

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

February 26, 2025

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E.
Albuquerque, NM 87108

**RE: Calle Cuarta Residential & Commercial
3525 4th St. NW
Grading and Drainage Plan
Engineer's Stamp Date: 01/30/2025
Hydrology File: G14D097**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 01/31/2025, the Grading & Drainage Plan is Approved for a Grading Permit and Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing together with a copy of this letter.

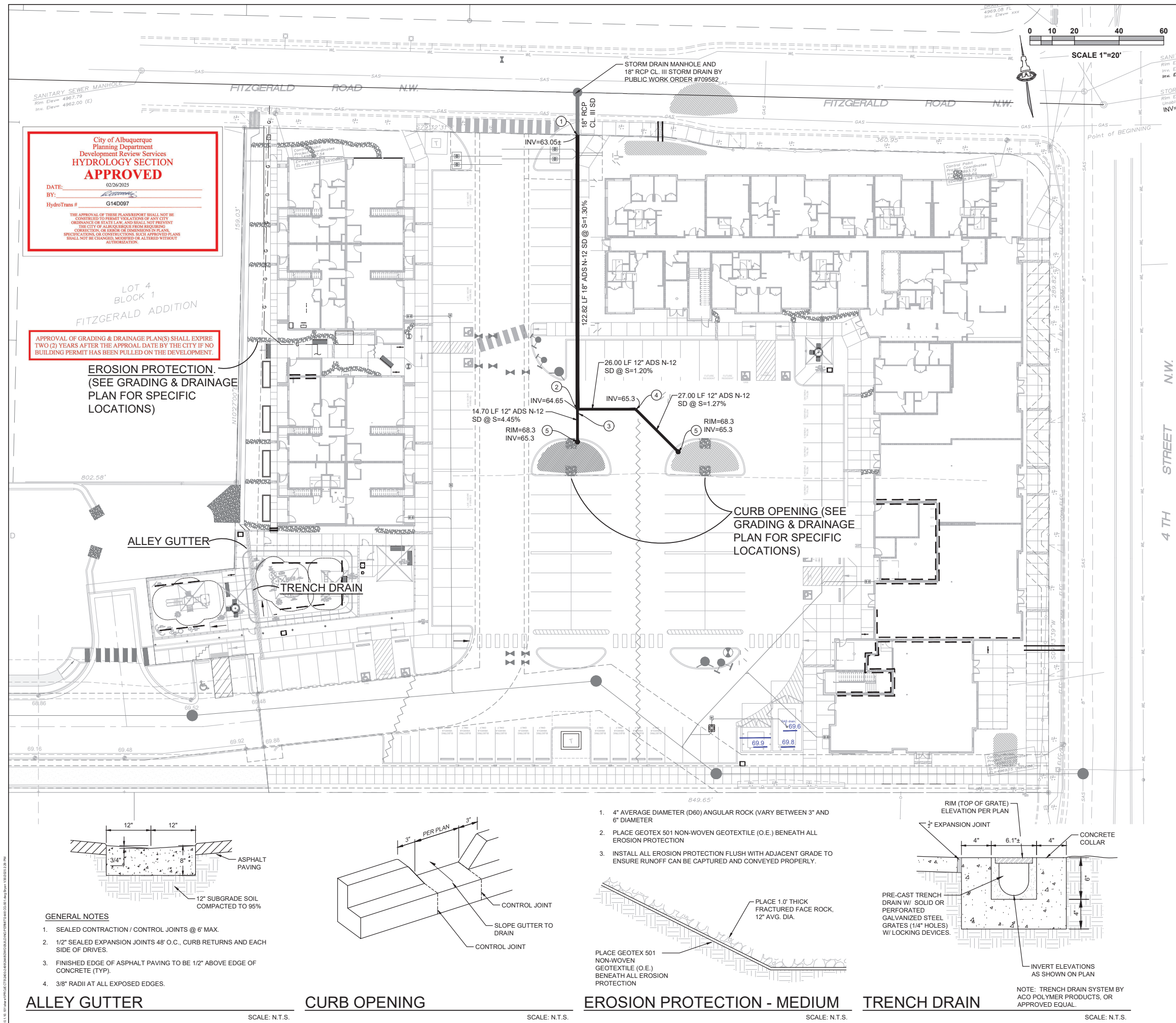
As a reminder, please prepare and provide a Drainage Covenant for the detention ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit on the 4th floor of the Plaza de Sol building. A \$25 fee will be required.

Also, if the project total area of disturbance (including the staging area and any work within the adjacent Rights-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3366 or richardmartinez@cabq.gov.

