

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

September 14, 2023

Robert Fierro
Fierro & Company
6300 Montano RD. NW
Albuquerque NM, 87104

RE: **Lot 21 Block 6 Volcano Cliffs Unit 18
6604 Papagayo Rd NW SAD 228
Grading and Drainage Plan
Engineers Stamp Date; 5/23/2023 (D10D003J5)
Pad Certification Date; 9/12/2023**

Mr. Fierro,

Based upon the information provided in your submittal received 9/12/2023, this plan is approved for Building Permit.

PO Box 1293

Advise the owner contractor not to use dirt as a ramp to climb the curb, use lumber or crusher fines for this purpose.

Albuquerque

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained with the approved G&D plan and Pad Certification. Also, if a swimming pool is to be placed the grading and drainage plan will change and will need to be resubmitted.

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Tiequan Chen P.E. CFM
Principal Engineer, Hydrology
Planning Department, Development Review Services

RR/TC
File D10D003J5



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ OTHER (SPECIFY) _____
- _____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- _____ GRADING PERMIT APPROVAL
- _____ SO-19 APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ GRADING/ PAD CERTIFICATION
- _____ WORK ORDER APPROVAL
- _____ CLOMR/LOMR
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

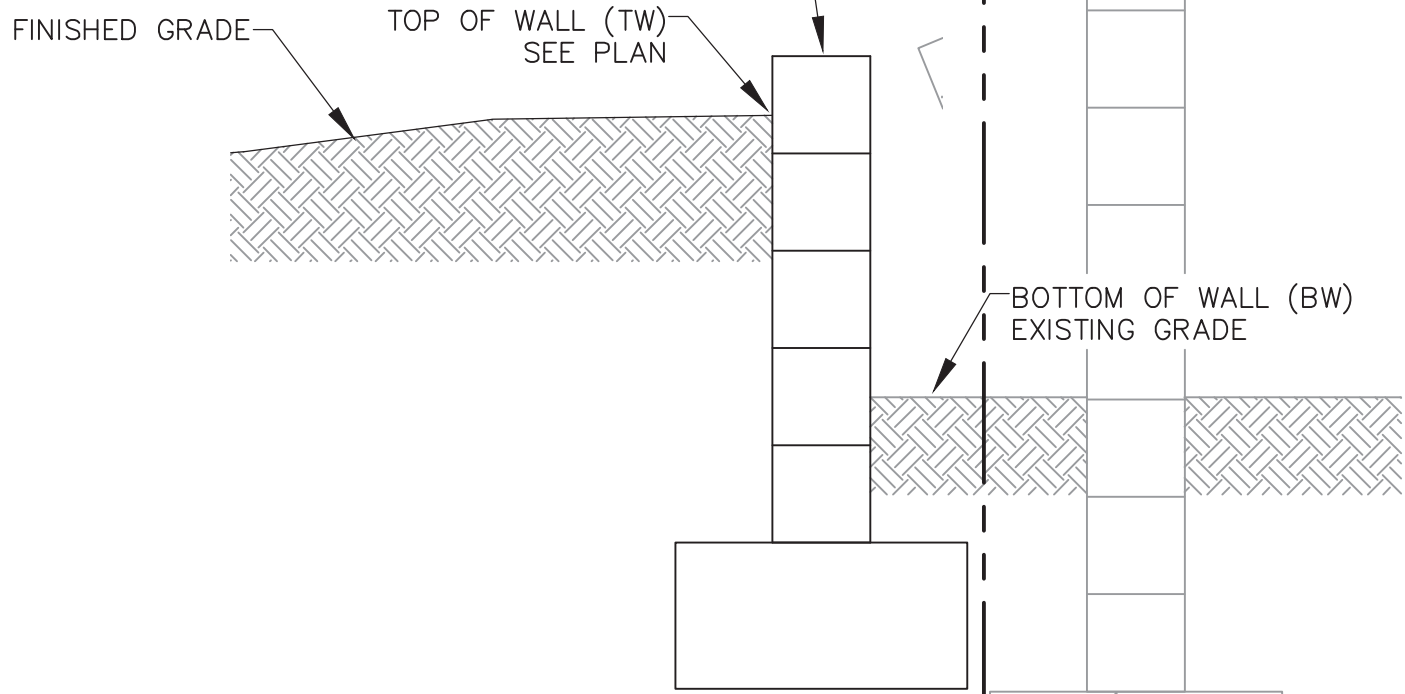
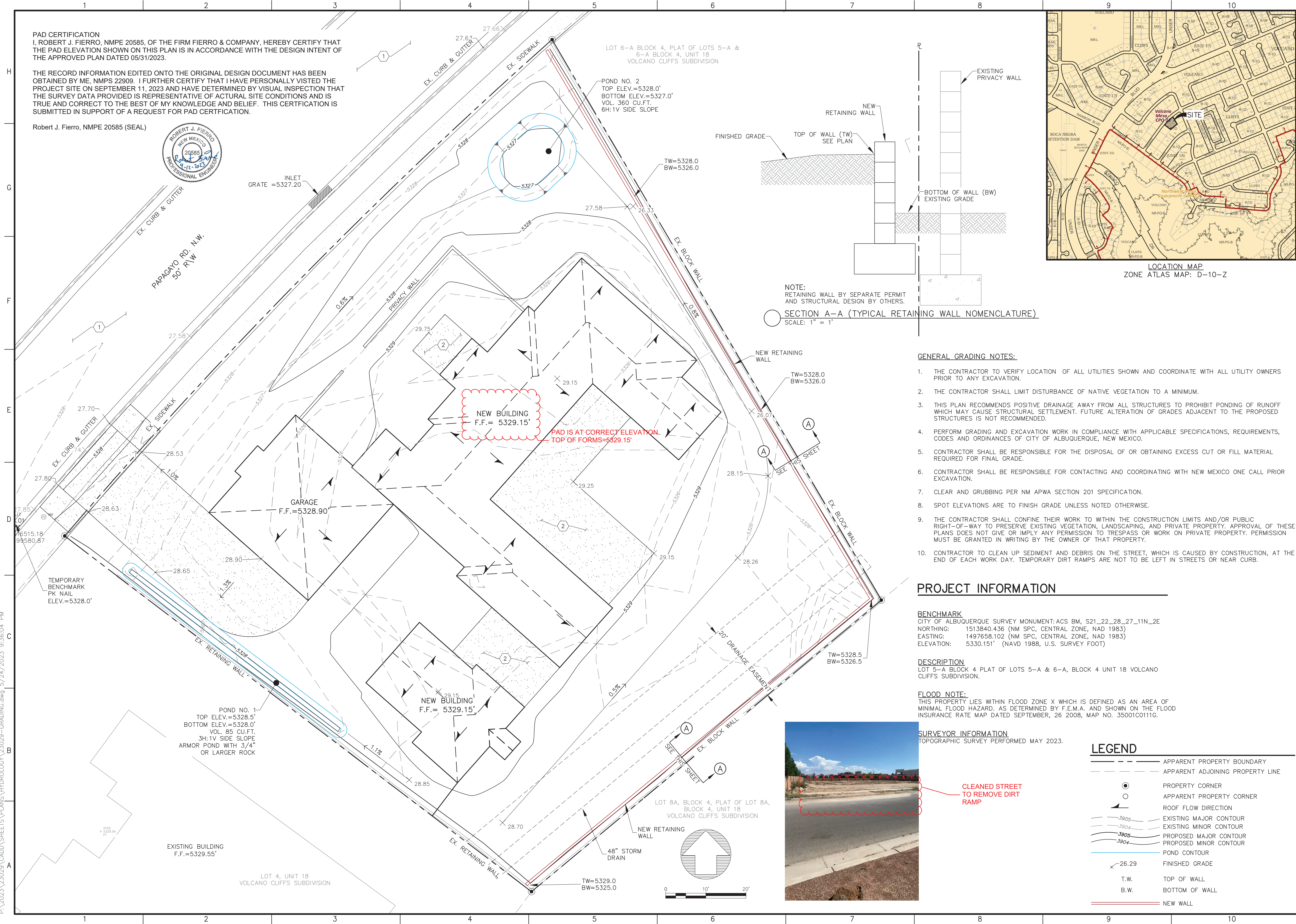
ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

PAD CERTIFICATION
I, ROBERT J. FIERRO, NMPE 20585, OF THE FIRM FIERRO & COMPANY, HEREBY CERTIFY THAT THE PAD ELEVATION SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 05/31/2023.

THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME, NMPS 22909. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISTED THE PROJECT SITE ON SEPTEMBER 11, 2023 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 PAD CERTIFICATION.

Robert J. Fierro, NMPE 20585 (SEAL)



NOTE:
RETAINING WALL BY SEPARATE PERMIT
AND STRUCTURAL DESIGN BY OTHERS.

SECTION A-A (TYPICAL RETAINING WALL NOMENCLATURE)
SCALE: 1" = 1'

GENERAL GRADING NOTES:

1. THE CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES SHOWN AND COORDINATE WITH ALL UTILITY OWNERS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL LIMIT DISTURBANCE OF NATIVE VEGETATION TO A MINIMUM.
3. THIS PLAN RECOMMENDS POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES TO PROHIBIT PONDING OF RUNOFF WHICH MAY CAUSE STRUCTURAL SETTLEMENT. FUTURE ALTERATION OF GRADES ADJACENT TO THE PROPOSED STRUCTURES IS NOT RECOMMENDED.
4. PERFORM GRADING AND EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE SPECIFICATIONS, REQUIREMENTS, CODES AND ORDINANCES OF CITY OF ALBUQUERQUE, NEW MEXICO.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF OR OBTAINING EXCESS CUT OR FILL MATERIAL REQUIRED FOR FINAL GRADE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH NEW MEXICO ONE CALL PRIOR EXCAVATION.
7. CLEAR AND GRUBBING PER NM APWA SECTION 201 SPECIFICATION.
8. SPOT ELEVATIONS ARE TO FINISH GRADE UNLESS NOTED OTHERWISE.
9. THE CONTRACTOR SHALL CONFINE THEIR WORK TO WITHIN THE CONSTRUCTION LIMITS AND/OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION, LANDSCAPING, AND PRIVATE PROPERTY. APPROVAL OF THESE PLANS DOES NOT GIVE OR IMPLY ANY PERMISSION TO TRESPASS OR WORK ON PRIVATE PROPERTY. PERMISSION MUST BE GRANTED IN WRITING BY THE OWNER OF THAT PROPERTY.
10. CONTRACTOR TO CLEAN UP SEDIMENT AND DEBRIS ON THE STREET, WHICH IS CAUSED BY CONSTRUCTION, AT THE END OF EACH WORK DAY. TEMPORARY DIRT RAMPS ARE NOT TO BE LEFT IN STREETS OR NEAR CURB.

PROJECT INFORMATION

BENCHMARK
CITY OF ALBUQUERQUE SURVEY MONUMENT: ACS BM, S21_22_28_27_11N_2E
NORTHING: 1513840.436 (NM SPC, CENTRAL ZONE, NAD 1983)
EASTING: 1497658.102 (NM SPC, CENTRAL ZONE, NAD 1983)
ELEVATION: 5330.151' (NAVD 1988, U.S. SURVEY FOOT)

