

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

October 21, 2019

Don Briggs, P.E.
Don Briggs Engineering, LLC
5324 Oakledge Ct NW
Albuquerque, NM 87120

RE: **7519 Eagle Rock NE**
Grading Plan
Engineer's Stamp Date: 10/17/19
Hydrology File: C19D042B

Dear Mr. Briggs,

Based on the submittal received on 10/17/19, the Grading Plan cannot be approved until the following corrections are made:

PO Box 1293

Prior to Grading Permit:

Albuquerque

NM 87103

1. Since this project is adjacent to, or drains into an Albuquerque Metropolitan Arroyo and Flood Control Authority (AMAFCA) facility, approval by AMAFCA will be needed prior to Hydrology approval. Please contact Nicole Friedt P.E, CFM (nfriedt@amafca.org or 505-884-2215). AMAFCA will be the deciding authority for what the allowable discharge to their facility is. Also provide AMAFCA approval for the work on their property.

www.cabq.gov

Prior to Certificate of Occupancy (For Information):

2. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required. Because the plan has completely changed, the previous Pad Certification is not applicable.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



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: _____



October 17, 2019

Mr. Dana Peterson, P.E.
Senior Engineer, Planning Dept.
City of Albuquerque
600 2nd St. NW
Albuquerque, NM 87105

Dear Mr. Peterson,

I have attached a revised grading & drainage plan that addresses your comments of 9/25/2019 as follows:

1. Since this project is adjacent to, or drains into an Albuquerque Metropolitan Arroyo and Flood Control Authority (AMAFCA) facility, approval by AMAFCA will be needed prior to Hydrology approval. Please contact Nicole Friedt P.E, CFM (nfriedt@amafca.org or 505-884-2215). AMAFCA will be the deciding authority for what the allowable discharge to their facility is. Also provide AMAFCA approval for the work on their property. *The plan has been submitted to AMAFCA.*
2. This site is in Precipitation Zone 3, not 2. *Hydrology calculations have been revised to Zone 3.*
3. Stormwater quality (SWQ) volume should be calculated as 0.34" x impervious area, but there is no SWQ requirement for individual homes, so the SWQ retention may be removed if desired. *The water quality volume has been removed from the pond design*
4. Drastically screen back or remove the image underlay. The plan is nearly illegible. *The background image has been removed.*
5. A digital (.pdf) submittal, emailed to PLNDRS@cabq.gov is required. *The digital submittal of the original plan has been done. The revised plan has also been digitally submitted.*
6. It appears that your engineering stamp is too big. The NM Board of Licensure for Professional Engineers and Professional Surveyors Administrative Code 16.39.3.12.C states, "The design of the seal/stamp shall consist of three (3) concentric circles, the outermost circle being one (1) and one-half (1/2) inches in diameter...". *Stamp image has been revised to meet NMBL requirements.*
7. Show/label any proposed walls. Provide sections through all proposed walls showing property/ROW lines, existing, and proposed grades. In accordance with DPM Ch.22, section 5 part B, grading and wall construction near the property line may not endanger adjacent property or constrain its use. *All walls are existing and have been labeled. No new walls are proposed.*
8. The driveway appears to be graded to drain straight into the garage. Provide a means to keep drainage from entering it such as a trench drain or changing the grading. *A drainage swale across the driveway is provided.*
9. Also ensure the building is elevated 1' above surrounding grades, with swales to convey drainage to the pond. Include the spillway elevation for the riprap rundown; should be at least 1' below the finished floor elevation. *Noted. The removal of the background image shows the proposed swales. Design spot elevations are provided to assure the finished floor is at least 1' above the surrounding grades.*

Prior to Building Permit (For Information):

10. An Engineer's Certification of the compacted pad and grading (Pad Certification), per the DPM Chapter 22.7: *Engineer's Certification Checklist for Non-Subdivision*, is required prior to issuing Building Permit. *As this property has a previously approved grading & drainage plan the building permit was previously approved and the home is currently under construction. Final certification for CO will be done using these requirements.*