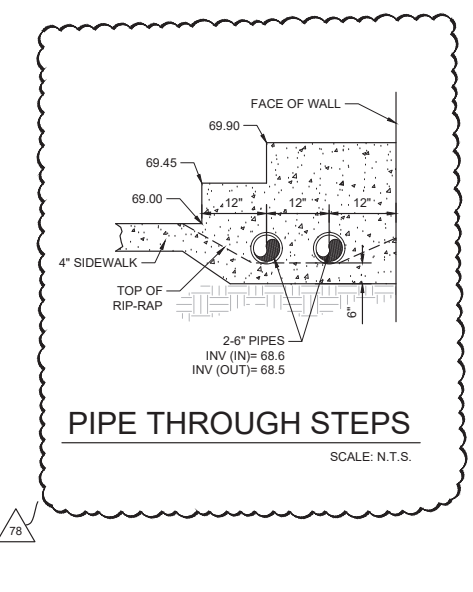
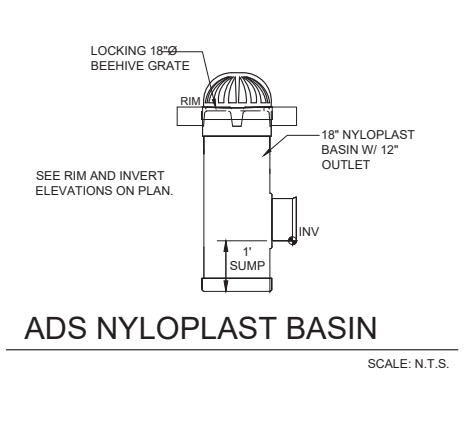
Sincerely,

Richard Martinez, P.E.
Senior Engineer, Hydrology
Planning Department



- ### GENERAL NOTES
- A. INSTALL ALL STORM DRAIN INLETS, PIPE AND FITTINGS PER MANUFACTURER'S SPECIFICATIONS.
 - B. EACH PROPOSED INLET IN LANDSCAPE AREAS CONSIST OF AN ADS NYLOPLAST BASIN, 3' DEEP; 1' SUMP; OUTLET SIZE PER PLAN; LOCKING DOME GRATE, 8" CONCRETE APRON.
 - C. ALL STORM DRAIN LINES AND FITTINGS TO BE ADS N-12WT WATERTIGHT.
 - D. INSTALL PIPE WITH SLOPES AND INVERTS PER PLAN.
 - E. STORM DRAIN SYSTEM WILL REQUIRE REGULAR MAINTENANCE TO ENSURE PROPER FUNCTIONING DURING STORM EVENTS. ENGINEER RECOMMENDS THAT PROPERTY OWNER PUT IN PLACE INSPECTION AND MAINTENANCE CRITERIA SCHEDULED TO OCCUR MONTHLY AND AFTER EACH STORM EVENT.
 - F. STORM DRAIN PIPE LENGTHS NOTED ON PLAN ARE TO CENTER OF DRAIN BASINS.

- ### KEYED NOTES
- 1. REMOVE 18" SD CAP AND CONNECT TO EXISTING 18" RCP STORM DRAIN WITH ADS ADAPTER.
 - 2. 1-18"x12" TEE
 - 3. 1-18"x12" REDUCER
 - 4. 1-12" 45° BEND
 - 5. 1-18" NYLOPLAST BASIN WITH 12" OUTLET. SEE GENERAL NOTE B THIS SHEET.



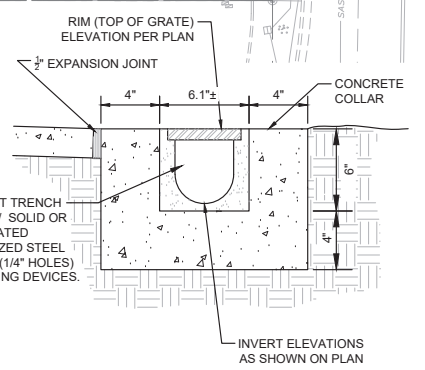
City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/26/2025
BY: [Signature]
HydroTrans # G14D097

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSIDERED TO PREVENT VIOLATION OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUESTING CORRECTION, OR ERROR OR DIMENSION IN PLANS, SPECIFICATIONS OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

EROSION PROTECTION.
(SEE GRADING & DRAINAGE PLAN FOR SPECIFIC LOCATIONS)

1. 4" AVERAGE DIAMETER (D60) ANGULAR ROCK (VARY BETWEEN 3" AND 6" DIAMETER)
2. PLACE GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.) BENEATH ALL EROSION PROTECTION
3. INSTALL ALL EROSION PROTECTION FLUSH WITH ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



- ### GENERAL NOTES
1. SEALED CONTRACTION / CONTROL JOINTS @ 6' MAX.
 2. 1/2" SEALED EXPANSION JOINTS 48" O.C., CURB RETURNS AND EACH SIDE OF DRIVES.
 3. FINISHED EDGE OF ASPHALT PAVING TO BE 1/2" ABOVE EDGE OF CONCRETE (TYP).
 4. 3/8" RADII AT ALL EXPOSED EDGES.