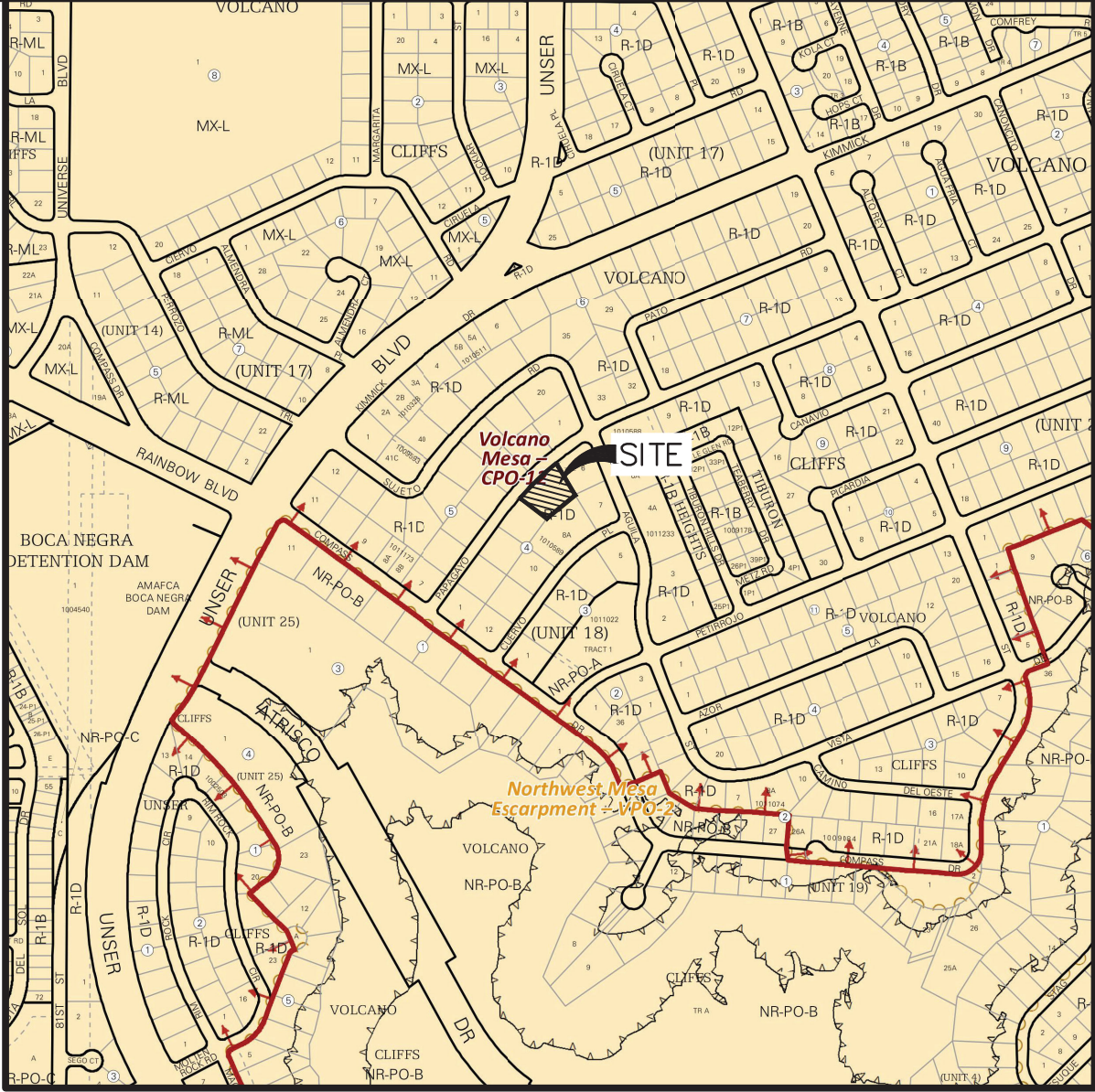
DESCRIPTION
LOT 5-A BLOCK 4 PLAT OF LOTS 5-A & 6-A, BLOCK 4 UNIT 18 VOLCANO CLIFFS SUBDIVISION.

FLOOD NOTE:
THIS PROPERTY LIES WITHIN FLOOD ZONE X WHICH IS DEFINED AS AN AREA OF MINIMAL FLOOD HAZARD. AS DETERMINED BY F.E.M.A. AND SHOWN ON THE FLOOD INSURANCE RATE MAP DATED SEPTEMBER, 26 2008, MAP NO. 35001C0111G.

SURVEYOR INFORMATION
TOPOGRAPHIC SURVEY PERFORMED MAY 2023.

LEGEND

- APPARENT PROPERTY BOUNDARY
- - - APPARENT ADJOINING PROPERTY LINE
- PROPERTY CORNER
- APPARENT PROPERTY CORNER
- ROOF FLOW DIRECTION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- POND CONTOUR
- FINISHED GRADE
- T.W. TOP OF WALL
- B.W. BOTTOM OF WALL
- NEW WALL



LOCATION MAP
ZONE ATLAS MAP: D-10-Z

Fierro & Company
ENGINEERING | SURVEYING
3201 4TH STREET NW, SUITE C
ALBUQUERQUE, NEW MEXICO 87107
PH (505) 352-8930
www.fierrocompany.com



