

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

November 10, 2025

Fred Arfman, P.E.
Isaacson & Arfman, Inc.
128 Monroe St. NE
Albuquerque, NM 87108

**RE: Candelaria & 2nd Street NW Multi-Family
210 Candelaria Rd NW
Grading and Drainage Plans
Engineer's Stamp Date: 10/27/2025
Hydrology File: G14D103
Case # HYDR-2025-00389**

Dear Mr. Arfman:

PO Box 1293

Based upon the information provided in your submittal received 8/26/2025, the Grading and Drainage Plans **are not** approved for Grading Permit, Building Permit, or SO19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

1. Please include in the Calculations Table the Existing Conditions .
2. Show the roof drain flow directions.

NM 87103

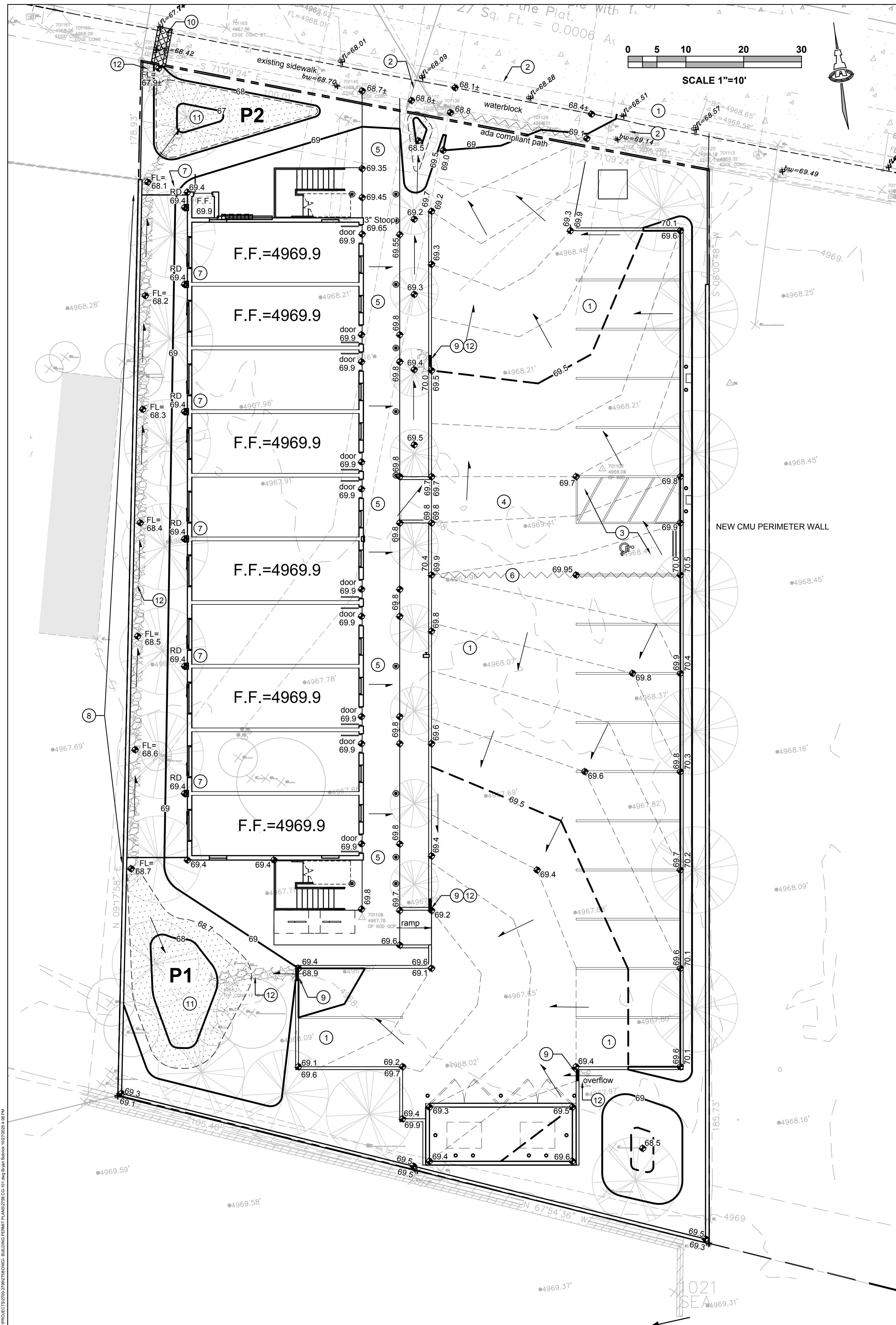
www.cabq.gov

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-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, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services



CALCULATIONS: Multi-Family Housing : 10-Oct-25
 Based on Drainage Design Criteria for City of Albuquerque
 Article 6-2 Hydrology dated June 26, 2020

100-YEAR, 6-HOUR STORM