ALLEY GUTTER

SCALE: N.T.S.

CURB OPENING

SCALE: N.T.S.

EROSION PROTECTION - MEDIUM

SCALE: N.T.S.

TRENCH DRAIN

SCALE: N.T.S.

Isaacson & Arfman, Inc.
Civil Engineering Consultants

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Albuquerque, NM 87108
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FRED C. ARFMAN
Professional Engineer
No. 322
Exp. 07-2025

Engineer

CALLE CUARTA
3525 4th St. NW
Albuquerque, New Mexico 87107

ISSUE:	100%
PROJECT NUMBER:	IA 2448
FILE:	
DRAWN BY:	bjb
CHECKED BY:	fca
DATE:	January 30, 2025

SHEET TITLE
STORM DRAIN PLAN & DRAINAGE DETAILS

SHEET NUMBER
CG-501

STORMWATER QUALITY
POND VOLUMES

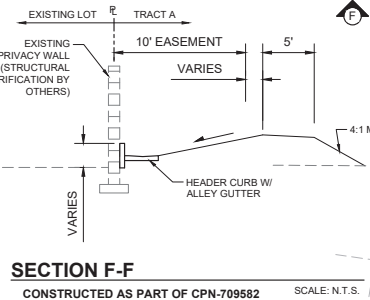
STORMWATER QUALITY POND P1		
Contour	Area	Volume
68.0	345	
66.5	140	364 CF
POND VOLUME = 364 CF		

STORMWATER QUALITY POND P2		
Contour	Area	Volume
68.0	345	
66.5	140	364 CF
POND VOLUME = 364 CF		

STORMWATER QUALITY POND P3		
Contour	Area	Volume
69.3	150	
68.0	17	109 CF
POND VOLUME = 109 CF		

STORMWATER QUALITY POND P4		
Contour	Area	Volume
68.0	178	
67.5	24	51 CF
POND VOLUME = 51 CF		

VALLEY GUTTER AND PERIMETER WALL IMPROVEMENTS THIS AREA TO BE CONSTRUCTED AS PART OF PHASE 1 (RESIDENTIAL) IMPROVEMENTS CPN-709582



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 02/26/2025
BY: [Signature]
HydroTrans # G14D097

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APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

KEYED NOTES

- NO WORK SHALL BE PERFORMED IN THE PUBLIC R/W WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.
- CONSTRUCT NEW PAVING AT ELEVATIONS SHOWN.
- PROVIDE SMOOTH TRANSITION TO EXISTING PAVEMENT.
- INSTALL TWO 4" DRAINS THROUGH CURB PER C.O.A. STD. DWG. 2235.
- CONSTRUCT ADA COMPLIANT CURB RAMP AT ELEVATIONS SHOWN.
- CONSTRUCT ADA COMPLIANT PEDESTRIAN ACCESS WALK AT ELEVATIONS SHOWN.
- CONSTRUCT ADA COMPLIANT PARKING SPACES AND ACCESS AISLES AT ELEVATIONS SHOWN.
- 6" HIGH CURB. TYPICAL. NOTE: TO ENSURE READABILITY, NOT ALL CURBS ARE LABELED WITH BOTH FLOWLINE AND TOP OF CURB ELEVATION. ALL SPOT ELEVATIONS SHOWN WITHIN GUTTER ARE FLOWLINE ELEVATION. ADD CURB HEIGHT FOR ADJACENT TOP OF CURB ELEVATION. SEE PAVING PLAN AND