ARAGON RESIDENCE
6604 PAPAGAYO RD N.W.
ALBUQUERQUE, NM 87120

PROJECT NAME

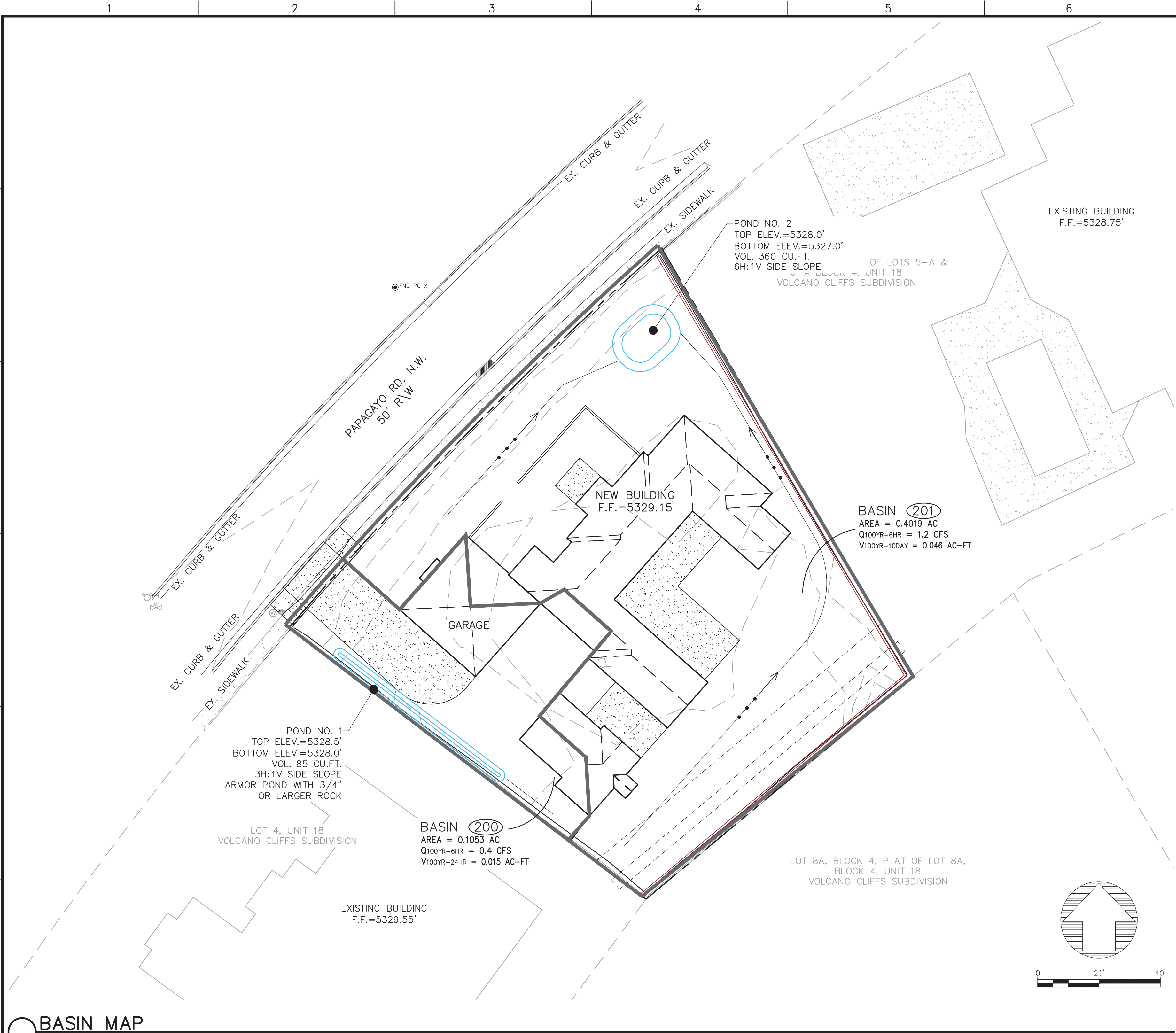
BY	DESCRIPTION	DATE	REV.

