

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

September 21, 2023

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

**RE: Farolito Senior Community**  
**10501 Central Ave. NE**  
**Grading & Drainage Plan**  
**Engineer's Stamp Date: 09/15/23**  
**Hydrology File: L21D074**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 09/15/2023, Grading & Drainage Plan is approved for Building Permit, Grading Permit and SO-19 Permit. Please attach a copy of these approved plans in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

Albuquerque

NM 87103

www.cabq.gov

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **\$25.00** made out to "**Bernalillo County**" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

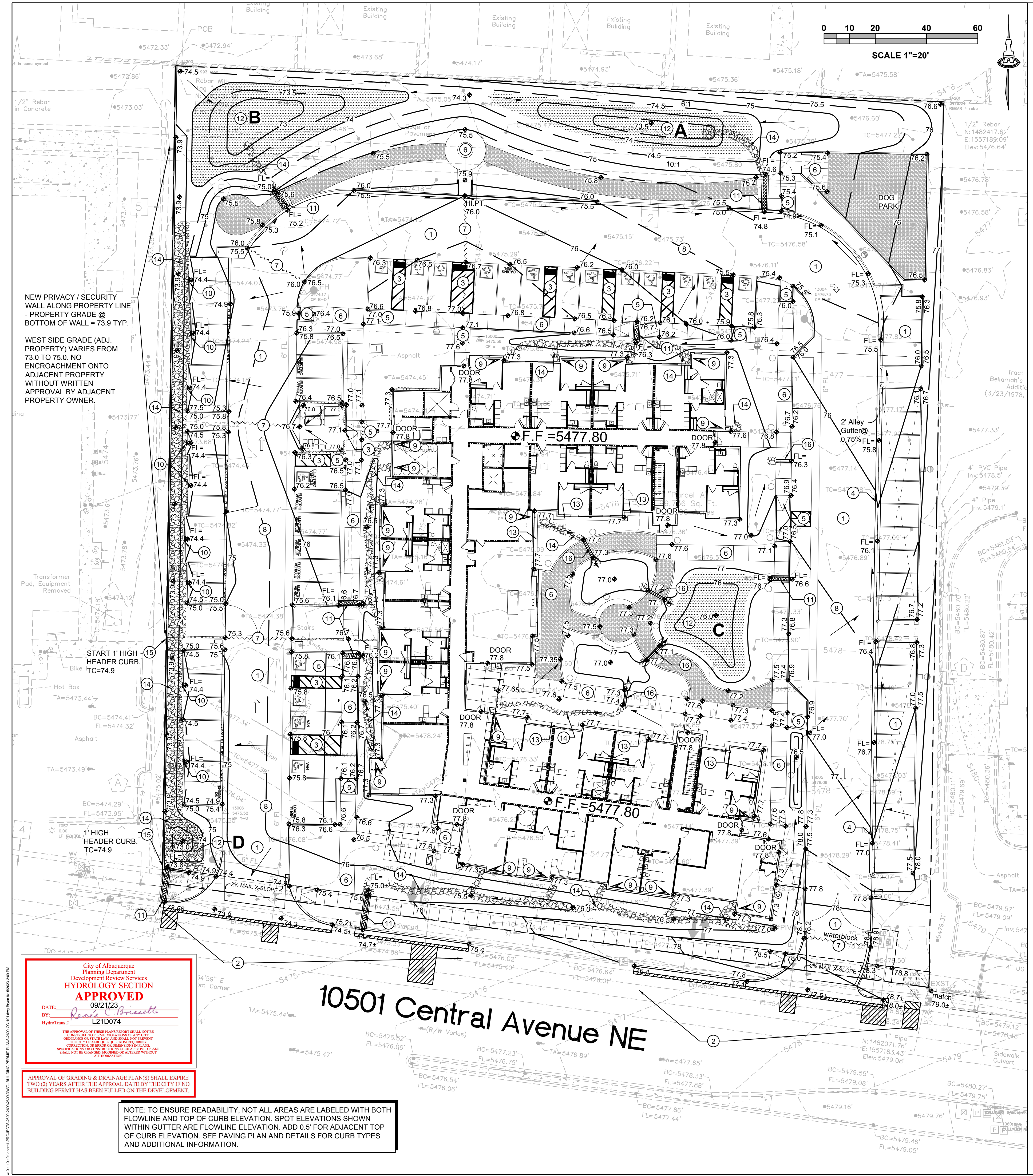
Sincerely,

*Renée C. Brissette*

Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department







NEW PRIVACY / SECURITY WALL ALONG PROPERTY LINE - PROPERTY GRADE @ BOTTOM OF WALL = 73.9 TYP.

