and turf grass guarantee does assume that the irrigation system is operational and used in accordance with the plant material requirements, verification—such as irrigation meter readings—can be requested separately by the developer and provided by the City if needed. However, that level of operational detail falls outside the scope of this document.

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
6.3.B.II.f.vi(iii) – insurance requirements post construction and acceptance by the city is inappropriate unless it relates solely to construction defects. The insurance amounts also seems very excessive.	6.3.B.II.f.vii. Site Amenity Guarantee Page 6-20	No change.	The insurance requirements outlined in this section are consistent with those currently included in the Development Process Manual (DPM) and have not been changed.
6.3.B.I.a.v having required elements in the smallest city park that require irrigation does not seem to take into account cost considerations (both upfront cost and ongoing maintenance cost) and seems to run contrary to the city's desire to conserve water.	6.3.B.I.a.v	6.3.B.I.a.v. Elements The typical amenities of a neighborhood park include a grass area, activity elements (which include playgrounds, splash pads, sports courts, skate parks, exercise equipment, active sport systems such as disc golf), shade structure, picnic tables, benches, and sport courts as laid out in the Comprehensive Plan. The basic required elements and optional elements for Community Parks are laid out in Table 6.2: Neighborhood Park Elements. If park dedication results in parks less than 3 acre, required elements may be waived by PRCS Department staff. To meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional park elements or vary required elements. **Table 6.2: Neighborhood Park Elements** **Required Elements*** / **Optional Elements** Activity element / Sports courts 2 benches per acre / Bicycle racks 3 tables per acre / Fenced Dog Park 2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion. / Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming. 1 dog waste station in conjunction with trash receptacles / Picnic shelter Minimum shade structure area of 400 sf per park unit, / Basketball court with minimum of 1 goal 8 trees per acre / Drinking fountain 3 shrubs per required tree / Splash pad Park rules sign Maintenance access Quick coupler hose connection per parts list located centrally and near the play and shade structures. Irrigated Turf Area a minimum 1 acre for a 3-acre sized park. *At least 1 of the required components must be ADA accessible	The cost considerations, both upfront and for ongoing maintenance, are important, and we acknowledge that this issue could be visited through a waiver request.
6.3.A (and 6.3.B.II.a(c) and other locations in the chapter) provides too much discretion to the city to implement requirements without regard to cost.	6.3.A (and 6.3.B.II.a(c)	No Change.	The provisions in Section 6.3.A and the related subsections apply specifically to *public park and trail development*. These standards are intended to ensure that such development meets essential requirements for safety, accessibility, usability, and legal compliance. The subsections cited are largely based on existing Federal, State, and Local regulations, and do not confer unlimited discretion to the City. The department is committed to collaborating with developers to identify workable, cost-conscious solutions where flexibility is appropriate. We recognize that each project may present unique challenges, and we aim to support practical approaches that uphold the intent of these standards while enabling successful project delivery.

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
			• 6.3.A.i & 6.3.A.ii: These provisions ensure compliance with Federal, State, and Local codes and laws. These are non-negotiable requirements and not discretionary in nature. • 6.3.A.iii: Recommending a qualified professional for park or trail design aligns with best practices to ensure safety, functionality, and durability. This guidance protects both the end user and developer from future maintenance or liability concerns. • 6.3.A.iv: This section refers to designated maintenance access, which PRCS believes is relevant only for public park projects. We agree this may not apply to private or HOA-maintained spaces and will review the language for clarification. • 6.3.A.v & 6.3.A.x: These reflect existing Federal and State requirements related to construction and safety and are not intended to introduce new discretionary burdens. • 6.3.A.vi & 6.3.A.xi: ADA compliance for site furnishings is federally regulated. The intent is to align with those regulations, which require that a minimum number or percentage of amenities (e.g., benches, shade structures) be accessible—not necessarily that all be ADA-compliant. • 6.3.A.vii: The intent of the “maximize usable space” provision is to prevent minimal or low-functioning park layouts (e.g., an under-programmed space with only one amenity and extensive gravel). • 6.3.A.viii: This section confirms that HOA-owned and maintained parks are still required to follow applicable permitting and construction processes to ensure public safety and infrastructure integrity. This is not intended to impose additional, discretionary design standards beyond those processes.