AREA OF SITE: 18317 SF = 0.42 ACRE

DEVELOPED FLOWS: EXCESS PRECIP:

Area A	=	0	0%	Precip. Zone	=	2
Area B	=	3663	20%	E _A	=	0.62
Area C	=	2198	12%	E _B	=	0.80
Area D	=	12456	68%	E _C	=	1.03
Total	=	18317	100%	E _D	=	2.33

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)
 Weighted E = $\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$

Hist. E = 0.81 in. Dev. E = 1.87 in.

On-Site Volume of Runoff: V₃₆₀ = E * A / 12
 Hist. V₃₆₀ = 1236 CF Dev. V₃₆₀ = 2851 CF

On-Site Peak Discharge Rate: Q_p = $\frac{Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D}{43.560}$

For Precipitation Z=2
 Q_{pA} = 1.71 Q_{pC} = 3.05
 Q_{pB} = 2.36 Q_{pD} = 4.34

Hist. Q_p = 1.0 CFS Dev. Q_p = 1.6 CFS

BASIN	Area	SF	Ac.	LAND TREATMENT
1	4575		0.1	
Sub-basin Weighted Excess Precipitation:				
	Weighted E =	1.87 in.	A =	0%
	Sub-basin Volume of Runoff:	V ₃₆₀ = 712 CF	B =	20%
	Sub-basin Peak Discharge Rate:	Q _p = 0.4 cfs	C =	12%
			D =	68%
2	13742		0.3	
Sub-basin Weighted Excess Precipitation:				
	Weighted E =	1.87 in.	A =	0%
	Sub-basin Volume of Runoff:	V ₃₆₀ = 2139 CF	B =	20%
	Sub-basin Peak Discharge Rate:	Q _p = 1.2 cfs	C =	12%
			D =	68%