WEST SIDE GRADE (ADJ. PROPERTY) VARIES FROM 73.0 TO 75.0. NO ENCROACHMENT ONTO ADJACENT PROPERTY WITHOUT WRITTEN APPROVAL BY ADJACENT PROPERTY OWNER.

City of Albuquerque  
Planning Department  
Development Review Services  
**HYDROLOGY SECTION**  
**APPROVED**  
DATE: 09/21/23  
BY: *Renee C. Brissett*  
HydroTrans # L21D074

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.

NOTE: TO ENSURE READABILITY, NOT ALL AREAS ARE LABELED WITH BOTH FLOWLINE AND TOP OF CURB ELEVATION. SPOT ELEVATIONS SHOWN WITHIN GUTTER ARE FLOWLINE ELEVATION. ADD 0.5' FOR ADJACENT TOP OF CURB ELEVATION. SEE PAVING PLAN AND DETAILS FOR CURB TYPES AND ADDITIONAL INFORMATION.

## STORMWATER QUALITY

REDEVELOPMENT: THIS SITE WAS PREVIOUSLY FULLY DEVELOPED. REDEVELOPMENT IS SUBJECT TO A REDUCED STORMWATER QUALITY VOLUME REQUIREMENT OF 0.26"/SF OF IMPERVIOUS AREA.

THE IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS 66% OF TOTAL AREA (0.66 \* 99,735 SF) = 65,826 SF. THE REQUIRED STORMWATER QUALITY RETENTION VOLUME = 0.26"/12" TYPE 'D' AREA = 1,427 CF.

NOTE THAT ALTHOUGH A PORTION OF THE PARKING STALLS AROUND THE PERIMETER WILL BE CONSTRUCTED WITH BASE COURSE (PERVIOUS PAVEMENT), THE STORMWATER QUALITY VOLUME IS BASED ON IMPERVIOUS PAVEMENT FOR ALL PARKING & DRIVE AISLES.

POND A			POND C		
Contour	Area	Volume	Contour	Area	Volume
4974.3	1340		4976.7	964	
4973.5	250	636 CF	4976.0	470	502 CF

POND B			POND D		
Contour	Area	Volume	Contour	Area	Volume
4974.0	1849		4973.8	188	
4973.0	400	1125 CF	4973.0	65	101 CF