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
			• 6.3.A.ix: The current language intends to support the City's Comprehensive Plan and Parks Master Plan by allowing the PRCS Department to work with developers on appropriate standards for public parks only. We agree this language can be clarified to: While cost considerations are always a factor in project implementation, it is important to recognize that these provisions apply specifically to *public park and trail development*. Compliance with legal codes and professional standards is necessary to protect public health, safety, and inclusivity. Within this context, the department is committed to working collaboratively with developers to explore workable, cost-conscious solutions. Where flexibility is appropriate, we aim to support practical approaches that uphold the intent of these standards while enabling successful, community-serving park projects.
6.2(f) (and 6.3(A)(vii) (I don't know which sections they are referencing unless it is an older version of the draft?) and the last paragraph of 6.3.B.I)– private parks should only be subject to applicable (such as the ADA). The city trying to regulate the minimum requirements for a private park is inappropriate, especially when (d) states that the design standards of Chapter 6 only apply to parks owned or maintained by the city. It is confusing to include any requirements on private parks in a chapter that explicitly says the chapter is only applicable to parks owned or maintained by the city.	6.2(f) (and 6.3(A)(vii)		Last paragraph of 6.3.B.I - Parks less than three acres in size are anticipated to be pocket parks that serve smaller geographic areas and must be owned and maintained by an HOA. The design and construction of these parks should be coordinated with PRCS Department staff to ensure minimum **safety standards** are utilized.
Removed Appendix A in Chapter 6 as it was duplicated in Chapter 2 and the updated attempted to keep all procedures and submittal requirements in once place.	2.8.B.IV.j.Irrigation Plans	Removed Appendix A which can be found in section 2.8.B.IV.j.Irrigation Plans of Chapter 2.	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
Removed Appendix A in Chapter 6 as it was duplicated in Chapter 2	2.8.D.II.f. Park Plans Pg. 2-84	~~17.~~ Locations of all streetlights pull boxes, and service locations. **2.8.D.II.f. Park Plans** 1. The Park developer shall provide and keep up to date a complete set of "record" drawings which shall be corrected after all modifications to show all changes in the location of sprinkler assemblies, irrigation controllers, backflow preventers, valves, drains, meters, points of connection, pull boxes and wire splice boxes, pipe and wire routing, and other changes that may have been made from the original drawings and specifications as provided to Park developer. All straight valves, manual drains, wire splices and automatic and manual valve locations shall be shown with actual measurements to reference points so that they may be easily located in the field. Valve locations shall be shown with actual measurements to reference points so they may be located in the field. 2. At the time of final acceptance, the Park developer shall furnish a complete set of As-Built Plans, prepared by a qualified draftsperson showing the entire completed system as actually installed. This is the responsibility of the Park developer and shall not be construed to be the responsibility of any other party. This plan set shall be accurate and to scale. The legend shall also be modified to designate any "record" changes. These As-Built Plans shall be drawn on/over the approved construction plans, shall be dated, and clearly labeled "AS-BUILT PLANS, RECORD DRAWING." ~~17.~~3. The Park developer shall also provide and install a legible reduction of the As-Built Irrigation Plan sheet with color coded zone map, laminated in plastic, in the controller enclosure at the Job Site.	Created section for parks in the record drawing section to contain content formerly in Appendix A of the parks section.
the Ch. 6 parking standards for parks to be "Parks over 3 acres in size shall provide 1 parking spot and 1 ADA spot for the first 3-4 acres and an additional 3 spots for **each additional acre** for parks greater than 4 acres, dependent on elements and programming."		**6.3 Design Standards** **6.3.A General Standards** 1. All commercial, municipal, and private parks, trails, and recreation facility projects shall be designed by a Landscape Architect licensed in the State of New Mexico who shall stamp the appropriate construction documents for the project. 2. It is the responsibility of the project Landscape Architect and/or Engineer, licensed in the State of New Mexico, to ensure that these Codes and any additional City of Rio Rancho adopted Codes, Ordinances, and Standards are followed in the design of parks and trails. 3. It is the responsibility of the Licensed Contractor to ensure these codes and standards are followed during construction, that all necessary permits are obtained, and that the project is inspected as required. 4. International Building Code and New Mexico Administrative Code requirements shall be followed for all design, construction, and improvements made to parks, trails, and related facilities. 5. The U.S. Access Board's Guide to Accessibility Standards, as well as any other applicable ADA standards, shall be followed. a. All parks must ensure that internal park pathways are ADA compliant. b. All parks must provide ADA compliant connections from adjacent sidewalks of the subdivision to the internal park pathways. c. All parks must ensure that benches, picnic tables, and shade structures are ADA compliant, and APA compliant connections must be provided to these elements. 6. In order to meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional standards and park elements. 7. Park developers shall work with PRCS Department staff to use optimal usable space and open space. 8. Parks over 3 acres in size shall provide 1 parking spot and 1 ADA spot for the first 3-4 acres and an additional 3 spots for **each additional acre** for parks greater than 4 acres, dependent on elements and programming. 9. All parks must have an area designated as maintenance access. PRCS Department staff will work with **Table 6.2: Neighborhood Park Elements** **Required Elements***: Activity element; 2 benches per acre; 3 tables per acre; 2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion.; 1 dog waste station in conjunction with trash receptacles **Optional Elements**: Sports courts; Bicycle racks; Fenced Dog Park; ~~Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.~~ Picnic shelter; ~~Picnic shelter~~ Basketball court with minimum of 1 goal	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
		Table 6.2: Neighborhood Park Elements **Required Elements*** / **Optional Elements** Minimum shade structure area of 400 sf per park unit, / ~~Basketball court with minimum of 1 goal~~ Drinking fountain 8 trees per acre / ~~Drinking fountain~~ Splash pad 3 shrubs per required tree / ~~Splash pad~~ Park rules sign Maintenance access Quick coupler hose connection per parts list located centrally and near the play and shade structures. Irrigated Turf Area a minimum 1 acre for a 3-acre sized park. Parking lot. Parks over 3 acres in size shall provide 1 parking spot and 1 ADA spot for the first 3-4 acres and an additional 3 spots for each additional acre for parks greater than 4 acres, dependent on elements and programming *At least 1 of the required components must be ADA accessible **Table 6.3: Community Park Elements** **Required Elements*** / **Optional Elements** Play / activity equipment / Skate park 2 benches per acre / Disc golf 3 tables per acre / Fenced Dog Park 2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Directors' discretion / Sport courts 1 dog waste station min, in conjunction with the trash receptacles / Picnic shelter Minimum Shade structure area of 500 sf per park unit / Basketball court with a minimum of 2 goals Drinking fountain / Splash pad Turf play area to accommodate athletic competitions 8 trees per acre 3 shrubs per required tree Quick coupler hose connection per parts list located centrally and near the play and shade structures Parking lot. Required spaces for parks over 3 acres in size parking lots is 1 spot and one ADA spot for the first 3-4 acres and an additional 3 plus spots for each additional acre for parks greater than 4 acres, dependent on elements and programming Park rules sign Maintenance access *At least 1 of the required components must be ADA accessible	
missing text	6.3.A.5.a General Standards		
this should be Table 3. There is already a Table 2.	6.3.B.I.a.v. Elements Table 2	Verified that tables are in sequential order. One table is split between two pages and is a continuation.	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
Are	6.3.B.I.a.v. Elements	Plan. The basic required elements and optional elements for Community Parks are~~and~~ laid out in	
Add for consistency with other park types "The basic required elements and optional elements for Regional Parks are laid out in Table 4: Regional Park Elements."	6.3.B.I.c.v. Elements	organized sports. Regional parks will also have appropriate parking lot and field or court lighting to support organized sports. The basic required elements and optional elements for Regional Parks are laid out in Table 4: Regional Park Elements. To meet City goals and objectives outlined in the Comprehensive	
Should be 2.5.B?	6.3.B.II.a.4 General Standards	Updated reference 4. Review of park elements will follow the procedures of Section 2.5.B. Park Development Procedures.	
add "and shall follow the specifications for asphalt courts below."	6.3.B.II.f.iv .4 Tennis and Pickleball Courts	4. At a minimum, courts shall be paved with asphalt. If a court is constructed of concrete, it shall follow the specifications for concrete and asphalt courts below.	
With	6.3.B.II.f.iv .4.a Tennis and Pickleball Courts	not less than 2-1/4 inches or 1-3/4", with an upper layer installed for a smooth surface with	
Table 5	6.3.B.II.d.i. 5 Fencing Standards	5. Fences shall meet the standards of Table 5 Fence Requirements. Fence design will vary in height and	
add "and shall follow the specifications for asphalt courts below."	6.3.B.II.f.v.3 Basketball Courts	3. At a minimum, basketball courts shall be paved with asphalt. If a basketball court is constructed of concrete, it shall follow the specifications for Ccencrete basketball and Aasphalt courts below.	
space; "high chairs"	6.3.B.II.f.v.3 .b Basketball Courts	concrete basketball courts pad shall be 4" thick, 4000 psi with 6" x 6" welded wire (WWM). WWM to be supported by keyway joints or 2"; high chairs and tied at all	
space; "high chairs"	6.3.B.II.f.vi. 6.a Skate and Bike Parks	be supported by 2"; high chairs and tied at all intersections, over 95% compacted sub grade.	
Revise to "Stated"	6.3.B.II.f.vii. 2 Site Amenity Guarantee	The following warranties (manufacturer or otherwise) shall be provided for specified equipment unless stated otherwise herein. Letters or warranty certificates for installed equipment shall be	
delete "with"	6.3.B.II.g.i. 10.d Landscape and Planting Standards	located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6' x 6' of covered bark mulch. Tree wells located within soft (i.e. Turf Area) surface areas shall have a	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
This is not correct. Section 2.8.A is for Development Agreements. Search Chapter 6 for reference areas referencing 2.8.A.	6.3.B.II.g.ii.1 Landscape Plans	plans. Conceptual plans provided during the Concept Planning stage, as described in Section 2.~~8.A~~5.B.	
add "or placing seed"	6.3.B.II.g.v12.b Turf Grass Standards	b. The City reserves the right to require that a sample of sod and a written submittal of the seed mix shall be submitted a minimum of fifteen (15) days prior to laying sod or placing seed.	
add "6.5"	6.3.B.II.h.i.1 Standards	Only approved irrigation products as specified in Appendix 6.5 B Irrigation Products and Execution	
add "6.4.5"	6.3.B.II.h.i.3 Standards	2. Irrigation Plans and Record Drawing 6.4.A.	
A?	6.3.B.II.h.i.11 Standards	turf. (~~ref appendix~~Appendix 6.5.B)	
add ",6.5"	6.3.B.II.h.i.24 Standards	23. Products shall meet the standards of Appendix 6.4.~~B~~A.	
add ", 6.5"	6.3.B.II.h.i Irrigation System Execution	Execution shall generally be conducted using the following process. Appendix 6.5 B Irrigation Products	
7	6.3.C.II.4 Trails and Path Design Standards	Park trails and paths shall comply with the requirements of Table 7 Park Trail and Path Standards.	
add "and path"	6.3.C.II.4 Trails and Path Design Standards	Park trails and paths shall comply with the requirements of Table 7 Park Trail and Path Standards.	
Table 8	6.3.C.II.c.3.b Open Space Trails	required within Table 8, be cleared, mowed, or otherwise kept free of vegetative growth.	
furnish?	6.4.B.2 Record Drawings	2. At the time of final acceptance, the Park developer shall furnish a complete set of As-Built Plans,	
Is this seven or five? For City-built facilities, requests for approval of a non-specified materials must be submitted to the City a minimum of seven days prior to the opening of bids.	Appendix B: Irrigation	For City-built facilities, requests for approval of non-specified materials must be submitted to a minimum of seven (~~5~~7) days prior to the opening of bids. For facilities built as part of a subdivision by a Developer, the Park developer must indicate the	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	Products and Execution 6.5.A Products		
close quote	6.5.A.V.1 Backflow Preventer	51 “Water and Wastewater Rules and Rates. The backflow preventer shall also be installed as required by State Code”.	
where is this?	6.5.A.VIII.3 Wiring	Struck, no other wiring specifications exist.	
laying	6.5.B.III.3 Pipe and Fitting Installation	3. Before installation, the inside of the pipe shall be cleaned of all dirt and foreign matter and shall be kept in a clean condition during and after laying of pipe. When work is not in progress, open ends of	
at	6.5.B.VI.4 Sprinkler Head Installation	to the original ground level as previously described (Irrigation Systems 6.3.B.II.h.ii.49~~3.03 B~~). If	
at	6.5.B.VI.4 Sprinkler Head Installation	out the system. If water pressure without the heads installed is not sufficient to provide adequate water flow at end risers, the Park developer shall cap off enough heads closest to the water source to	
raking	6.5.B.XIX.3.a Guarantee	a. Bring to grade by top-dressing (raking topsoil into grass).	
Valve boxes shall be 17" x 30" in size and shall have adequate horizontal and vertical room within the box to access all unions, valves, etc., and shall have a 6" depth of 1" washed gravel with 2" clearance to bottom of valve assembly.	6.5.A.II. VALVES AND VALVE BOXES Pg. 6-35	4. ~~Valve boxes shall be as noted on the Drawings.~~ Valve boxes shall be 17" x 30" in size, providing sufficient horizontal and vertical space to access all unions, valves, and related components. The box shall contain 6" of 1" washed gravel with a 2" clearance to the bottom of the valve assembly.	
Increase trail widths from 5 to 8’.	Table 6	4. Park trails and paths shall comply with the requirements of Table 7 -Park Trail and Path Standards.	

