

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

December 28, 2021

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, NM 87199

**RE: 520 Cardenas
520 Cardenas SE
Grading and Drainage Plan
Engineer's Stamp Date: 11/11/21
Hydrology File: C19D011D6**

Dear Mr. Soule:

Based upon the information provided in your submittal received 11/11/2021, the Grading & Drainage Plan is **not** approved for Building Permit. Following comments need to be addressed for approval of the above referenced project:

PO Box 1293

SHEET 1 of 2

Albuquerque

1. Check Spelling

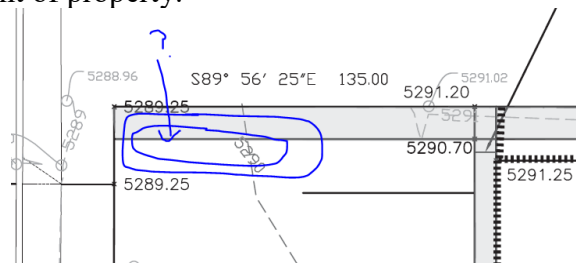
Narrative

The subject property is located within a fully developed area of SE Albuquerque. All down stream drainage improvements have been completed. This is a redevelopment of an site that discharges 0.51 cfs to the street and surrounding properties. The proposed improvements consist of a 3 onsite basins, this basins. Basins A is the existing paved parking, Basin B is the building and majority of lot, basin C is sidewalk area on north side of building. Basins A and C free discharge, while basin B is routed through a detention pond the reduces the peak. The proposed site will discharge 0.42 cfs. The detention pond has a water quality volume of 120 of which is what is required required.

NM 87103

2. Include project benchmark and datum.
3. Include a section of the detention pond include water quality volume to be retained.
4. Suggestion: Update site by potentially moving structure east and providing the pond at the front of property.

www.cabq.gov



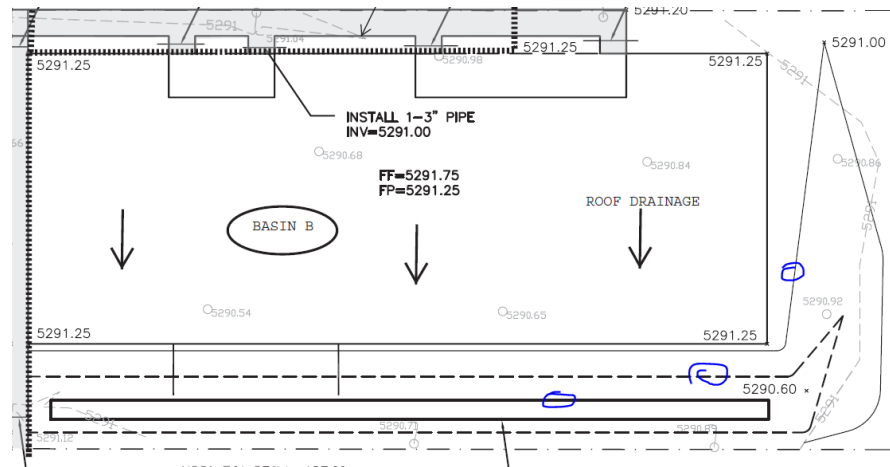
- i. Is the grey area sidewalk/concrete? Add to legend
5. Are these three different line types for contours?

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller



HEREFORE THE CUMULATIVE DISCHARGE IS

FIRST FLUSH 5141.15 SFX 0.28 119.9601667

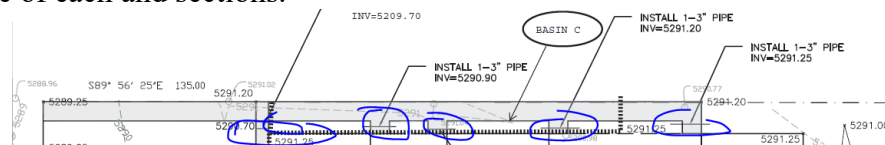
PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

- a.
7. Please provide detail showing this site will not discharge to neighboring lots.
8. Show how the pond (s) will drain out to Cardenas (include spot elevations showing grade of pond).
9. What is the pipe for within Basin C? Does some of the pond enter this? Please provide high point elevation. Potentially move the high point of the pond south. Please ensure Basin C/B boundary is correct. It seems Basin C should be moved East. Provide more proposed spot elevations to clearly show delineation of the basins. I assume Basin C also has some water quality volume as shown? Please call these out and label each. Provide volume of each and sections.