| TOTAL |  | 2364 |  |  |  |

## 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.

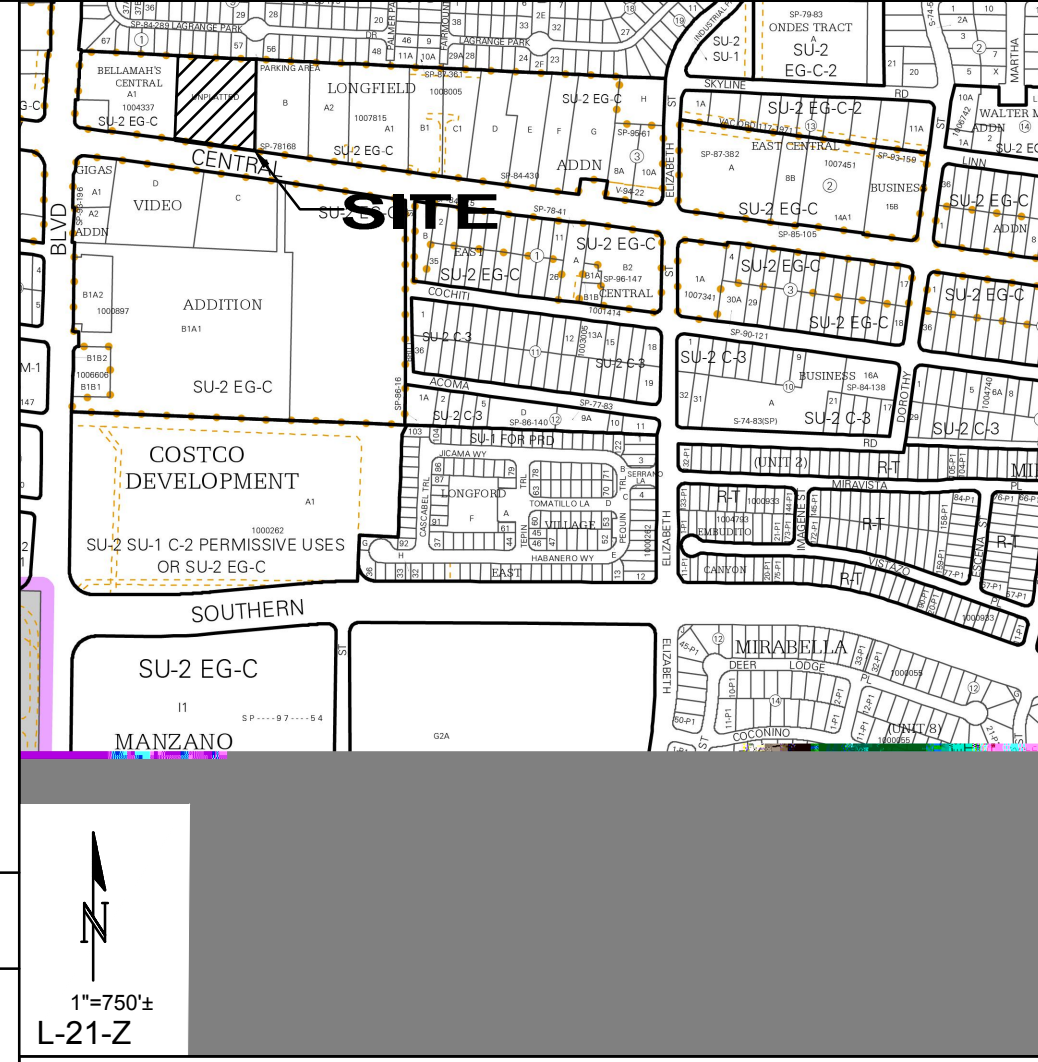
## KEYED NOTES

- NEW PAVING AT ELEVATIONS SHOWN. SEE PAVING PLAN FOR MATERIAL, EXTENTS, JOINTS AND PAVING SECTIONS.
- SEE PUBLIC WORK ORDER DRAWINGS AND/OR BUILDING PERMIT PLANS FOR CONSTRUCTION WITHIN R/W INCLUDING NEW ACCESS DRIVES, ADA COMPLIANT RAMPS, PUBLIC SIDEWALKS, ETC. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.
- ADA COMPLIANT PARKING SPACES AND ACCESS AISLES AT ELEVATIONS SHOWN.
- ALLEY GUTTER. SEE PAVING DETAILS.
- ADA COMPLIANT 1:12 MAX. SLOPE ADA COMPLIANT ACCESS RAMP.
- ADA COMPLIANT PEDESTRIAN WALK AT ELEVATIONS SHOWN.
- HIGH POINT / GRADE BREAK LOCATION.
- 0.5' DESIGN CONTOURS ARE SHOWN DASHED WHERE NECESSARY TO CLARIFY GRADING CONCEPT.
- ROOF DISCHARGE LOCATION - INSTALL SPLASHPAD (3' DIA. X 8" DEEP ANGULAR ROCK OR PRECAST UNIT) AND 2-3" WIDE (MEANDERING) ANGULAR ROCK SWALE TO LIMITS SHOWN.
- 18" WIDE (BOTTOM WIDTH) OPENING IN CURB TO PASS FLOW. SEE PAVING DETAILS. SLOPE GUTTER AT 2% MAX. IN DIRECTION OF FLOW (EACH CURB OPENING LOCATION).
- 18" WIDE COVERED CONCRETE SIDEWALK CULVERT PER COA STD. DWG. 2236. SEE PAVING DETAIL FOR ADDITIONAL INFORMATION. S.O.19 PERMIT REQUIRED FOR CONSTRUCTION IN THE R.O.W. - SEE NOTES THIS SHEET.
- STORMWATER QUALITY RETENTION POND AT ELEVATIONS SHOWN. STORMWATER QUALITY PONDING VOLUMES MAY BE VERIFIED AS PART OF A S.O.19 PERMIT REQUIRED FOR CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- CONSTRUCT 18" WIDE X 4" THICK CONCRETE APRON ADJACENT TO BUILDING THIS AREA TO EXTENTS SHOWN. TOP OF CONCRETE AT BUILDING = 0.1' BELOW FINISH FLOOR ELEVATION. SLOPE APRON AWAY FROM BUILDING AT 2% SLOPE.
- INSTALL ANGULAR ROCK EROSION PROTECTION TO LIMITS HATCHED. EROSION PROTECTION MUST BE PLACED TO ALLOW STORMWATER TO PASS SMOOTHLY. HAND PLACE AT CURB OPENINGS AND SWALES TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY. ALL EROSION PROTECTION TO BE 4" AVG. DIA. (2" TO 6") @ 8" DEEP OVER NON-WOVEN GEOTEXTILE (US135NW O.A.E.).
- CONSTRUCT MODIFIED HEADER CURB TO ACHIEVE GRADE DIFFERENCE SHOWN. SEE PAVING DETAIL.
- CONCRETE ALLEY GUTTER CROSSING WITH TWO 3" PIPES.