Table 6 Park Trail and Path Standards

Trail Typology	Minimum Width	Materials	Longitudinal Slope	Cross Slope
Paved trails within parks	~~5~~ 8 ft	Asphalt or concrete	5% max	2% max
Crusher fine trails	~~5~~ 8 ft	Stabilized crusher fines	5% max	2% max

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
State that: PRCS can provide irrigation standard details to the Developer and/or their Design Professional after the initial park planning meeting between the City/PRCS and Developer.		planting. **6.3.B.II.h. Irrigation Systems** Irrigation is necessary to allow plants to survive and thrive. Irrigation is essential in planting beds, turf fields, and for tree establishment. Irrigation standards ensure adequate watering while prioritizing water conservation. PRCS can provide irrigation standard details to the Developer and/or their Design Professional after the initial park planning meeting between the City/PRCS and Developer. **6.3.B.II.h.i. Standards**	
We do not use or accept metal tree grates. I didn't comment on this before because we would just prohibit it on a case by case development/project, but staff had said they would like this removed. Instead can state: Trees within parks shall not be planted within a hard surface with a narrow pedestrian corridor.	6.3.B.II.g.i Landscape and Planting Standards Pg. 6-23	10. Planting shall meet the following requirements: a. The Contractor shall take care when backfilling planters to provide adequate compaction of the fill material in order to prevent settling. b. Prepare all planting holes and install plants as shown on the PRCS Department's standard sheets "14 SHRUB PLANTING DETAIL" and "15 TREE PLANTING DETAIL". Plants shall be set plumb and straight. c. Backfill for planting holes shall be positioned in the hole and backfilled. The backfilling shall be completed, and materials tamped. When hole is nearly filled, water thoroughly and allow water to soak away. If settling of backfill occurs after watering, add more backfill to bring to finish grade. d. All trees shall have tree wells unless otherwise directed by the PRCS Department. Trees within parks shall not be planted within a hard surface with a narrow pedestrian corridor. Tree wells located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6' x 6' of covered bark mulch. Tree wells located within soft (i.e. Turf Area) surface areas shall have a 6' diameter tree ring with bark mulch. The purpose of such is to keep mowers, trimmers, and small equipment from coming in contact with the tree's base or root system.	
Note that additional standard sheets related to driveways, curb and gutter and other improvements may apply.	6.3.B.II.b Pg. 6-12	**6.3.B.II.b. Paving** 1. Work under this section consists of preparing all paved areas for parking lots, sidewalks/paths, courts, and skate parks according to the specifications. 2. Paved surfaces shall follow all applicable codes and the paving standards of the Department of Public Works. 3. Asphalt surfaces including parking lots, walkways, and sport courts, shall follow the City Standard for "paved pedestrian trail or parking lot" through the Department of Public Work's standard sheet "Pavement Sections– DWG. No. PS-01." 4. Concrete surfaces such as sidewalks and concrete pads shall follow the City Standard for sidewalks through the Department of Public Work's standard sheet "Sidewalk and Residential Driveway – DWG. NO – DW-01." Note that additional standard sheets related to driveways, curb and gutter and other improvements may apply.	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
Public restrooms will not be built in neighborhood parks Remove (have stated this many times)	Table 2: Neighborhood Park Elements Pg. 6-7	**Table 2: Neighborhood Park Elements** **Required Elements** / **Optional Elements** Activity element / Sports courts 2 benches per acre / Bicycle racks 3 tables per acre / Fenced Dog Park 2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion. / Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming. 1 dog waste station in conjunction with trash receptacles / ~~Toilet~~ Picnic shelter	
Add Definition of Activity Element (comments provided on 11/18/24 - but needs clarification): Playgrounds, Sport Courts, Skate Parks, Exercise Equipment, Active Sport Systems (such as Disc Golf)	6.2.A definitions Pg 6-3	**Activity Element- Refers to a feature designed for active recreation, such as playgrounds, sport courts, skate parks, exercise equipment, or active sport systems like disc golf, aimed at promoting physical activity and engagement.**	
Under the elements standard section – should state more clearly/up front - that it is assumed that the park developer will ensure that power is provided to the future park property during subdivision or site development in order to power, at a minimum, the irrigation controller and heat tape for the irrigation system backflow preventer.	6.3.A General Standards Pg. 6-6	year or until the vegetation is established. 10. The park developer shall ensure that electrical power is provided to the future park property during subdivision or site development. At a minimum, this power supply must support the irrigation controller and heat tape for the irrigation system backflow preventer.	
I cannot find this section or how later sections (than 2.7.A) applies to parks - Do you mean 2.5.B.II?	6.2 Pg. 6-3	and process outlined in Section 2.7.A. of Chapter 2 Development Procedures. 6. Inspections of completed parks shall follow the requirements and process outlined in Section ~~2.7.A.II.e~~2.6.B of Chapter 2 Development Procedures.	
Strike 'and provide'	6.3.A General Standards	a. All parks must ensure that internal park pathways are ADA compliant.	
Add Definition of Activity Element (comments provided on 11/18/24 - but needs clarification): Playgrounds, Sport Courts, Skate Parks, Exercise Equipment, Active Sport Systems (such as Disc Golf)	6.3.B.I.a.v. Elements	The typical amenities of a neighborhood park include a grass area, activity elements (which include Playgrounds, Sports courts, Skate parks, Exercise Equipment, Active Sport systems such as Disc Golf),	
Add Irrigated Turf Area (per 11/18/24 notes) with minimum of 1 acre for 3 acre+ sized park	Table 2 Neighborhood Park Elements Pg. 6-7	Irrigated Turf Area of 1 acre for a 3-acre sized park	
A minimum turf area for a small neighborhood park (greater than 3 acres and therefore a City Park) would be 1 acre irrigated turf with a slope 2% or less for sport practice and general park use. *section 6.3.B.II.h.i says 3%, which could be acceptable for a neighborhood park, but any other facilities supporting tournament play must be 2%.	Table 2 Neighborhood Park Elements Pg. 6-7	Irrigated Turf Area of 1 acre for a 3-acre sized park / A minimum turf area for a small neighborhood park (greater than 3 acres and therefore a City Park) would be 1 acre irrigated turf with a slope 2% or less for sport practice and general park use. *section 6.3.B.II.h.i says 3%, which could be acceptable for a neighborhood park, but any other facilities supporting tournament play must be 2%.	