PROJECT NO: 23029
DESIGNED BY: RJF
DRAWN BY: JB
CHECKED BY: RJF
DATE: MAY 2023
SHEET TITLE

GRADING PLAN

SHEET NO:
C-1

P:\2023\23029\CADD\23029-DRAINAGE.dwg 5/24/2023 9:37:21 PM



BASIN MAP

HYDROLOGY SUMMARY									
BASIN	Total Area (acres)	Land Treatment (%)				Weighted E	Q ₁₀₀ (cfs)	V _{100yr-24hr} (ac-ft)	SWQV (cf)
		A	B	C	D				
200	0.1053	0.0	20.0	32.0	48.0	1.526	0.4	0.015	77
201	0.4019	0.0	20.0	50.1	29.9	1.291	1.2	0.046	183
ALLOWABLE	0.5072	0.0	20.0	46.0	34.0	1.345	1.6	0.061	2676

HYDROLOGY SUMMARY

POND NO. 1					
Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5328	65	0.001	0	0.000	0
5328.5	273	0.006	0.002	0.002	65

POND NO. 2					
Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5327	173	0.004	0	0.000	0
5327.5	345	0.008	0.003	0.003	130
5328	575	0.013	0.005	0.008	360

STAGE-STORAGE TABLE

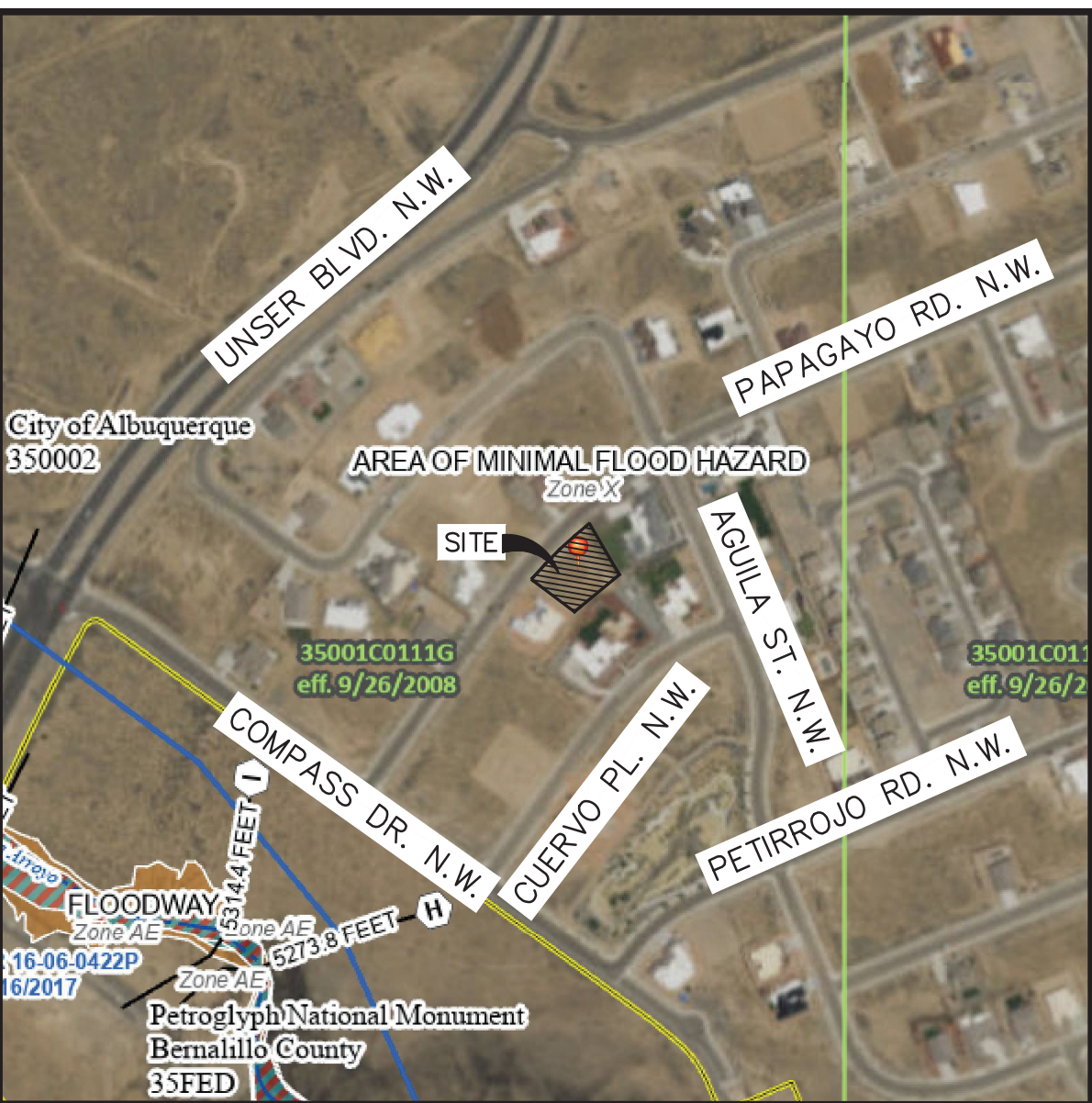
Introduction
The site is located at 6604 PAPAGAYO ROAD N.W. THE PROPERTY IS VACANT AND A 3,500 SQ.FT. CUSTOM HOME IS PROPOSED. THE PURPOSE OF THIS GRADING & DRAINAGE PLAN IS TO 1) PROVIDE HYDROLOGIC AND HYDRAULIC ANALYSIS OF THE PROPOSED CONDITION, 2) SATISFY ALLOWABLE STORMWATER DISCHARGE RATES, AND 4) SEEK APPROVAL FOR BUILDING PERMIT.