STORMWATER QUALITY

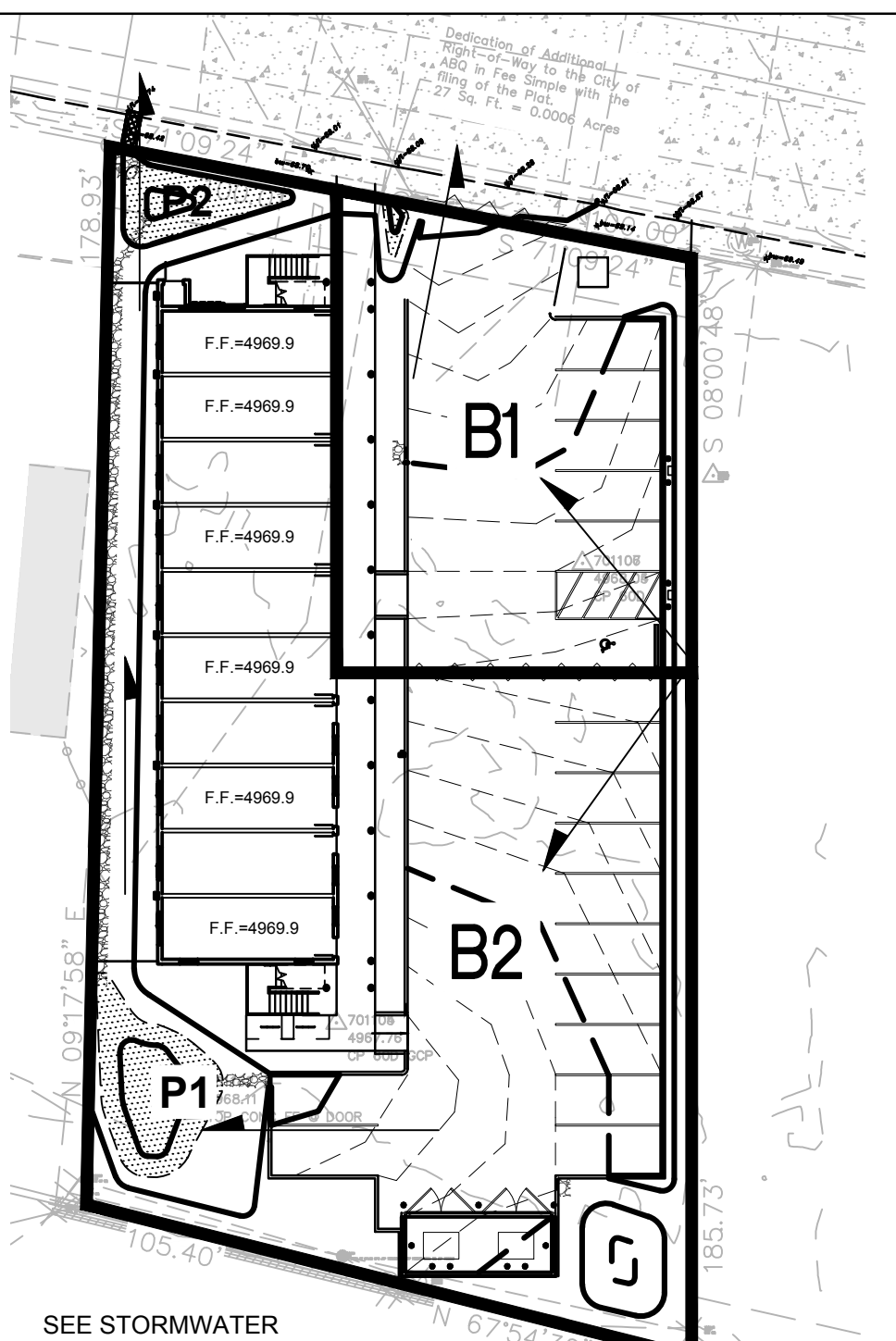
FOR NEW DEVELOPMENT SITES, THE CABQ STORMWATER QUALITY VOLUME (SWQV) IS BASED ON THE 80TH PERCENTILE STORM EVENT OR 0.26".

THE IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS 68% OF TOTAL AREA: 12,456 SF. THE TOTAL REQUIRED S.Q. RETENTION VOLUME = 0.26" * TYPE 'D' AREA = 270 CF.