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<tr><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td>Add Splash Pad to Optional Elements for Neighborhood Parks and larger.</td><td>Table 2 Neighborhood Park Elements Pg. 6-7</td><td>
<table>
<tr><th colspan="2">Table 2: Neighborhood Park Elements</th></tr>
<tr><th>Required Elements</th><th>Optional Elements</th></tr>
<tr><td>Activity element</td><td>Sports courts</td></tr>
<tr><td>2 benches per acre</td><td>Bicycle racks</td></tr>
<tr><td>3 tables per acre</td><td>Fenced Dog Park</td></tr>
<tr><td>2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion.</td><td>Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.</td></tr>
<tr><td>1 dog waste station in conjunction with trash receptacles</td><td>~~Toilet~~Picnic shelter</td></tr>
<tr><td>Minimum shade structure area of 400 sf per park unit,</td><td>Basketball court with minimum of 1 goal</td></tr>
<tr><td>8 trees per acre</td><td>Drinking fountain</td></tr>
<tr><td>3 shrubs per required tree</td><td>Splash pad</td></tr>
</table>
</td><td></td></tr>
<tr><td>Add Splash Pad to Optional Elements for Neighborhood Parks and larger.</td><td>Table 3: Community Parks Element Pg. 6-9</td><td>
<table>
<tr><th colspan="2">Table 3: Community Park Elements</th></tr>
<tr><th>Required Elements*</th><th>Optional Elements</th></tr>
<tr><td>Play / activity equipment</td><td>Skate park</td></tr>
<tr><td>2 benches per acre</td><td>Disc golf</td></tr>
<tr><td>3 tables per acre</td><td>Fenced Dog Park</td></tr>
<tr><td>2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Directors' discretion</td><td>Sport courts</td></tr>
<tr><td>1 dog waste station min, in conjunction with the trash receptacles</td><td>Picnic shelter</td></tr>
<tr><td>Minimum Shade structure area of 500 sf per park unit</td><td>Basketball court with minimum of 2 goals</td></tr>
<tr><td>Drinking fountain</td><td>Splash pad</td></tr>
<tr><td>Turf play area to accommodate athletic competition</td><td></td></tr>
<tr><td>8 trees per acre</td><td></td></tr>
<tr><td>3 shrubs per required tree</td><td></td></tr>
<tr><td>Quick coupler hose connection per parts list located centrally and near the play and shade structures</td><td></td></tr>
<tr><td>Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming</td><td></td></tr>
<tr><td>Park rules sign</td><td></td></tr>
<tr><td>Maintenance access</td><td></td></tr>
<tr><td colspan="2">*At least 1 of the required components must be ADA accessible</td></tr>
</table>
</td><td></td></tr>
<tr><td>Add "At least one ADA accessible component and Irrigated Turf Area with a minimum of 1 acre for 3 acre+ parks.</td><td>Table 2</td><td>
<table>
<tr><th colspan="2">Table 2: Neighborhood Park Elements</th></tr>
<tr><th>Required Elements</th><th>Optional Elements</th></tr>
<tr><td>8 trees per acre</td><td>Drinking fountain</td></tr>
<tr><td>3 shrubs per required tree</td><td>Splash pad</td></tr>
</table>
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</table>

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<tr><td>Add - one play component that is accessible</td><td>Table 3</td><td>
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<tr><td>Irrigated Turf Area ~~of~~ a minimum 1 acre for a 3-acre sized park.</td><td></td></tr>
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do went to identify a standard for the surface for spots courts?</td><td>Table 4</td><td>
<table>
<tr><th colspan="2">Table 4: Regional Park Elements</th></tr>
<tr><th>Required Elements*</th><th>Optional Elements</th></tr>
<tr><td>Play equipment</td><td>Softball and Baseball fields</td></tr>
<tr><td>2 benches per acre</td><td>Fenced Dog Park</td></tr>
<tr><td>3 tables per acre</td><td>Disc Golf Courses</td></tr>
<tr><td>Trash receptacles</td><td>Horseshoe pits</td></tr>
<tr><td>Dog waste station</td><td>Tennis/ Pickleball</td></tr>
<tr><td>Shade structure a cumulative total of 600 sf coverage</td><td>Racquetball</td></tr>
<tr><td>Drinking fountain</td><td>Volleyball</td></tr>
<tr><td>Play area</td><td>Cricket</td></tr>
<tr><td>12 trees per acre</td><td>Bocce Courts</td></tr>
<tr><td>3 shrubs per required tree</td><td>Basketball court with minimum of 1 goal</td></tr>
<tr><td>Quick coupler hose connection per parts list located centrally and near the play and shade structures.</td><td>Splash Pad</td></tr>
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<tr><td>This height does not match with the standard (4' min ht)</td><td>Table 5</td><td>
<table>
<tr><th colspan="6">Table 5 Fence Requirements</th></tr>
<tr><th>Fence Typology</th><th>Minimum Height</th><th>Fence Materials</th><th>Post</th><th>Entry Points</th><th>Other Requirem</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
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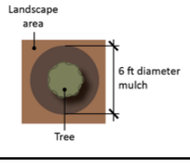
RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
		<table><tr><td>Drainage Pond and Open Space Fencing</td><td>4 ft</td><td>5 strands of barbless wire fencing</td><td>4"x4" wooden or metal posts set at least 3' in the ground</td><td>A pipe maintenance gate at least 8' wide.</td><td></td></tr></table>	
We do not use or accept metal tree grates.	6.3.B.II.g.i.10.d	Struck metal tree wells d. All trees shall have tree wells unless otherwise directed by the PRCS Department. Tree wells located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6' x 6' of covered bark mulch. Tree wells located within soft (i.e. Turf Area) surface areas shall have a 6' diameter tree ring with bark mulch. The purpose of such is to keep mowers, trimmers, and small equipment from coming in contact with the tree's base or root system.	
8' min	Table 8	<table><tr><td>8 ft</td></tr><tr><td>8 ft</td></tr><tr><td>8 ft</td></tr></table>	
This seems excessive and potentially not doable. Has this amount been provided recently? Referring to Certificates of Liability Insurance in the amount of $5,000,000 1. The Park developer shall obtain and provide Certificates of Liability Insurance for the following amounts, to the City to be placed on file, prior to the start of work. a. Manufacturer - $5,000,000	6.3.B.II.f.vii Site Amenity Guarantee	No change	This is the existing dollar amount required. No proposed changes at this time.
Missing appendices 2.7.G-V	TOC	TOC has been updated	
Under the elements standard section – should state more clearly/up front - that it is assumed that the park developer will ensure that power is provided to the future park property during subdivision or site development in order to power, at a minimum, the irrigation controller and heat tape for the irrigation system backflow preventer.	6.3.A. General Standards	~~9.~~ The park developer shall ensure that electrical power is provided to the future park property during subdivision or site development. At a minimum, this power supply must support the irrigation controller and heat tape for the irrigation system backflow preventer.	
Add Definition of Activity Element (comments provided on 11/18/24 - but needs clarification): Playgrounds, Sport Courts, Skate Parks, Exercise Equipment, Active Sport Systems (such as Disc Golf)	6.3.B.I.a.v. Elements	The typical amenities of a neighborhood park include a grass area, activity elements (which include Playgrounds, Sports courts, Skate parks, Exercise Equipment, Active Sport systems such as Disc Golf), shade structure, picnic tables, benches, and sport courts as laid out in the Comprehensive Plan. The basic	