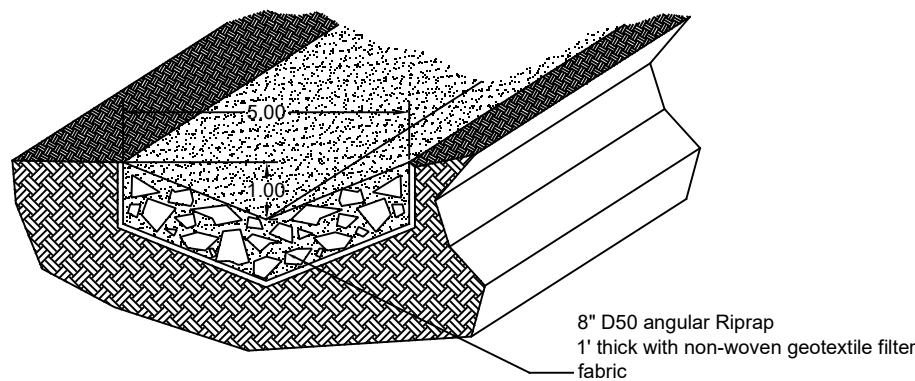
Please call if you have any questions or comments on this matter.

Sincerely

Don Briggs PE CFM



Project Benchmark
X scratched in concrete cut off wall
Marked ALS CP #119
Elev. 87.5



Riprap Rundown Detail

SCALE 1" = 20'

LEGEND

-  Existing Spot Elevation
 Basin Boundary
 New Channel Centerline
 Existing Retaining Wall/Garden Wall
 Ponding Areas
 Design Contour
 Design Spot Elevation

CONTOUR ELEVATION	AREA (sq ft)	AVERAGE AREA (ac)	CONTOUR INTERVAL (ft)	VOLUME (cu ft)	STAGE (ft)	STORAGE (ac ft)	COMMENTS
5380.50	0.0				0	0	ESTIMATED LOW POINT
5381.00	137.7	68.85	0.5	34.4250	0.5	34.4250	
5382.00	417.4	277.55	1	277.5500	1.5	311.9750	2" PVC Pipe Outlet @ 5381.5
5383.00	505.3	461.35	1	461.3500	2.5	773.3250	
5384.00	907.9	706.60	1	706.6000	3.5	1479.9250	
Required Volume =		1415	cu ft				

