CITY OF ALBUQUERQUE

Planning Department

Mayor Timothy M. Keller

January 4, 2018

Jackie McDowell, PE
McDowell Engineering, Inc.
7820 Beverly Hills Ave NE
Albuquerque, NM 87121

RE: **Lot 6 Block 4 Unit 18, S.A.D. 228**
Volcano Cliffs Subdivision
6600 Papagayo Rd NW
Grading and Drainage Plan
Engineers Stamp Date 1/2/18 (D10D003J6)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 1/03/18, this plan is approved for Grading Permit.

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.

Please inform the builder/owner to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 1/2/18.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

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

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JDH
C: File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

STANDARD WALL AND PAD CERTIFICATION NOTES:

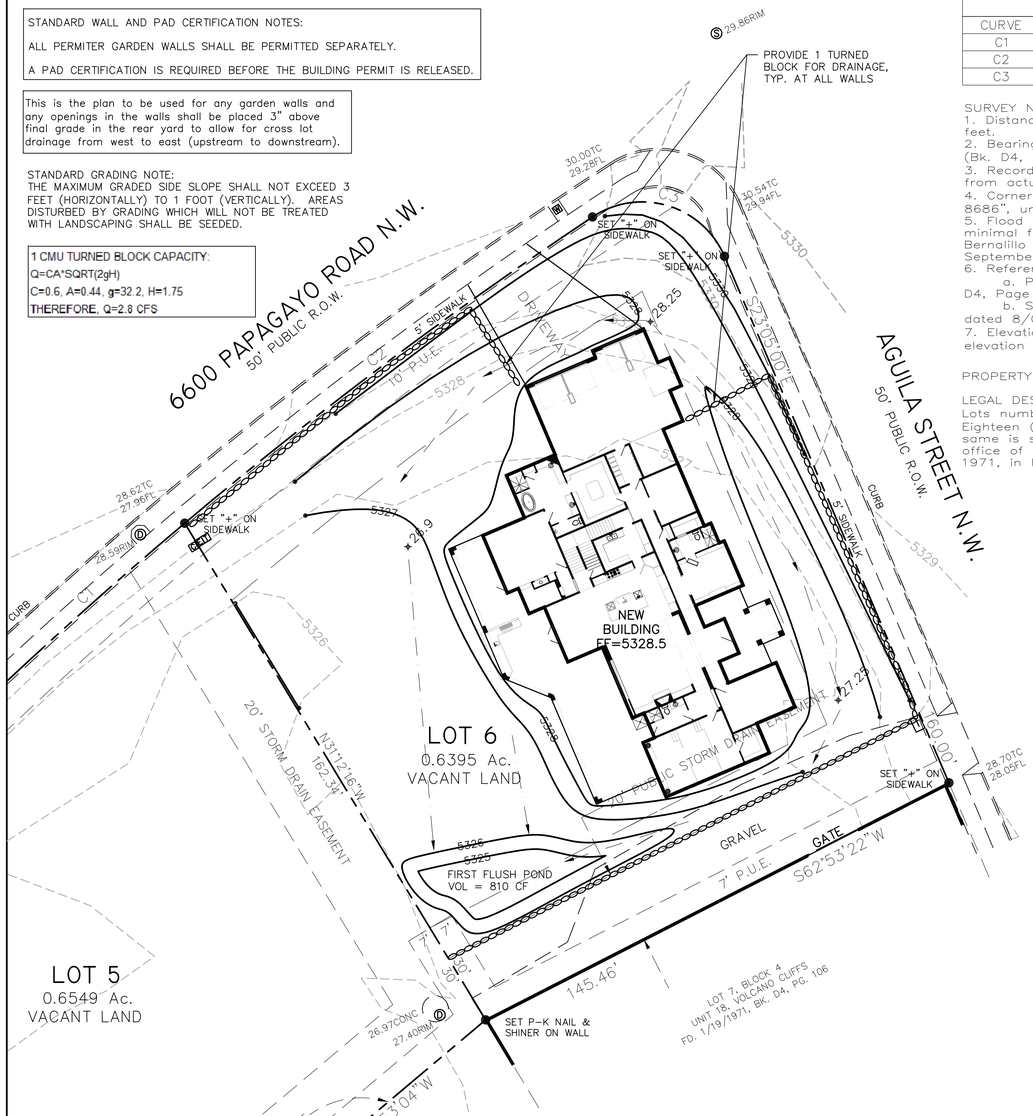
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

A PAD CERTIFICATION IS REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).

STANDARD GRADING NOTE:
THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

1 CMU TURNED BLOCK CAPACITY:
Q=CA*SQRT(2gH)
C=0.6, A=0.44, g=32.2, H=1.75
THEREFORE, Q=2.8 CFS



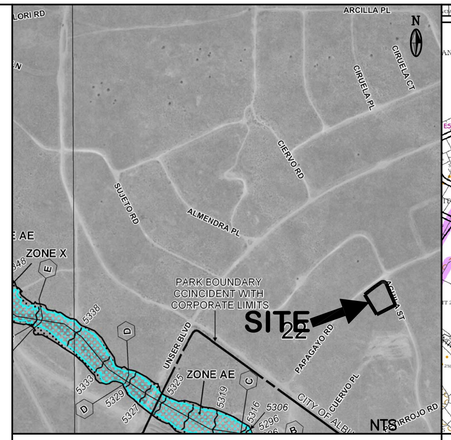
GRADING
12-4-17
1=20
PEC0117L

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD BEARING	CHORD	DELTA
C1	213.85	1273.00	S45°03'52"W	213.60	9°37'30"
C2	142.63	1273.00	S53°05'13"W	142.56	6°25'11"
C3	43.90	25.00	N73°23'36"W	38.48	100°37'12"