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<tr><td>Park rules sign</td><td>Turf area. 1 acre minimum on un-sloped area for sports practice and general park use.</td></tr>
<tr><td>Maintenance access</td><td></td></tr>
<tr><td>Quick coupler hose connection per parts list located centrally and near the play and shade structures.</td><td></td></tr>
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<tr><td>Change minimum height to 4'</td><td>Table 5: Fence Requirements</td><td>
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<tr><th>Fence Typology</th><th>Minimum Height</th><th>Fence Materials</th><th>Post</th><th>Entry Points</th><th>Other Requirements</th></tr>
<tr><td>Dog Park Fencing</td><td>4 ft</td><td>Vinyl coated chain link with a bottom rail</td><td>Steel posts with caps, anchored in a concrete footing.</td><td>Double gated with latching gates with a minimum separation of 10 ft.</td><td>Large and small dog areas shall be separated by 4 ft chain link fence with a bottom rail.

A minimum 8 ft wide hinged or rolling maintenance gate, shall be provided.</td></tr>
<tr><td>Post and Cable Fencing</td><td>Determined on a site-by-site basis</td><td></td><td>Metal posts with caps, anchored in a concrete footing.</td><td>Locked "drop" section where the cable has been cut, looped and terminated to allow for a lock</td><td></td></tr>
<tr><td>Drainage Pond and Open Space Fencing</td><td>~~8~~ 4 ft</td><td>5 strands of barbless wire fencing</td><td>4"x4" wooden or metal posts set at least 3' in the ground</td><td>A pipe maintenance gate at least 8' wide.</td><td></td></tr>
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<tr><td>Remove the following language- If the tree well is within a hard surface with a narrow pedestrian corridor, the tree well shall have the same area as describe above, with a metal grate that meets surface grade (or equal approved option). Metal grades shall have adjustable tree rings.

Remove metal grate with mulch below figure.</td><td>6.3.B.II.g.i. Landscape and Planting Standards</td><td>d. All trees shall have tree wells unless otherwise directed by the PRCS Department. Tree wells located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6' x 6' of covered bark mulch. ~~If the tree well is within a hard surface with a narrow pedestrian corridor, the tree well shall have the same area as describe above, with a metal grate that meets surface grade (or equal approved option). Metal grades shall have adjustable tree rings.~~ Tree wells located within soft (i.e. Turf Area) surface areas shall have a 6' diameter tree ring with bark mulch. The purpose of such is to keep mowers, trimmers, and small equipment from coming in contact with the tree's base or root system.

Figure 2 Tree Wells

 
</td><td></td></tr>
</table>

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
Change trail widths from 5’ to 8’ min	Table 8 Open space Trail Standards	**Table 8 Open Space Trail Standards** **Open Space Trail Typology** / **Minimum Width** / **Materials** Improved multi-purpose open space trail / 8 ~~5~~ ft / Crusher fine Improved multi-purpose open space trail as commuter connection / 8 ~~5~~ ft / Asphalt Improved open space trail / 8 ~~5~~ ft / Compacted native material or stabilized crusher fines Open space foot paths / 4 ft / Compacted or uncompacted native material	
Make sure all table references are consistent throughout the Chapter.	Throughout the Chapter.	Updated .	
Line Item 5. Is missing a text.	6.3.A. General Requirements	5. The U.S. Access Board’s Guide to Accessibility Standards, as well as any other applicable ADA standards, shall be followed. a. All parks must ensure that internal park pathways are ADA compliant.	
For consistency add the following language- "The basic required elements and optional elements for Regional Parks are laid out in Table 4: Regional Park Elements."	6.3.B.I.c.v. Elements	contain all elements of a neighborhood park plus a minimum 2 acres of playing fields or courts for organized sports. Regional parks will also have appropriate parking lot and field or court lighting to support organized sports. The basic required elements and optional elements for Regional Parks are laid out in Table 4: Regional Park Elements. To meet City goals and objectives outlined in the Comprehensive Plan and Parks Master Plan, PRCS Department Staff may require additional park elements or vary required elements.	
Line item 4. Change reference to read as Section 2.5.B	6.3.B.II.a. General Standards	4. Review of park elements will follow the procedures of Section 2.5.B Park Development Procedures.	
Line Item 4. – add the following language - and shall follow the specifications for asphalt courts below." Line Item 4.a)- remove and and add with.	6.3.B.II.f.v. Tennis and Pickle ball courts	4. At a minimum, courts shall be paved with asphalt. If a court is constructed of concrete, it shall follow the specifications for concrete and asphalt courts below. a. Asphalt courts: Hot mixed asphalt shall be 4” thick with two lifts, the first a lower layer with ¾ inch to ½ inch minimum aggregate size, gradations No. 3 or 4 to a compacted thickness of not less than 2-1/4 inches or 1-3/4”, with an upper layer installed for a smooth surface with	
Line Item 4. – add the following language - and shall follow the specifications for asphalt courts below." Add space to High chairs.	6.3.B.II.f.vi. basketball Courts	3. At a minimum, basketball courts shall be paved with asphalt. If a basketball court is constructed o concrete, it shall follow the specifications for Concrete basketball and Asphalt courts below. a. Asphalt basketball courts: Asphalt shall be 2” thick with a smooth finish. Surface shall be leveled, smoothed and finished to prevent ponding of water. Asphalt shall be laid over a prime coat applied over six-inch prepared sub grade compacted to 95%. b. Concrete basketball courts pad shall be 4” thick, 4000 psi with 6” x 6” welded wire mesh (WWM). WWM to be supported by keyway joints or 2”; high chairs and tied at all	
Line item 6. B) -Add a space to high chairs.	6.3.B.II.f.vi. Skate and Bike Parks	6. All Skate Parks will have a concrete skate pad per the following specifications: a. The concrete pad shall be 4” thick, 4000 psi with 6” x 6” welded wire mesh (WWM). WWM to be supported by 2”; high chairs ~~highchairs~~ and tied at all intersections, over 95% compacted sub grade.	
Change state to “stated”	6.3.B.II.f.vii. Site Amenity Guarantee	2. The following warranties (manufacturer or otherwise) shall be provided for specified equipment unless stated otherwise herein. Letters or warranty certificates for installed equipment shall be provided to the City for the following minimum periods of time, at the time of final acceptance of the facility.	