10. Please provide all invert elevations on both ends of each pipe to also ensure it is sloped correctly.
11. Provide section of the pond and label volume and levels (including any retained portion).
12. The site has free discharge into Cardenas, is a detention pond necessary or is this a Water Quality pond? Please clarify.
13. Review calculations. The comment does not make sense for the half pipe and water elevation above that with the provided invert for the orifice calcs.
14. Please provide a pond section with 100 yr surface elevation and Water Quality volume elevation.
15. Please label the pond with overall volume and water quality volume in addition to the 100 yr surface.
16. AHYMO not necessary. Please provide all typical calcs for the site.

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

17. Please fill out the attached application for any portion of the water quality volume that cannot be met onsite.

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, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3965 or dggutierrez@cabq.gov

Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 520 CARDENAS **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 7, BLOCK 2 BARONBURG HEIGHTS
City Address: 520 CARDENAS SE

Applicant: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE
Address: PO BOX 93924 ALB NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

TYPE OF DEVELOPMENT: _____ PLAT _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
_____ TRAFFIC/ TRANSPORTATION

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?

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

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: _____

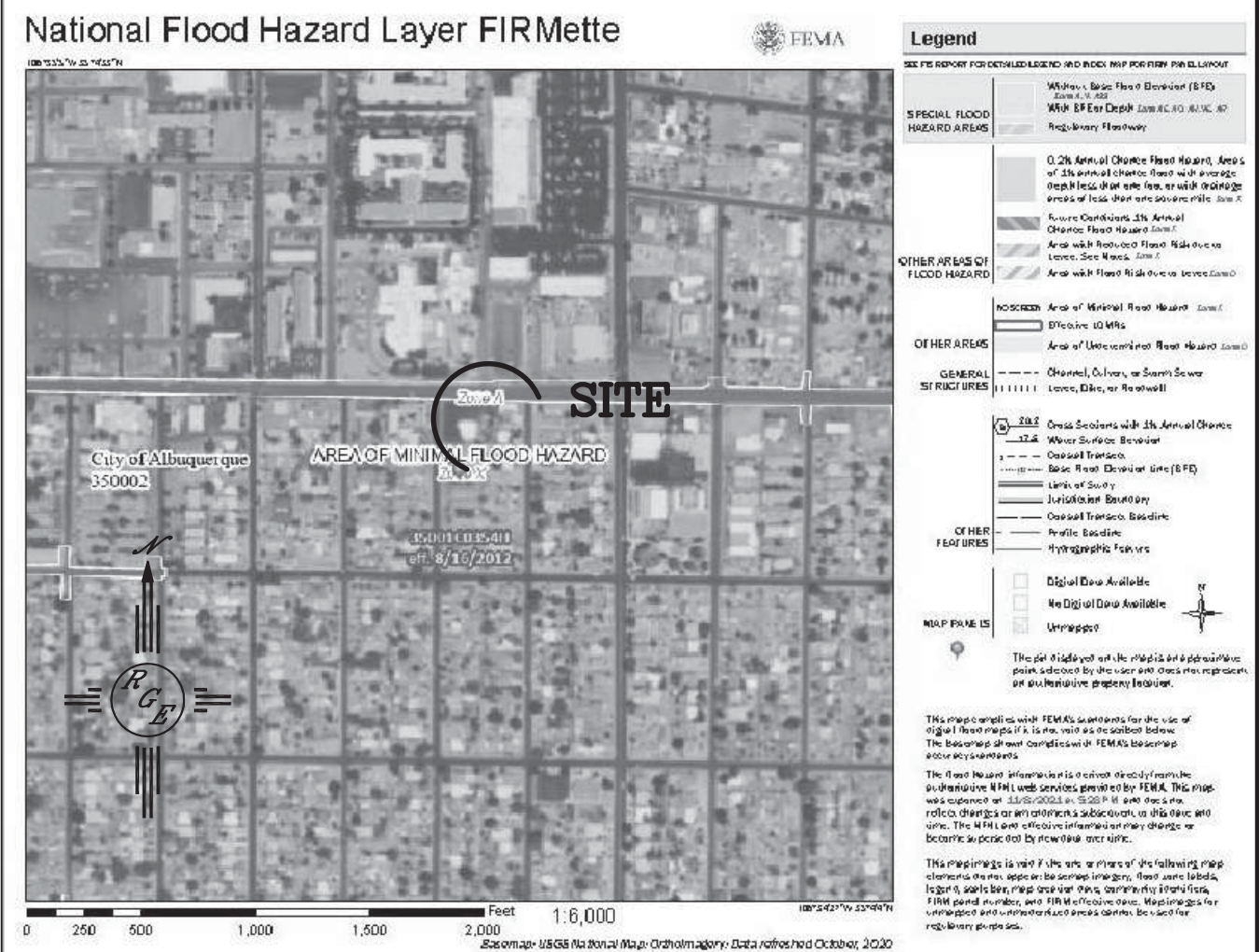
FEE PAID: _____

[illegible]

FIRST FLUSH	5141.15 SFX 0.28	119.9601667
-------------	------------------	-------------