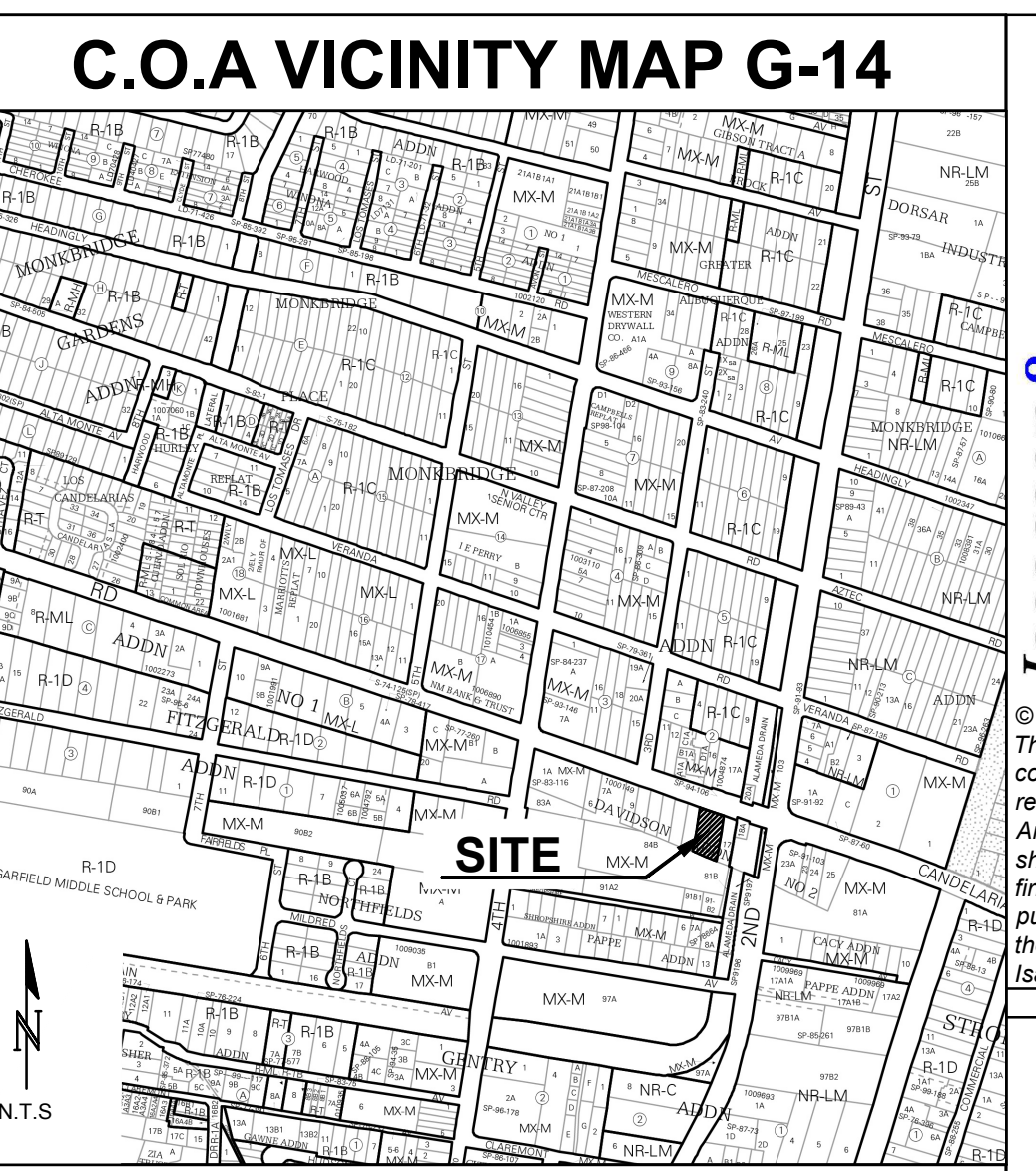
POND P1			POND P2		
Contour	Area	Volume	Contour	Area	Volume
4968.7	370		4967.9	200	
4968.0	120	171 CF	4967.0	25	101 CF
POND VOLUME = 171 CF			POND VOLUME = 101 CF		