RR DPM UPDATE – Chp 6 Parks Comment log			
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Delete “with”	6.3.B.II.g.i. Landscape and Planting Standards	All trees shall have tree wells unless otherwise directed by the PRCS Department. Tree wells located within hardscapes (i.e. concrete pad) shall have a minimum interior area of 6’ x 6’ of covered ~~with~~ bark mulch. If the tree well is within a hard surface with a narrow pedestrian corridor, the tree well shall have the same area as describe above, with a metal grate that meets surface grade (or equal approved option). Metal grades shall have adjustable tree rings. Tree wells located within soft (i.e. Turf Area) surface areas shall have a 6’ diameter tree ring with bark mulch. The purpose of such is to keep mowers, trimmers, and small equipment from coming in contact with the tree’s base or root system.	
Line 12. B) Add- or placing seed	6.3.B.II.g.v. Turf Grass Standards	b. The City reserves the right to require that a sample of sod and a written submittal of the seed mix shall be submitted a minimum of fifteen (15) days prior to laying sod or placing seed.	
Line item 1. Add reference of 6.5 to Appendix. Line item 3. Add 6.4.5 before Irrigation Design. Line item 11. Add “a” before sloped landscape. Line item 24. Add 6.5” – lateral lines.	6.3.B.II.h.i. Standards	1. Only approved irrigation products as specified in Appendix 6.5 B Irrigation Products and Execution are permitted. Rainbird Products are required unless none is available or unless otherwise approved. 2. Irrigation Plans and Record Drawings shall be prepared in accordance with the standards of Appendix A. 3. 6.4.5 Irrigation Design to prevent fugitive water. 4. All existing utilities to be coordinated with during design phase. 5. Manual drain valves shall be the size and type as indicated and at locations as shown on the Drawings. These valves shall be in a bed of ¾” gravel for drainage. 6. In areas where shade structures or picnic / seating areas are present, a quick coupler shall be located within 10 feet of the structure or area. 7. Materials noted on irrigation plan shall be materials installed. 8. Irrigation zones shall be designated by application type. Mix application, combining drip, bubbler, sub surface, or spray, is prohibited. 9. Triangulated Head to head coverage is mandatory. 10. Irrigation system to be designed to apply 2” of spray irrigation to high uses turf and 1” to low uses turf. (ref appendix) 11. Spray irrigation on a sloped landscape shall be isolated with top and bottom only zones to minimize sheet erosion. 24. All PVC piping to be sch 40 for mainline and 6.5" lateral lines. 25. Crossing pipes is prohibited unless otherwise approved by PRCS Department staff.	
Add 6.5 before Appendix	6.3.B.II.h.ii. Irrigation System Execution	Execution shall generally be conducted using the following process. Appendix 6.5 B Irrigation Products and Execution provides process details.	
Change table reference to 7. Add “and Path”	6.3.C.II. Parks and Trail Standards	4. Park trails and paths shall comply with the requirements of Table 7 ~~6~~ Park Trail and Path Standards.	
Line item 2. Change finish to furnish	6.4.B. Record Drawings	2. At the time of final acceptance, the Park developer shall furnish a complete set of As-Built Plans prepared by a qualified draftsperson showing the entire completed system as actually installed.	
Where are additional wiring specifications ?	6.5.A.VII. Wiring	No change.	Additional wiring specifications are found in 6.4.A.II.b

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
Line item 3. Change to laying.	6.5.B.III. Pipe and Fitting Installation	Before installation, the inside of the pipe shall be cleaned of all dirt and foreign matter and shall be kept in a clean condition during and after laying of pipe. When work is not in progress, open ends of pipe and fitting shall be secured closed so that no trench water, earth or other foreign materials may enter the pipe or fitting until they have been connected to a valve or capped as directed on the irrigation system Drawings.	
Change from to "at"	6.5.B.VI. SPRINKLER HEAD INSTALLATION	out the system. If water pressure without the heads installed is not sufficient to provide adequate water flow at end risers, the Park developer shall cap off enough heads closest to the water source to provide adequate flushing of the end riser assemblies.	
Change ranking to raking	6.5.B.XIX. GUARANTEE	a. Bring to grade by top-dressing (raking topsoil into grass).	
Change footer to read correct chapter name.	Throughout the chapter	7-3 | SURVEYS AND PERMANENT MONUMENTATION	
For the Crosswalk for the Parks Chapter (Chapter 6), the section numbering is off. For example, Design Standards is Section 6.4 in the DPM, however in the crosswalk it appears as 6.3 (in error).	Table of Contents	Definition section was using the incorrect header lever, updated that section and subsequent sections agree with remaining crosswalk numbering.	
In Table 1, under Street Name Changes, add "As petitioned by the public."	Table 1	R= Review and/or Recommend D = Review and Decide AD = Appeal Review and Decision < > = Public Hearing POLICY DECISIONS Annexation of Land — An annexation of land request is required to add any new land area into the City Limits. — X X X Land Use Plans — Land Use Plans are Masterplans and Specific Area Plans that lay out a specific development scenario for a site, including future land use, utilities, drainage, and transportation. A masterplan may be required for any development that is at least 10 acres in size. A specific area plan is required for any development that is at least 1,000 acres in size. — X X X Land Use Plan Amendments — A plan amendment is required to update or change elements of established Masterplans or Specific Area Plans. — X X X DECISIONS REQUIRING A PUBLIC HEARING Subdivisions — A request for subdivision is required for dividing a portion of land into lots or for consolidating one or more parcels into a larger lot. —	
If a graded area is to be turned back into a natural state, the area must be properly hydrated for at least one year or until the vegetation is established.	6.3.A.9	post and cable fence, and/or removable bollards for access. 9. Disturbance to terrain and vegetation to undeveloped open space areas shall be minimized to the maximum extent practicable. Disturbed areas shall be reseeded or planted with low-water, low maintenance, native, or naturalized plant materials and irrigated and maintained for a minimum of ~~13~~ years or until the vegetation is established.	
Buffer active use areas from parking lots, adjacent roadways, and internal vehicular circulation routes using passive areas, including trails and natural vegetation. (Is there a recommended percentage?)	6.3.A	post and cable fence, and/or removable bollards for access. ~~8.~~9. Active usable space or areas shall be buffered from parking lots, adjacent roadways, and interna vehicular circulation routes using passive areas by a minimum 15' buffer that incorporate trails, natural vegetation, and landscaping features. ~~9.~~10. Disturbance to terrain and vegetation to undeveloped open space areas shall be minimized	
Parks developers	6.3.A.vii	Park developers ~~shall make every effort to maximize~~ work with staff to use the optimal ~~the~~ usable space and open space, activity, and turf areas.	