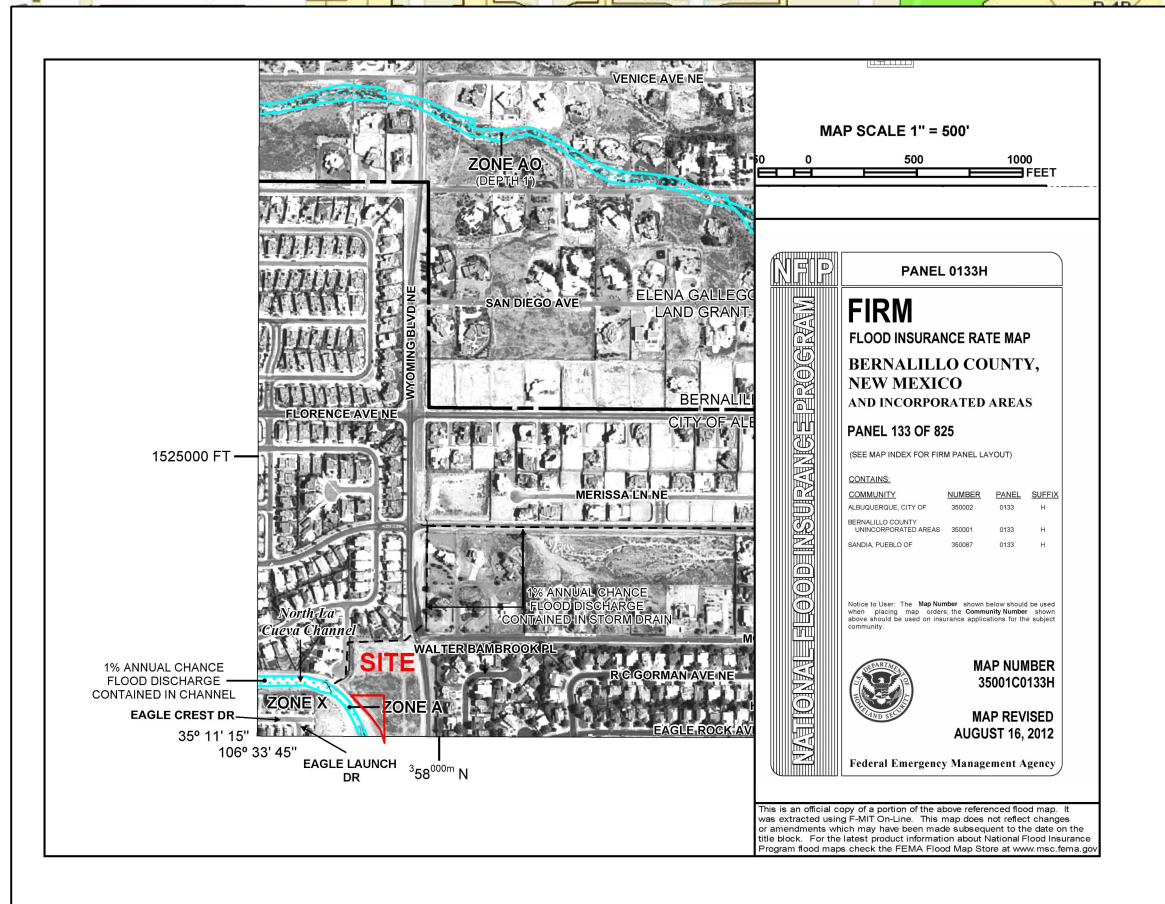
POND 1 OUTLET CALCULATIONS

Orifice Discharge Rate
1 - 2" smooth pipe

$$Q = C_d A_o \sqrt{2gH}$$

Area	2" Dia	0.049	sq. ft.
Coefficient		0.62	
Grav. Const		32.20	ft./sec ²
Head		3.35	ft.
Q/opening		0.45	cfs

(Depth = 3.5')



DRAINAGE NARRATIVE

This grading & drainage plan was prepared to support a building permit application for a new residence located at 7519 Eagle Rock Ave. NE. A review of the City Hydrology records indicates this property has free discharge to the adjacent AMAFCA, La Cueva Channel. This plan was prepared using the hydrology methodology presented in Chapter 22.2 of the City of Albuquerque's Development Process Manual (abbreviated method).

The site is a 0.2442 acre parcel located in Precipitation Zone 2 and Floodzone X (Unshaded). Site grading and wall construction was completed under project C19D049B and slopes slightly from the South East to the North West. The site is not impacted by cross lot runoff from adjacent properties.

The hydrology analysis indicates developed conditions will increase discharge rates over historical, undisturbed rates. Although free discharge is allowed, this plan limits discharge to the AMAFCA facility with a regulated discharge through a detention/retention pond. The retention portion of the pond is sized to contain the EPA water quality volume which was determined using the 0.42" runoff factor for new development. The detention portion of the pond is sized to contain the 100yr 6hr runoff volume. We have also provided a rip rap rundown for erosion protection on the AMAFCA side of the wall at the pond outlet location.

GENERAL NOTES

Contractor is responsible for utility spots and controlling sediment deposition and erosion during construction.

A concrete washout bin must be provided as per City of Albuquerque MS4 Permit requirements.

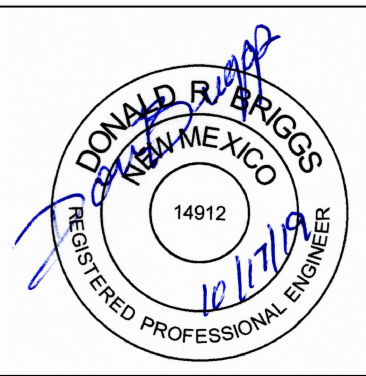
All disturbed area due to construction must be reseeded or landscaped following construction.

<i>AS BUILT INFORMATION</i>	
CONTRACTOR	
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE
<i>RECORDING INFORMATION</i>	
RECORDED BY	DATE
NO.	

BENCHMARKS

[illegible]

ENGINEER'S SEAL



NO.	DATE	REMARKS	BY
<i>REVISIONS</i>			
<i>DESIGN</i>			
DESIGNED BY	DB	DATE	4/4/2019
DRAWN BY	DB	DATE	4/4/2019
CHECKED BY		DATE	

	DON BRIGGS Engineering LLC	605-249-4843 donbriggseengineering@gmail.com 5324 Oakledge Ct. NW, Albuquerque, NM 87120																		
TITLE: 7519 Eagle Rock NE Grading & Drainage Plan																				
Design Review Committee	City Engineer Approval	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center; vertical-align: middle;">Last Design Update</td> <td style="width: 45%; text-align: center; vertical-align: middle;">Mo. / Day / Yr.</td> <td style="width: 50%; text-align: center; vertical-align: middle;">Mo. / Day / Yr.</td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>	Last Design Update	Mo. / Day / Yr.	Mo. / Day / Yr.															
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City Project No.	Zone Map No.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; vertical-align: middle;">Sheet</td> <td style="width: 50%; text-align: center; vertical-align: middle;">Of</td> </tr> </table>	Sheet	Of																
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