METHODOLOGY
HYDROLOGIC PROCEDURES PRESENTED IN THE HYDROLOGY SECTION OF THE DMP, ARTICLE 6-2(A), APPROVED JUNE 8, 2020 WERE FOLLOWED. PRECIPITATION ZONE 1 DATA WAS USED IN THE HYDROLOGIC COMPUTATIONS.

EXISTING CONDITION
THE VACANT PROPERTY IS 0.5 ACRES. THE ADJOINING LOTS ARE DEVELOPED WITH CUSTOM HOMES. THE SITE DOES NOT RECEIVE OFFSITE RUNOFF FROM THE ADJOINING LOTS. THERE IS A 20-FOOT WIDE DRAINAGE EASEMENT ALONG THE REAR PROPERTY LINE. A 42-INCH RCP PIPE IS CENTERED IN THIS EASEMENT. THE LOT IS LOWER THAN THE ROAD; THEREFORE, RUNOFF PUDDLES AT THE REAR OF THE PROPERTY.

PROPOSED CONDITION
A CUSTOM HOME WITH A FOOTPRINT OF APPROXIMATELY 3,500 SQ.FT. IS PROPOSED. THIS SITE IS ALLOWED 34% LAND TREATMENT "D" AS OUTLINED IN THE SAD 228 DRAINAGE REPORT. THE PROPOSED LAND TREATMENT IS 33.6% WHICH IS LESS THAN THE ALLOWABLE. THEREFORE, THE PROPOSED SITE IS ONLY RESPONSIBLE FOR STORING THE STORM WATER QUALITY VOLUME. TWO PONDS ARE PROPOSED TO STORE THE STORM WATER QUALITY VOLUME. RUNOFF VOLUME IN EXCESS OF THE 90 PERCENTILE STORM WILL OVERFLOW TO PAPAGAYO ROAD.

DRAINAGE NARRATIVE



FLOOD INSURANCE RATE MAP
MAP NO. 35001C0111G
EFFECTIVE DATE: 09/26/2008

LEGEND	
	PROPERTY BOUNDARY
	FLOW PATH
	ROOF FLOW
	SURFACE DRAINAGE
	UTILITY EASEMENT LINE
	FLOWLINE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED BASIN

Fierro & Company
ENGINEERING | SURVEYING
3201 4TH STREET NW, SUITE C
ALBUQUERQUE, NEW MEXICO 87107
PH (505) 352-8930
www.fierrocompany.com

ENGINEER'S SEAL

ARAGON RESIDENCE
6604 PAPAGAYO RD N.W.
ALBUQUERQUE, NM 87120

PROJECT NAME		DESCRIPTION	DATE	REV.	BY

DESIGNED BY:	RJF
DRAWN BY:	JB
CHECKED BY:	RJF
DATE:	MAY 2023

SHEET TITLE
DRAINAGE PLAN

SHEET NO:
D-1