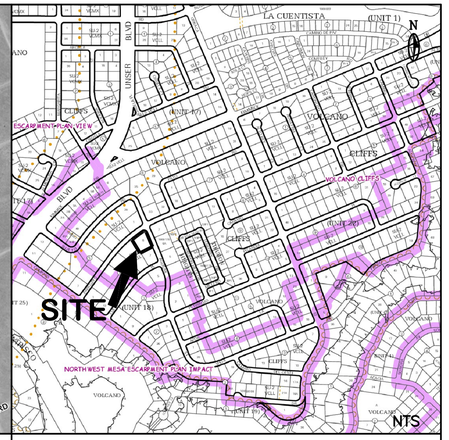
SURVEY NOTES:
1. Distances shown hereon are horizontal ground distances in US Survey feet.
2. Bearings are based on the plat of Unit 18, Volcano Cliffs Subdivision (Bk. D4, Pg. 106), as monumented by found corners.
3. Record dimensions are shown in parenthesis ( ), where record differs from actual measurements.
4. Corners shown thus " " are #4 rebar w/cap stamped "G. Gritsko, PS 8686", unless otherwise shown.
5. Flood Note: The property shown hereon is located in Zone X, areas of minimal flood hazard, according to the Flood Insurance Rate Map of Bernalillo County, New Mexico, Panel No. 35001C0111G, effective date September 26, 2008.
6. Reference documents:
   a. Plat of Unit 18, Volcano Cliffs Subdivision, filed 1/19/1971, Bk. D4, Page 106.
   b. Stewart Title of Albuquerque LLC commitment No. 01147-40512, dated 8/09/2017.
7. Elevations shown hereon are referenced to "ACS BM 14-D10". Published elevation = 5322.212 (NAVD 1988 datum).

PROPERTY ADDRESS: 6600 & 6604 Papagayo Road NW, Albuquerque, NM

LEGAL DESCRIPTION:
Lots numbered Five (5) and Six (6) in Block numbered Four (4), in Unit Eighteen (18) of Volcano Cliffs, in Bernalillo County, New Mexico, as the same is shown and designated on the Plat of said Addition, filed in the office of the County Clerk of Bernalillo County, New Mexico, on January 19, 1971, in Plat Book D4, Page 106.



FEMA FLOODWAY MAP PANEL #111G



VICINITY MAP ZONE ATLAS D-10

LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	28.70TC 28.05FL	XX.X

DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home is proposed for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.64 acre site is undeveloped. The site is bounded on the northwest by Papagayo Road NW, on the northeast by Aguila Street, and on the southeast and southwest by private property. The site is relatively level in the center, after it slopes down from the streets, and has a gentle slope from the northeast to the southwest. As shown on FEMA Panel #111G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 228 Drainage Report by Wilson & Company, drainage from the lots has been master planned to be intercepted by drainage features downstream of the properties. Current COA Drainage Ordinance requires that ponds must be provided to handle the First Flush volume which has been calculated and is included on this plan. As shown by the plan, the building is located in the center/easterly portion of the lot. No off-site flows enter the site due to existing grades on adjacent streets which transport offsite runoff through public streets around the site. On site flows will drain around the structure via swales, and flow to the south to the first flush retention pond. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and pond.

Supplemental calculations are shown as part of this Grading and Drainage plan.

CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

PROPERTY ADDRESS:

6600 Papagayo Road NW

TOPOGRAPHY:

Topographic information provided by Gary Gritsko dated August, 2017.

GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.

2. This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.

3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.

4. This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.

5. Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.

6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.

7. The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.

9. 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.

10. Contactor shall ensure that no site soils/sediment or silt enters the righ-of-ways during construction.

11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

ZONE 1

Areas: (acres)	Existing	Proposed
Treatment A	0.64	0.00
Treatment B	0.00	0.45
Treatment C	0.00	0.00
Treatment D	0.00	0.19
Total (acres) =	0.64	0.64

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5326	1106	
		810
5325	514	

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.023	0.056	0.004	0.028	0.000	0.012
Volume (cubic feet) =	1,022	2,453	186	1,215	0	513

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.64 AC * 43560 SF/AC) = 790 CF

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.83	0.00	0.15	0.00	0.00	0.00
Treatment B	0.00	0.91	0.00	0.34	0.00	0.01
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.00	0.83	0.00	0.55	0.00	0.32
Total Q (cfs) =	0.83	1.74	0.15	0.89	0.00	0.33

JACKIE S. McDOWELL NEW MEXICO 14269 REGISTERED PROFESSIONAL ENGINEER
1-2-18

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on December 5, 2017 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 6, BLOCK 4, UNIT 18
VOLCANO CLIFFS SUBDIVISION

PECK (BUILDER: MICHAEL SANCHEZ) - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 BEVERLY HILLS AVE. NE • ALBUQUERQUE, NM 87122
TELE: 505-828-2430 • FAX: 505-821-4857

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1

File PEC0117L Date DECEMBER,2017