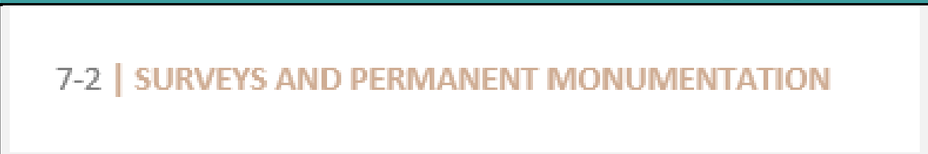
<table>
<tr><th colspan="4">RR DPM UPDATE – Chp 6 Parks Comment log</th></tr>
<tr><th>Comment</th><th>Section</th><th>Resulting Changes</th><th>Response, if necessary</th></tr>
<tr><td></td><td></td><td>"usable space and open space"</td><td></td></tr>
<tr><td>Definition of usable space:
Usable space or area – must have a function related to park visitor use for passive (sitting, picnicking, viewing) and active (recreating independently, with others or with pets) engagement with the physical space.</td><td>6.4
Definitions</td><td>Usable space or area. Areas specifically designed or designated to support functions that enhance visitor experiences, facilitating both passive (e.g., sitting, picnicking, enjoying views) and active (e.g., recreation, group activities, or pet-friendly engagement) interactions with the physical environment. These spaces are intended to be accessible and functional for a variety of activities that promote community use and enjoyment.</td><td></td></tr>
<tr><td>Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.</td><td>6.3.B.I.a.v
Table 2</td><td>
<table>
<tr><th colspan="2">Table 2: Neighborhood Park Elements</th></tr>
<tr><th>Required Elements</th><th>Optional Elements</th></tr>
<tr><td>Activity element</td><td>~~Parking lot~~Sports courts</td></tr>
<tr><td>2 benches per acre</td><td>Bicycle racks</td></tr>
<tr><td>3 tables per acre</td><td>Fenced Dog Park</td></tr>
<tr><td>2 trash receptacles per park unit at a min. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion.</td><td>~~Sports courts~~ Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.</td></tr>
<tr><td>1 dog waste station in conjunction with trash receptacles</td><td>Toilet</td></tr>
<tr><td>Minimum shade structure area of 400 sf per park unit,</td><td>Picnic shelter</td></tr>
<tr><td>8 trees per acre</td><td>Basketball court with minimum of 1 goal</td></tr>
<tr><td>3 shrubs per required tree</td><td>Drinking fountain</td></tr>
<tr><td>Park rules sign</td><td>Turf area. 1 acre minimum on un-sloped area for sports practice and general park use.</td></tr>
</table>
</td><td></td></tr>
<tr><td>Add parking lot to Table 3</td><td>6.3.B.I.b.v
Table 3</td><td>
<table>
<tr><th colspan="2">Table 3: Community Park Elements</th></tr>
<tr><th>Required Elements</th><th>Optional Elements</th></tr>
<tr><td>8 trees per acre</td><td></td></tr>
<tr><td>3 shrubs per required tree</td><td></td></tr>
<tr><td>Quick coupler hose connection per parts list located centrally and near the play and shade structures~~.~~</td><td></td></tr>
<tr><td>Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming</td><td></td></tr>
<tr><td>Park rules sign</td><td></td></tr>
<tr><td>Maintenance access</td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>Add quick coupler..... here as well, as well as a parking lot Table 4</td><td>6.3.B.I.b.v
Table 4</td><td>
<table>
<tr><th colspan="2">Table 3: Regional Park Elements</th></tr>
<tr><th>Required Elements</th><th>Optional Elements</th></tr>
<tr><td>Play equipment</td><td>Softball and Baseball fields</td></tr>
<tr><td>2 benches per acre</td><td>Fenced Dog Park</td></tr>
<tr><td>3 tables per acre</td><td>Disc Golf Courses</td></tr>
<tr><td>Trash receptacles</td><td>Horseshoe pits</td></tr>
<tr><td>Dog waste station</td><td>Tennis/ Pickleball</td></tr>
<tr><td>Shade structure a cumulative total of 600 sf coverage</td><td>Racquetball</td></tr>
<tr><td>Drinking fountain</td><td>Volleyball</td></tr>
<tr><td>Play area</td><td>Cricket</td></tr>
<tr><td>12 trees per acre</td><td>Bocce Courts</td></tr>
<tr><td>3 shrubs per required tree</td><td>Basketball court with minimum of 1 goal</td></tr>
<tr><td>Quick coupler hose connection per parts list located centrally and near the play and shade structures.</td><td></td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th colspan="4">RR DPM UPDATE – Chp 6 Parks Comment log</th></tr>
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<tr><td></td><td></td><td><table><tr><td>Parking lot. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming</td><td></td></tr><tr><td>Park rules sign</td><td></td></tr><tr><td>Maintenance access</td><td></td></tr></table></td><td></td></tr>
<tr><td>Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.</td><td>6.3.B.II.b.i Parking Lots</td><td>6.3.B.II.b.i. Parking Lot Standards
i. Paved parking lots shall follow the City Standard for “paved pedestrian trail or parking lot” through the Department of Public Work’s standard sheet “Pavement Sections – DWG. No. PS-01.”
ii. Permeable paving may be used within onsite parking lots. Low Impact Development parking lots shall follow the SSCAFCA standard specifications and construction details, as specified by staff.
iii. Accessible parking shall be provided as required by the federal Americans with Disabilities Act Guidelines for Buildings and Facilities (ADAAG), the New Mexico Statutes Annotated, and the Rio Rancho Municipal Code.
iv. Required spaces for parking lots is 1 spot and one ADA spot for 3-4 acres and 3 plus spots for parks greater than 4 acres dependent on elements and programming.~~3 spots per acre for parks that are 5 acres and greater~~.</td><td></td></tr>
<tr><td>We would like to incorporate two definitions for park units as (1) the is the acreage of the “developed” area for recreation and (2) the “undeveloped” area for conservation, and/or education.
○ Definitions will be added to Chapter 155.
○ We believe there are definitions, acreage requirements and criteria for these in the Parks Master Plan that we want to incorporate into the DPM.</td><td>6.4 Definitions</td><td>Added new definitions
• Developed Area. The developed area is the portion of park land designated for active recreational use. Specifically designed and maintained to support various recreational activities, this area includes amenities such as sports fields, playgrounds, picnic areas, trails, and other facilities intended for public enjoyment and physical activity.
• Undeveloped Area. The undeveloped area is the portion of park land preserved in its natural state for conservation, wildlife habitat, and educational purposes. It encompasses features like forests, wetlands, open spaces, and other natural landscapes protected from active development. This acreage serves as a resource for environmental conservation, ecological study, and passive recreation.
• Neighborhood Park (NP). The Rio Rancho Parks and Recreation Master Plan defines neighborhood parks as the basic unit of the park system and serve as the recreational and social focus of the neighborhood. Typically ranging from three to ten acres, these parks have a service area of a 10-minute walking distance, with a recommended service level of one facility per 20,000 people.
• Community Park (CP). The Rio Rancho Parks and Recreation Master Plan defines community parks as larger than neighborhood parks, serving a broader purpose with multiple facilities. They typically range from 10 to 20 acres, although size can vary based on location and functionality. The optimal service area is within a 10-minute drive, with a recommended service level of one facility per 20,000 people.
• Multi-Purpose Recreation Center (RC). Defined by the Rio Rancho Parks and Recreation Master Plan as structures designed to accommodate a variety of recreational activities and events. These centers typically feature spaces such as general-use auditoriums, gymnasiums, and specialized facilities like swimming pools. They serve an optimal area within a 10-minute drive, with a service level of one facility per 20,000 people.</td><td></td></tr>
</table>