## CALCULATIONS

Faralito Senior Community : July 21, 2023					
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:	99736	SF	=	2.29	ACRE
DEVELOPED FLOWS:			EXCESS PRECIP:		
	SF	%	Precip. Zone	3	
Area A	=	0	0%	E <sub>A</sub>	= 0.67
Area B	=	16955	17%	E <sub>B</sub>	= 0.86
Area C	=	16955	17%	E <sub>C</sub>	= 1.09
Area D	=	65826	66%	E <sub>D</sub>	= 2.58
Total	=	99736	100%	E <sub>D</sub>	= 2.58
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)					
Weighted E =		$\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$			
		Dev. E = 2.03 in.			
On-Site Volume of Runoff: V360 =		E* A / 12			
		Dev. V <sub>360</sub> = 16908 CF			
On-Site Peak Discharge Rate: Q <sub>p</sub> = Q <sub>pA</sub> A <sub>A</sub> + Q <sub>pB</sub> A <sub>B</sub> + Q <sub>pC</sub> A <sub>C</sub> + Q <sub>pD</sub> A <sub>D</sub> / 43,560					
For Precipitation Z <sub>o</sub> 3					
Q <sub>pA</sub>	=	1.84	Q <sub>pC</sub>	=	3.17
Q <sub>pB</sub>	=	2.49	Q <sub>pD</sub>	=	4.49
		Dev. Q <sub>p</sub>		=	9.0 CFS

## C.O.A VICINITY MAP L-21



## PROJECT INFORMATION

PROPERTY: THE PROPERTY IS A PREVIOUSLY DEVELOPED COMMERCIAL PROPERTY BOUNDED ON THE NORTH BY SINGLE FAMILY RESIDENTIAL, TO THE EAST AND WEST BY DEVELOPED COMMERCIAL PROPERTY, AND TO THE SOUTH BY CENTRAL AVENUE.

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

LOT SIZE: 2.29 ACRES ±

LEGAL: PARCEL A AS SHOWN ON THE BOUNDARY SURVEY OF TRACT C, VIDEO ADDITION AND PARCELS OF LAND OWNED BY THE STATE OF NEW MEXICO

BENCHMARK: VERTICAL DATUM SHOWN HEREON WAS BASED UPON ALBUQUERQUE CONTROL SURVEY MONUMENT "5-K20" HAVING AN ELEVATION OF 5429.995.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0359G DATED 9/26/2008, THE SITE IS LOCATED WITHIN ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

SURVEYOR: BRIAN J. MARTINEZ, CSI-CARTESIAN SURVEYS INC. P.O. BOX 44414 RIO RANCHO, NEW MEXICO 87174

DRAINAGE PLAN CONCEPT: ONSITE FLOW ON THE EAST AND NORTH SIDES OF THE PROPOSED BUILDING WILL BE ROUTED NORTH TO WATER HARVESTING (STORMWATER QUALITY) PONDS ON THE NORTH END OF THE PROPERTY. THIS AREA WILL BE UTILIZED AS A NATURAL AREA FOR PLANTS, ANIMALS, AND INSECTS.

ONSITE FLOW ON THE WEST SIDE OF THE PROPOSED BUILDING WILL BE DIRECTED TO A SHALLOW STORMWATER QUALITY POND AT THE SOUTHWEST CORNER OF THE PROPERTY.

ONCE THE STORMWATER QUALITY PONDS FILL, EXCESS STORMWATER WILL BE RELEASED TO CENTRAL AVE. VIA TWO PROPOSED COVERED SIDEWALK CULVERTS.

TOTAL DISCHARGE FROM THE SITE WILL BE LESS THAN HISTORIC DUE TO A REDUCTION OF IMPERVIOUS AREA AS WELL AS THE ADDITION OF STORMWATER QUALITY PONDS.

## LEGEND

5478	EXISTING CONTOUR
5478.21	EXISTING SPOT ELEVATION
77	PROPOSED 1.0' CONTOUR
77.5	PROPOSED 0.5' CONTOUR
77.0	PROPOSED SPOT ELEVATION
→	FLOW DIRECTION
FF = 5477.80	FINISH FLOOR ELEVATION
X	STORMWATER QUALITY POND ID

## 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" [or (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

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

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Engineer 09-15-2023

FAROLITO  
SENIOR COMMUNITY  
10501 CENTRAL AVE. NE

DESIGN DEVELOPMENT		Description	
ISSUE:	PROJECT NUMBER: IA 2809	No	Date
FILE:	DRAWN BY:		
CHECKED BY:	DATE:		
SHEET TITLE			
GRADING & DRAINAGE PLAN			
SHEET NUMBER			
CG101			