The subject property is located within a fully developed area of SE Albuquerque. All down street drainage improvements have been completed. This is a redevelopment of an site that discharges 0.51 cfs to the street and surrounding properties. The proposed improvements consist of a 3 onsite basin, this basins. Basins A is the existing paved parking, Basin B is the building and majority of lot, basin C is sidewalk area on north side of building. Basins A and C free discharge, while basin B is routed through a detention pond the reduces the peak. The proposed site will discharge 0.42 cfs. The detention pond has a water quality volume of 120 cf which is what is required

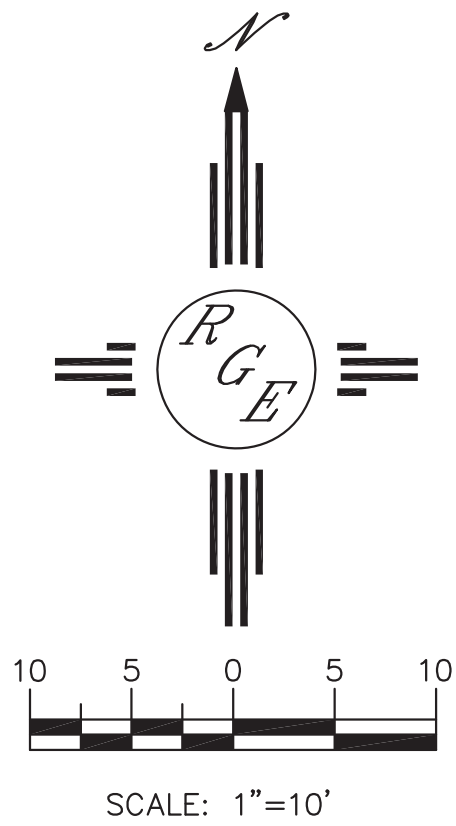
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

	EXISTING CONTOUR
	EXISTING INDEX CONTOUR
	PROPOSED CONTOUR
	PROPOSED INDEX CONTOUR
	SLOPE TIE
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	LOT LINE
	CENTERLINE
	RIGHT-OF-WAY
	PROPOSED PVC SD (SEE PLAN FOR SIZE)
	GRAVEL LINED SWALE
	EXISTING CURB AND GUTTER
	PROPOSED CMU SCREEN WALL—DESIGN BY OTHERS
	18" MAX RETAINING WALL PERIMETER WALL

EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.



ENGINEER'S SEAL	520 CARDENAS	DRAWN BY WCVJ
	GRADING AND DRAINAGE PLAN	DATE 11-09-21 210210097-LAYOUT-11-09-21
11/11/21		SHEET # 1 OF 2
DAVID SOULE P.E. #14522	 <i>Rio Grande Engineering</i> 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0989	JOB # 210210097

VOLUME CALCULATIONS

Orifice Equation
 $Q = CA \text{ SQRT}(2gH)$

C =	0.6
Diameter (in)	4
Area (ft^2)=	0.087266463
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

OUTLET

ENGINEER'S SEAL	520 CARDENAS	DRAWN BY WCVJ
	GRADING AND DRAINAGE PLAN CALCULATIONS	DATE 11-09-21
11/11/21		210210097-LAYOUT-11-09-21
DAVID SOULE P.E. #14522	<i>Rio Grande Engineering</i> 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # 2 JOB # 210210097