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
		• Sports Complex (SC). The Rio Rancho Parks and Recreation Master Plan defines these facilities as consolidating heavily programmed athletic fields and associated facilities at larger and fewer sites strategically located throughout the community. The minimum size is 40 acres, with 80 to 150 acres being optimal, with a 10-minute drive is the optimal service area. Level of service for Sports Complex is 1 facility per 30,000 people • Special Use Park (SUP). The Rio Rancho Parks and Recreation Master Plan defines special use classification to cover a broad range of parks and recreation facilities oriented towards single-purpose use with the area being determined by the use, for example from dog parks, skate parks and pools less than 1 acre to balloon parks and RV parks greater than 20 acres. The optimal service area for these facilities should be 20 minutes drive or less with a level of service at 1 facility per 30,000 people. • Open Space / Natural Resource Area (NRA). The Rio Rancho Parks and Recreation Master Plan defines natural resource areas are lands set aside for the preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering. These can range in size depending on the resource and location. Major Natural Resource Areas (greater than 20 acres) have a service area of 20 minutes drive or less and have a level of service is 5 acres per 1000 people.	
	6.2, applicability	**6.2 Applicability** a. All parks must submit a park application. The application must justify how proposed parks meet the requirements of this section.	
Required elements to add for all parks: ○ ADA compliant pedestrian routes through parks and accessible connections between subdivision sidewalks and internal paths. ADA compliance to the following elements: benches, picnic tables, shade structures	6.3.A, new 6.3.A. v and 6.3.A.vi	roll curb, post and cable fence, and/or removable bollards for access. v. All parks must ensure that internal park pathways are ADA compliant and provide ADA accessible pedestrian connections from adjacent sidewalks to the internal park pathways. ~~ii.~~vi. All parks must ensure that benches, picnic tables, and share structures are ADA compliant.	
Change “play element” to activity element to offer more options such as fitness equipment.	Table 2: Neighborhood Park Elements, page 6-6	**Table 21: Neighborhood Park Elements** **Required Elements** | **Optional Elements** ~~Play~~ Activity element | Parking lot	
	6.3.B.I.B.v, page 6-6	• Collocated in proximity to middle schools, high schools, and community centers. 6.3.B.I.b.v. Elements The typical amenities of a community park include grass area, ~~play~~ activity elements, shade picnic tables, benches, multiple sport courts, skate park, parking lot, and paths as laid out i Comprehensive Plan. The basic required elements and optional elements for Community P	
Coupler hose connection near activity areas and/or shade structures.	6.3.B.II.i	A couple house shall be located within 10 feet of activity centers and/or shade structures.	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
2 Trash receptacles per park unit at a minimum. More depending on activities supported by the park per the Parks, Recreation and Community Services Director's discretion. 1 Dog waste station in conjunction with the trash receptacles.	Table 2, page 6-6 Table 3, page 6-8	**Table 32: Communi** **Required Elements** Play / activity equipment 2 benches per acre 3 tables per acre 2 Trash receptacles min ~~per Planning Director~~ 1 Dog waste station min, collocated near trash receptacles Shade structures with total 600 sf coverage Drinking fountain	
Minimum shade structure area of 40 square feet per park unit.	Table 2, page 6-6 Table 3, page 6-8	**Table 23: Neighborhood Park Elements** **Required Elements** / **Optional Elements** ~~Play~~ Activity element / Parking lot 2 benches per acre / Bicycle racks 3 tables per acre / Fenced Dog Park 2 t~~T~~rash receptacles min ~~per Planning Director~~ / Sports courts 1 d~~D~~og waste station min, collocated near trash receptacles / Toilet Shade structure with 40~~0~~ sf coverage / Picnic shelter~~Toilet~~	
There will be a park application that will be reviewed and approved by staff.	6.2 Applicability	**6.2 Applicability** a. All parks must submit a park application. a-b. The design review and approval of ~~any~~ parks and recreation facilities shall follow the	
○ 3-acre (in park units) minimum for a park to be considered a Public Neighborhood Park.	Table 1, 6.3.B.I. Park Typology Standards, page 6-4	Revise Neighborhood park size in Table 2: Park Typologies **Table 1: Park Typologies** **Park Type** / **Size** Neighborhood Park / ~~1~~3-10 acres	
	6.3.B.I.a.ii, Size Guidelines, page 6-5	**6.3.B.I.a.iii. Size Guidelines** ~~1~~ 3 to 10 acres	
	6.3.B.I.a.v, Elements, page 6-6	**6.3.B.I.a.v. Elements** The typical amenities of neighborhood park include a grass area, play elements, shade structure, picnic tables, benches, sport courts as laid out in the Comprehensive Plan. The basic required elements and optional elements for Community Parks and laid out in Table 1: Neighborhood Park Elements. If park dedication result in parks less than ~~1~~ 3 acre, required elements may be waived by PRCS Department staff.	
A park less than 3 acres must be owned and maintained by an HOA.	6.2 Applicability, page 6-3	d. Any parks less than 3 acres in size must be owned and maintained by a Homeowners Association (HOA). b.e. Privately owned and maintained parks, trails, and recreation facilities should be coordinated with	
	6.3.B.I. Park Typology	Revise 6.3.B.I. PARK TYPOLOGY STANDARDS:	

RR DPM UPDATE – Chp 6 Parks Comment log			
Comment	**Section**	**Resulting Changes**	**Response, if necessary**
	Standards, page 6-4	-Parks less than ~~one~~three ~~acre~~acres in size are anticipated to be pocket parks that serve smaller geographic areas and must be owned and maintained by an HOA. ~~.~~The design and construction of these parks should be coordinated with PRCS Department staff to ensure minimum safety standards are utilized.	

	RR DPM UPDATE – Comment log			
Date	**Comment**	**Document**	**Section**	**Resulting Changes**
	Change footer to read correct chapter name.			 Updated to match chapter title

Development Process Manual, Chapter 2 - Development Procedures	DPM Chapter 2 - Development Procedures
DPM Chapter 2 Feedback	I have significant concerns regarding the proposed changes to the master plan requirements in the Development Process Manual (DPM). Currently, the Comprehensive Plan recommends that master plans cover at least 100 acres and outlines specific components that should be included. The existing DPM lacks detail on these required components. While I understand this update provides an opportunity to provide clarity, it should not change the fundamentals as outlined in the Comprehensive Plan. While the updated DPM does include a definition for a master plan, it does not define a specific area plan, which creates ambiguity. The proposed changes to the DPM reduce the threshold for master plans to just 10 acres. Additionally, the revisions include a new requirement that at least 75% of the subject area must be under unified ownership and allow certain plan components to be omitted at staff discretion. These changes introduce uncertainty around what is required for a master plan—precisely the kind of clarity the DPM is intended to provide. Individually, each of these changes may seem minor. However, taken together, they pose significant challenges to development. Lowering the acreage threshold without clear guidance adds complexity, particularly in light of the staff policy requiring a master plan to accompany any zone map amendment request. This policy, combined with the new ownership threshold and the outdated nature of current platting, will make it difficult and more expensive for developers to assemble land and prepare a master plan—without any assurance that a zoning request will be approved. Overall, these changes risk slowing down development and increasing costs without offering clear benefits or guidance. I strongly urge reconsideration of these amendments or, at the very least, the inclusion of clear, consistent criteria for master plans within the DPM and re-evaluating the 10ac threshold.

CITY OF RIO RANCHO
RESOLUTION

RESOLUTION NO. **ENACTMENT NO.**

RESOLUTION ADOPTING UPDATES TO THE DEVELOPMENT PROCESS MANUAL

WHEREAS: the Governing Body Rio Rancho, State of New Mexico finds a need to update the Development Process Manual in order to amend procedures to reflect current practices, clarify standards by removing conflicting requirements, update standards to reflect national best practices and to provide consistency; and

WHEREAS: the Governing Body of the City of Rio Rancho has the authority to review and adopt establishments and additions to the Development Process Manual per the Rio Rancho Municipal Code, Section 150.11(C)(4); and

WHEREAS: the Development Process Manual Committee of the City of Rio Rancho reviewed the proposed updates to the Development Process Manual at their meeting held on April 3, 2025, and have made recommendation to the Planning and Zoning Board on the adoption of the proposed updates; and

WHEREAS: the Planning and Zoning Board of the City of Rio Rancho reviewed the proposed updates to the Development Process Manual at their meeting held on May 27, 2025, and have made recommendation to the Governing Body on the adoption of the proposed updates; and

WHEREAS: the Governing Body of the City of Rio Rancho, following a duly noticed public hearing on June 12, 2025, reviewed the proposed updates to the Development Process Manual and determined that the updates are in conformance with the City of Rio Rancho adopted plans and policies.

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF RIO RANCHO:

Section 1. The Governing Body hereby approves and adopts the proposed updates to the Development Process Manual.

Section 2. **Effective Date.** This Resolution shall become effective ten days after adoption.

ADOPTED THIS 27th DAY OF MAY, 2025.

_____
Greggory D. Hull, Mayor

ATTEST:

_____

Noel C. Davis, City Clerk
(SEAL)