

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

December 10, 2018

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

RE: **Lot 26 Block 5, S.A.D. 227**
Unser Cliffs Subdivision
8016 Victoria NW
Grading and Drainage Plan
Engineers Stamp Date 12-04-18 (E10D055)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 12/06/18, this plan is approved for Grading Permit.

PO Box 1293

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

Albuquerque

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.

NM 87103

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 12/04/18.

www.cabq.gov

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 E10D055



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Other Contact: _____ **Contact:** _____

Address: _____

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

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes _____ No

DEPARTMENT _____ TRANSPORTATION _____ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE REPORT
- _____ DRAINAGE MASTER PLAN
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ STREET LIGHT LAYOUT
- _____ 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: _____

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 SEEDDED.

STANDARD WALL AND PAD CERTIFICATION NOTES:

ALL PERMITTER 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).

PROPERTY LINE WALLS AND GARDEN WALLS SHALL HAVE TURNED BLOCKS OR WEEP HOLES FOR DRAINAGE. ALL OPENINGS IN THE WALLS SHALL BE 3" ABOVE GRADE.

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S53°20'03"W	16.01'
	(N53°14'E)	(16.00')

CURVE TABLE					
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	46.91'	110.00'	24°25'56"	S41°06'22"W	46.55'
	(46.85')	(110.00')			

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

SURVEY LEGEND

▲	CONTROL MONUMENT (AS NOTED)
□	FOUND REBAR (AS NOTED)
⊕	FOUND PK NAIL (AS NOTED)
⊙	TELEPHONE MANHOLE
⊞	TELEPHONE PEDESTAL
⊞	ELECTRIC BOX
⊞	ELECTRIC METER
⊞	CABLE TV
⊞	POWER POLE
⊞	GUY WIRE
⊞	WATER METER
⊞	SPOT ELEVATIONS
⊞	OVERHEAD POWER
⊞	BLOCK WALL
■	BUILDING HATCH
■	CONCRETE HATCH

SURVEY NOTES:

PROJECT LOCATION

8016 VICTORIA DRIVE NORTHWEST, ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION

LOT 26, BLOCK 5, UNIT 5, VOLCANO CLIFFS SUBDIVISION

SURVEY INFORMATION

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC, CORRALES, NEW MEXICO NOVEMBER 2018.

PROJECT BENCHMARK

PROJECT BENCHMARK IS A CITY OF ALBUQUERQUE SURVEY BRASS DISC SET 1.0' X 1.0' CONCRETE, 0.40' ABOVE NATURAL GROUND AND IS STAMPED "CALB. LINE STA. "A" TO REACH THE STATION FROM THE INTERSECTION OF UNSER BOULEVARD NORTHWEST AND MONTAÑO ROAD NORTHWEST, TRAVEL NORTHWEST ON UNSER BOULEVARD 0.80 MILES TO MOLTON ROCK ROAD ON THE LEFT, TRAVEL WEST ON MOLTON ROCK ROAD 0.10 MILES TO 81 ST STREET, TAKE LEFT AND TRAVEL SOUTH ON 81ST STREET 0.50 MILES TO THE POINT ON THE RIGHT. ELEVATION = 5,329.531 FEET (NAVD 88 VERTICAL DATUM).

TEMPORARY BENCHMARK

TEMPORARY BENCHMARK CP 100 IS A TERRA LAND SURVEY 1/2" REBAR WITH CAP STAMPED "TERRA CONTROL". ELEVATION = 5,321.53 FEET (NAVD 1988 VERTICAL DATUM).

NOTES

1. FIELD SURVEY PERFORMED IN NOVEMBER 2018.
2. TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GROUND COORDINATES REFERENCED TO NAD 1983 NEW MEXICO CENTRAL ZONE. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GPS RTK METHODS. COMBINED GROUND TO GRID FACTOR IS 0.999672107749/1.000327999805 SCALED AROUND 0.0.
3. ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
4. CONTOURS SHOWN HEREON ARE AT A ONE FOOT INTERVAL REFERENCED TO THE NAVD 88 VERTICAL DATUM.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL OF THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.
6. PIPE SIZES AND MATERIAL TYPES FOR MANHOLES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEYS, VISUAL INSPECTIONS, AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE PIPE SIZES AND MATERIAL TYPES ARE EXACT BUT DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

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

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 0.26 acre site is undeveloped. The site is bounded on the southwest, northwest, and northeast by private property, and on the southeast by Victoria Dr. NW. The site slopes gently from the northwest to the southeast. As shown on FEMA Panel #113G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 227 Drainage Report by Wilson & Company, drainage from the lots have been master planned to be intercepted by drainage features downstream of the properties for developments than do not exceed 36% impervious. This proposed development exceeds that amount by 10%, therefore, ponding has been provided. As shown by the plan, the building is located in the center of the lot. Negligible off-site flows enter the site due to existing grades from the northwest and will continue to be allowed to historically flow through the site. On site flows will drain around the structure to new grades and flow to ponding areas (sediment capture ponds). All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths.

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:

8016 Victoria Dr. NW

TOPOGRAPHY:

Topographic information provided by Christopher Median dated November, 2018.

SOUTHEAST POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5321	467	154.25
5320.5	150	

SOUTHWEST POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5323	379	112.5
5322.5	71	

TOTAL POIND VOL PROVIDED 266.75

ZONE 1

P(360) = 2.20 inches
P(10 day) = 3.67 inches

Areas: (acres)	Existing	Proposed
Treatment A	0.26	0.00
Treatment B	0.00	0.00
Treatment C	0.00	0.14
Treatment D	0.00	0.12
Total (acres) =	0.26	0.26

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.010	0.031	0.002	0.018	0.000	0.009
Volume (cubic feet) =	415	1,361	76	764	0	375

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.12 AC * 43560 SF/AC) = 148 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	0.34	0.00	0.06	0.00	0.00	0.00
Treatment B	0.00	0.00	0.00	0.00	0.00	0.00
Treatment C	0.00	0.40	0.00	0.21	0.00	0.07
Treatment D	0.00	0.52	0.00	0.35	0.00	0.20
Total Q (cfs) =	0.34	0.93	0.06	0.56	0.00	0.27



LEGEND

EXISTING PROPOSED

CONTOUR

6045 6045

PROPERTY LINE

ROAD

SETBACK

RETAINING WALL/WALL

SPOT ELEVATION

x5321.78

PROPERTY LINE

ALL PORTIONS OF THE WALL, INCLUDING THE ENTIRE FOOTING, MUST BE LOCATED WITHIN THE SUBJECT PROPERTY UNLESS AGREEMENTS (A LETTER) ARE MADE WITH ADJACENT PROPERTY OWNERS FOR PERMISSION TO CONSTRUCT FOOTING AND/OR WALL ON OR BEYOND PROPERTY LINE

PROPOSED WALL AND FOOTING

CROSS SECTION
PROPERTY LINE WALL DETAIL

Jackie S. McDowell
12-4-18
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on November 30, 2018 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.

8016 VICTORIA DR. NW, ALBUQUERQUE, NM 87120	
CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO	
LOT 26, BLOCK 5, UNIT 5 VOLCANO CLIFFS SUBDIVISION	
MARTINEZ, ADRIAN (BUILDER: MICHAEL SANCHEZ) – G & D PLAN	
McDowell Engineering, Inc. 7820 BEVERLY HILLS AVE. NE ALBUQUERQUE, NM 87122 TELE: 505-828-2430 FAX: 505-821-4857	
Designed JSM	Drawn STAFF
File MAR0118L	Date NOVEMBER,2018
Sheet 1	of 1