KEYED NOTES

- PAVING, CURB & GUTTER TO ELEVATIONS SHOWN, SLOPES AND CROSS SLOPES VARY THROUGHOUT TO ACHIEVE ADA COMPLIANCE, UTILITY COVER, DRAINAGE, ETC. 0.5' AND 0.1' CONTOURS ARE PROVIDED WHERE NEEDED TO CLARIFY GRADING.
- SMOOTH TRANSITION TO EXISTING PAVEMENT.
- ADA COMPLIANT PARKING SPACE(S) AND ACCESS AISLE(S).
- ADA COMPLIANT CURB RAMP.
- ADA COMPLIANT PEDESTRIAN ACCESS WALK.
- HIGH POINT / GRADE BREAK LOCATION.
- CONCENTRATED ROOF DISCHARGE TO SURFACE. PRECAST CONCRETE SPLASHPAD AT ALL ROOF DISCHARGE LOCATIONS.
- 2.0' WIDE 6" THICK X 3" AVG. DIA. ANGULAR ROCK SWALE (2" DEPRESSION) ALONG WALL AT 0.5% SLOPE TO DIRECT FLOW NORTH.
- 18" WIDE (BOTTOM WIDTH) OPENING IN CURB TO PASS FLOW.
- 18" WIDE (BOTTOM WIDTH) COVERED CONCRETE SIDEWALK CULVERT PER COA STD. DWG. 2236. SEE S.O. 19 NOTES THIS SHEET FOR ADDITIONAL INFORMATION. 100-YEAR 6-HOUR DISCHARGE = 1.2 CFS.
- 8" DEEP STORMWATER QUALITY RETENTION POND (SWQR) AT ELEVATIONS SHOWN. 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.
- INSTALL 6" THICK X 3" AVG. DIA. ANGULAR ROCK PROTECTION TO LIMITS HATCHED. SEE EROSION CONTROL GENERAL NOTES FOR REQUIRED GEOTEXTILE AT ALL LOCATIONS.



SEE STORMWATER QUALITY REQUIREMENTS AND POND VOLUME CALCULATIONS THIS SHEET.



PROJECT INFORMATION

PROPERTY: THE PROPERTY IS A PREVIOUSLY DEVELOPED RESIDENTIAL PROPERTY BOUND TO THE NORTH BY CANDELARIA RD NW, TO THE EAST BY AN UNDEVELOPED LOT (PREVIOUSLY DEVELOPED RESIDENTIAL), AND TO THE SOUTH BY DEVELOPED COMMERCIAL PROPERTY, AND TO THE WEST BY A DEVELOPED RESIDENTIAL PROPERTY.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE CONSTRUCTION OF A 2 STORY MULTI-FAMILY HOUSING BUILDING WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, AND LANDSCAPING.

LOT SIZE: 0.42± AGRE

LEGAL: LOT 15-A DAVIDSON ADDITION NO. 2, ALBUQUERQUE, NEW MEXICO

BENCHMARK: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE ACS MONUMENT "NM 47-10" HAVING AN ELEVATION OF 4970.252' FEET. NAVD 1988.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0332G DATED 9/26/2008. THE SITE IS LOCATED WITHIN ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN DUE TO LEVEE INFRASTRUCTURE.

DRAINAGE PLAN CONCEPT: DEVELOPED RUNOFF WILL BE DIRECTED NORTH TO FREE DISCHARGE INTO CANDELARIA RD NW AT THE PROPOSED ENTRANCE DRIVE AND AT A PROPOSED COVERED SIDEWALK CULVERT AT THE NW CORNER OF THE PROPERTY (SEE S.O. 19 INFORMATION THIS SHEET).

ADA COMPLIANCE

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

LEGEND

- - - 4967 - - -	EXISTING CONTOUR
+ 4967	EXISTING SPOT ELEVATION
- - - 77 - - -	PROPOSED 1.0' CONTOUR
- - - 70 - - -	PROPOSED 0.1' CONTOUR
◆ 70.0	PROPOSED SPOT ELEVATION
→	FLOW DIRECTION

Isaacson & Arfman, Inc.
 Civil Engineering Consultants

128 Monroe Street NE
 Albuquerque, NM 87108
 505-266-8828 | www.iacivil.com

FRED C. ARFMAN
 LICENSED PROFESSIONAL ENGINEER
 7322
 10-27-2025

Engineer

CANDELARIA & 2nd MULTI-FAMILY ALBUQUERQUE, NM

ISSUE: 100% CONST. DOCS.	PROJECT NUMBER: IA 2758	FILE:	BIB / SC
		DRAWN BY: FCA	CHECKED BY:
			DATE: 10-27-2025

No Date Description

SHEET TITLE

GRADING AND DRAINAGE PLAN

SHEET NUMBER

2