

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

November 20, 2018

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

RE: **Montgomery Carwash**
3525 Montgomery NE
Grading Plan Stamp Date: 10/31/18
Hydrology File: F16D053

Dear Mr. Soule,

Based on the submittal received on 11/1/18, the Grading and Drainage Plan cannot be approved until the following are corrected:

PO Box 1293

Prior to Building Permit:

Albuquerque

1. Basin C delineation needs to be shown on the plan. It is unclear how any of Basin C makes it to a stormwater quality pond.

NM 87103

2. Provide management onsite for the entire Stormwater Quality Volume in accordance with the new drainage ordinance, § 14-5-2-6 (H) enacted 10/2/18 (Council Bill C/S O-18-2). This site qualifies as redevelopment and is only required to manage runoff from the 80th percentile storm ($\text{Vol.} = 0.26'' \times \text{Imp. Area}$).

www.cabq.gov

3. Each stormwater quality pond need to be sized for the area draining to it. These areas need to be clearly delineated and shown on the plan, or as a separate exhibit.

4. Provide a section through the building and east property line. How will the channel manage the roof runoff and the offsite flows? Please show the channel in plan view.

Prior to Certificate of Occupancy (For Information):

5. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

6. A Bernalillo County Recorded [Private Facility Drainage Covenant](#) is required for the stormwater quality pond(s). The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Peterson', is written over a light blue horizontal line.

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

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: MONTGOMERY CARWASH **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: TRACT G2A2 MONTGOMERY COMPLEX

City Address: 3525 MONTGOMERY

Applicant: LBJ, LLC **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: _____

Weighted E Method
MONTGOMERY CARWASH

Existing Developed Basins										100-Year, 6-hr		10-day	
Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)	Flow cfs	Volume (ac-ft)	Flow cfs
UPLAND (DIVERTED WITH VALLEY GUTTER													
BASIN A	5972	0.137	0%	0	6.0%	0.008	21.0%	0.029	73%	0.100	1.832	0.021	0.30
BASIN B	9461	0.217	0%	0	4.0%	0.009	18.0%	0.030	78%	0.109	1.886	0.034	0.34
BASIN C	21150	0.486	0%	0	3.0%	0.015	5.0%	0.02428	92%	0.447	2.030	0.082	2.21
TOTAL	36583.00	0.840	0%	0	3.7%	0.031	11.0%	0.092	85%	0.716	1.961	0.137	3.73

COMPARISON
Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm (zone 2)

Ea= 0.53
Eb= 0.78
Ec= 1.13
Ed= 2.12

Qa= 1.56
Qb= 2.28
Qc= 3.14
Qd= 4.7

FIRST FLUSH REQUIREMENT
883,919 CUBIC FEET
1671 CUBIC FEET PROVIDED

weir calculation
Q=2.95X^{1.5}
6' OPENING 6.24 CFS
5' OPENING 5.2 CFS
3' OPENING 3.12 CFS
2' OPENING 2.08 CFS