- DETAILS FOR CURB TYPES AND ADDITIONAL INFORMATION.
- CONSTRUCT 2" WIDE CONCRETE ALLEY GUTTER AT FLOWLINE ELEVATIONS SHOWN. SEE CG-501 FOR DETAIL.
 - HIGH POINT / GRADE BREAK LOCATION.
 - 0.5" AND 0.1" DESIGN CONTOURS SHOWN DASHED WHERE NECESSARY TO CLARIFY GRADING CONCEPT.
 - CONCENTRATED ROOF DISCHARGE LOCATION DISCHARGES TO ANGULAR ROCK SWALE OR DIRECTLY INTO COVERED SIDEWALK CULVERT.
 - CONSTRUCT 8" WIDE (MINIMUM BOTTOM WIDTH) COVERED SIDEWALK CULVERT. FLOWLINE OF ANGULAR ROCK SWALE (WHERE APPLICABLE) TO MATCH FLOWLINE.
 - PROVIDE 2.0' WIDE OPENING IN CURB TO PASS FLOW. SLOPE GUTTER AT 2% MAX. IN DIRECTION OF FLOW (EACH CURB OPENING LOCATION). SEE CG-501 FOR DETAIL.
 - CHANGE IN FINISH FLOOR ELEVATION. SEE ARCHITECTURAL AND STRUCTURAL PLANS.

- CONSTRUCT DEEP STORMWATER QUALITY RETENTION POND (SWQ) AT ELEVATIONS SHOWN. SLOPE = 2:1 ARMORED WITH 4" AVG. DIAMETER ANGULAR ROCK OVER PERMANENT EROSION CONTROL MATERIAL. ALL STORMWATER QUALITY PONDING VOLUMES WILL BE VERIFIED AS PART OF AS-BUILT CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- CONCRETE DUMPSTER PAD SLOPED TO INTERIOR DRAIN INLET(S). SEE UTILITY PLAN FOR CONTINUATION.
- CONTRACTOR TO CLEAN AND CLEAR EXISTING SIDEWALK CULVERTS AND STORM DRAIN SYSTEM.
- CONSTRUCT PRIVATE STORM DRAIN SYSTEM. SEE SHEET CG-501 FOR SIZES / SLOPES / INLET INFORMATION / MATERIALS. CONNECT TO STUB PROVIDED AS PART OF PUBLIC WORK ORDER CONSTRUCTION.

- INSTALL 8" THICK (4" AVG. DIA.) ANGULAR ROCK EROSION PROTECTION TO LIMITS HATCHED. HAND PLACE AT CURB OPENINGS AND SWALES TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY. SWALES TO BE 2" WIDE X 8" THICK X 2" DEPRESSED TO EXTENTS SHOWN. SEE CG-501 FOR ADDITIONAL INFORMATION.
- GRADE TRANSITION WALL. RETAINING HEIGHT VARIES. STRUCTURAL DESIGN TO BE PROVIDED BY WALL CONTRACTOR.
- 56± LF 8" WIDE (BOTTOM WIDTH) TRENCH DRAIN (6" DEEP TYP.) WITH PEDESTRIAN RATED GRATE. SEE CG-501 FOR DETAIL.
- 12" WIDE (BOTTOM WIDTH) 'U' CONCRETE CHANNEL THROUGH PARKING ISLAND TO PASS MINOR OFF-SITE FLOW TO COVERED SIDEWALK CULVERT.
- TWO 6" PIPES THRU STEPS PER DETAIL ON SHEET CG-501.

LEGEND

EXISTING CONTOUR
PROPOSED 1.0' CONTOUR
PROPOSED SPOT ELEVATION
FLOW DIRECTION
FINISH FLOOR ELEVATION
PROPOSED STORM DRAIN / INLET
STORMWATER QUALITY POND (SEE KEYED NOTE #16)

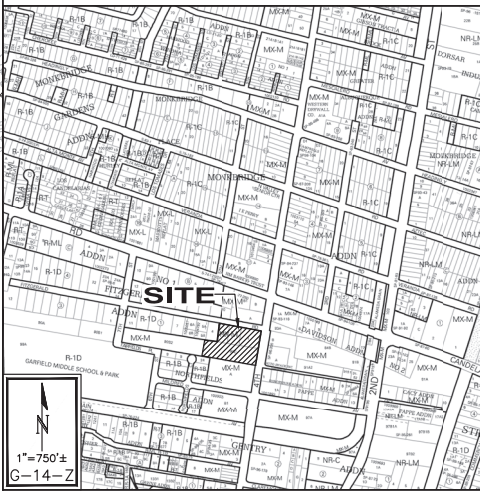
ADA REQUIREMENTS

SIDEWALK(S) AND RAMP(S): TARGET CROSS SLOPE = 1% TO 1.5%. CROSS SLOPE SHALL NOT EXCEED 2%.

ACCESSIBLE RAMP(S): TARGET LONGITUDINAL SLOPE = 7% LONGITUDINAL SLOPE SHALL NOT EXCEED 12:1 (8.3%).

ACCESSIBLE PARKING: TARGET SLOPE = 1% TO 1.5%. SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

VICINITY MAP



PROJECT INFORMATION

PROPERTY: THE SITE IS A PREVIOUSLY DEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP G-14. THE SITE IS BOUND TO THE EAST BY 4TH ST. SW, TO THE WEST BY UNDEVELOPED RESIDENTIAL, TO THE NORTH BY FITZGERALD RD. NW, AND TO THE SOUTH BY DEVELOPED RESIDENTIAL AND COMMERCIAL PROPERTIES.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A MIXED MULTI-FAMILY RESIDENTIAL/COMMERCIAL AREA WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, AND LANDSCAPING.

LEGAL: TRACT A, CALLE CUARTA, ALBUQUERQUE, NEW MEXICO.

BENCHMARK: VERTICAL DATUM IS BASED UPON ALBUQUERQUE CONTROL SURVEY MONUMENT "23-G14", ELEVATION = 4969.296 FEET (NAVD 88).

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY OTHER THAN A PORTION OF THE FUTURE RESIDENTIAL PROPERTY TO THE WEST WHICH WILL DRAIN THROUGH A SURFACE SWALE TO FITZGERALD ROAD WITHIN A DESIGNATED DRAINAGE EASEMENT PROVIDED FOR THAT PURPOSE.

FLOOD HAZARD: THE SUBJECT PROPERTY APPEARS TO LIE WITHIN "ZONE X" (AREA WITH REDUCED FLOOD RISK DUE TO LEVEE) AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 35001C0332G, EFFECTIVE DATE SEPTEMBER 26, 2008.

DRAINAGE PLAN CONCEPT: BASED ON A PREDESIGN MEETING WITH COA HYDROLOGY, (RENEE BRISETTE - SENIOR ENGINEER) THE PROPERTY IS PERMITTED FREE DISCHARGE TO THE SURROUNDING STREETS. SURFACE DISCHARGE WILL BE PROVIDED WHERE POSSIBLE. A PRIVATE STORM DRAIN SYSTEM(S) WILL BE INSTALLED TO COLLECT ON-SITE RUNOFF AND ROUTE TO THE EXISTING PUBLIC STORM DRAIN IN FITZGERALD ROAD NW. ON-SITE VOLUME IS PROVIDED WITHIN THE PARKING LOT (MAX. 6" DEPTH) TO PERMIT TEMPORARY DETENTION UNTIL THE STORM PEAK SUBSIDES AND CAPACITY BECOMES AVAILABLE.

SURVEYOR: RUSS P. HUGG, NMPS NO. 9750, SURV-TEK, INC.

STORMWATER QUALITY PONDS

BASED ON HISTORICAL GOOGLE IMAGERY, THIS PROPERTY HAS BEEN PREVIOUSLY DEVELOPED AS A COMMERCIAL BUSINESS. FOR REDEVELOPMENT SITES, THE CABO STORMWATER QUALITY VOLUME (SWQV) IS BASED ON 0.26" PER SQUARE FOOT OF IMPERVIOUS AREA.

THE ESTIMATED IMPERVIOUS AREA FOR THIS PROPERTY IS 90,636 SF. THE TOTAL REQUIRED S.Q. RETENTION VOLUME = 0.26" * TYPE 'D' AREA: 0.26/12 * 90636 SF = 1,964 CF.

SWQV PONDS P1 @ 364 CF, P2 @ 364 CF, P3 @ 109 CF, AND P4 @ 51 CF TOTALING 887 CF WILL BE CONSTRUCTED AS SHOWN TO A PORTION OF THE STORMWATER QUALITY VOLUME. A WAIVER REQUEST IS PROVIDED FOR THE 1,077 CF THAT CANNOT BE CAPTURED.

S.O.19 : NOTICE TO CONTRACTORS

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

- Build sidewalk culvert per COA STD DWG 2236.
- Contact Storm Drain Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** for (505) 260-1990 for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Storm Drain Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

Isaacson & Arfman, Inc.
Civil Engineering Consultants

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FRED C. ARFMAN
NEW MEXICO
7322
LICENSED PROFESSIONAL ENGINEER
07-39-25

Engineer

CALLE CUARTA
3525 4th St. NW
Albuquerque, New Mexico 87107

100%	ISSUE:	PROJECT NUMBER: IA 2448	FILE:	DRAWN BY: bjb	CHECKED BY: fca	DATE: January 30, 2025
No	Date	Description	SHEET TITLE			
GRADING & DRAINAGE PLAN						
SHEET NUMBER						
CG-101						