FLOW THRU CURB CUTS
UPLAND+BASIN A=4.18 CFS
UPLAND+BASIN B=6.24 CFS
UPLAND+BASIN C=3.12 CFS

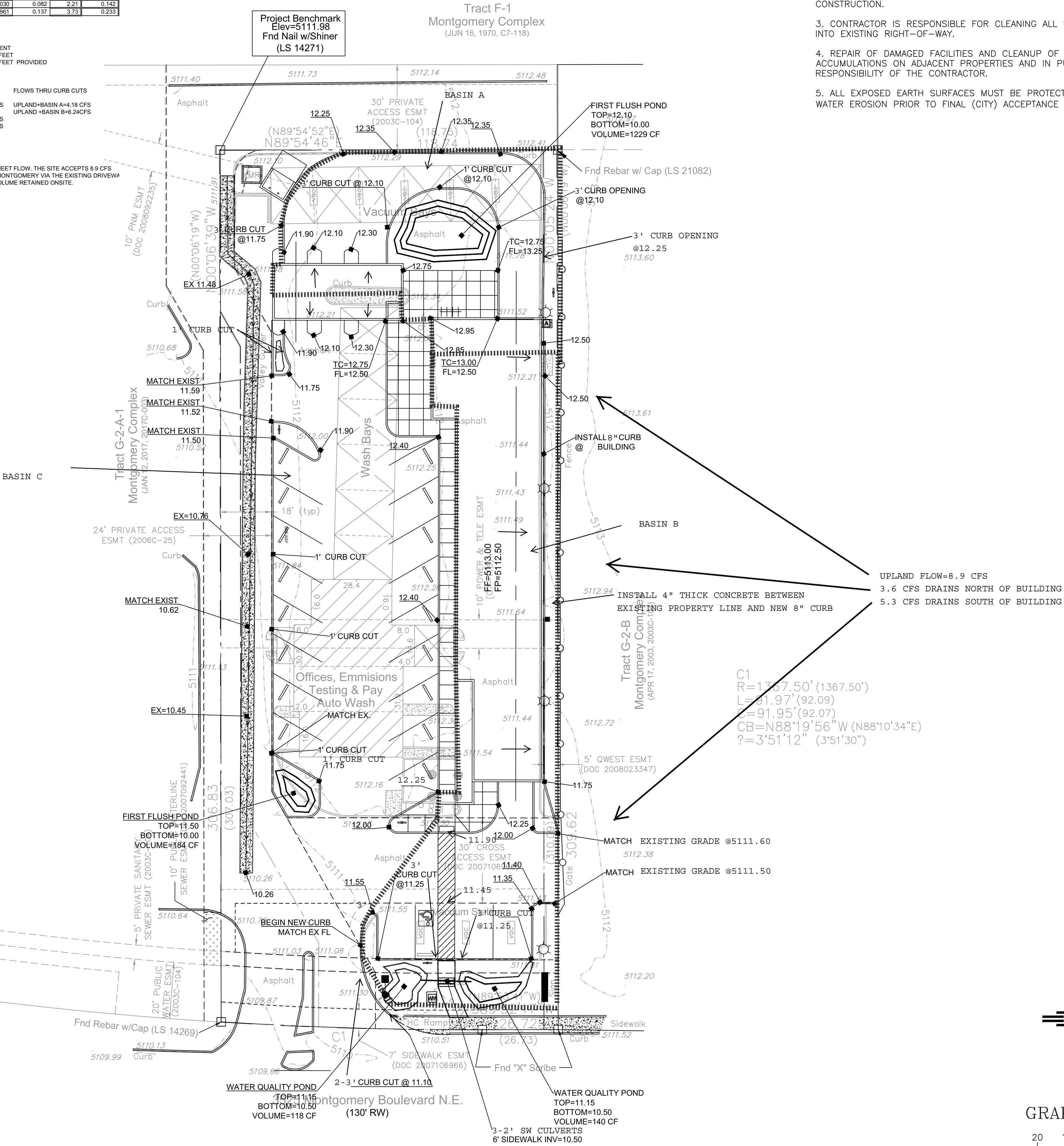
DRAINAGE NARRATIVE
THIS SITE IS A REDEVELOPMENT OF AN EXISTING SITE. PER F160553, THE SITE DISCHARGES 3.7 CFS TO MONTGOMERY AS SHEET FLOW. THE SITE ACCEPTS 8.9 CFS FROM THE UPLAND SITE. WE ARE PROPOSING TO MAINTAIN EXISTING PATTERNS AND CONTINUE TO FREE DISCHARGE TO MONTGOMERY VIA THE EXISTING DRIVEWAY. THE SITE DISCHARGES 3.73 CFS, WHICH IS .03 CFS GREATER THAN HISTORICAL WHICH IS BENEFICIAL. THE FIRST FLUSH VOLUME RETAINED ONSITE.

CURB/CHANNEL AT EAST FACE OF BUILDING

Top Width	Bottom Width	Depth	Area	WP	R	Slope	Q Provided	Q Required	Velocity
(ft)	(ft)	(ft)	(sq ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(ft/s)
5	3	0.67	2.01	5.22	0.3851694	0.8	9.45	8.90	4.43

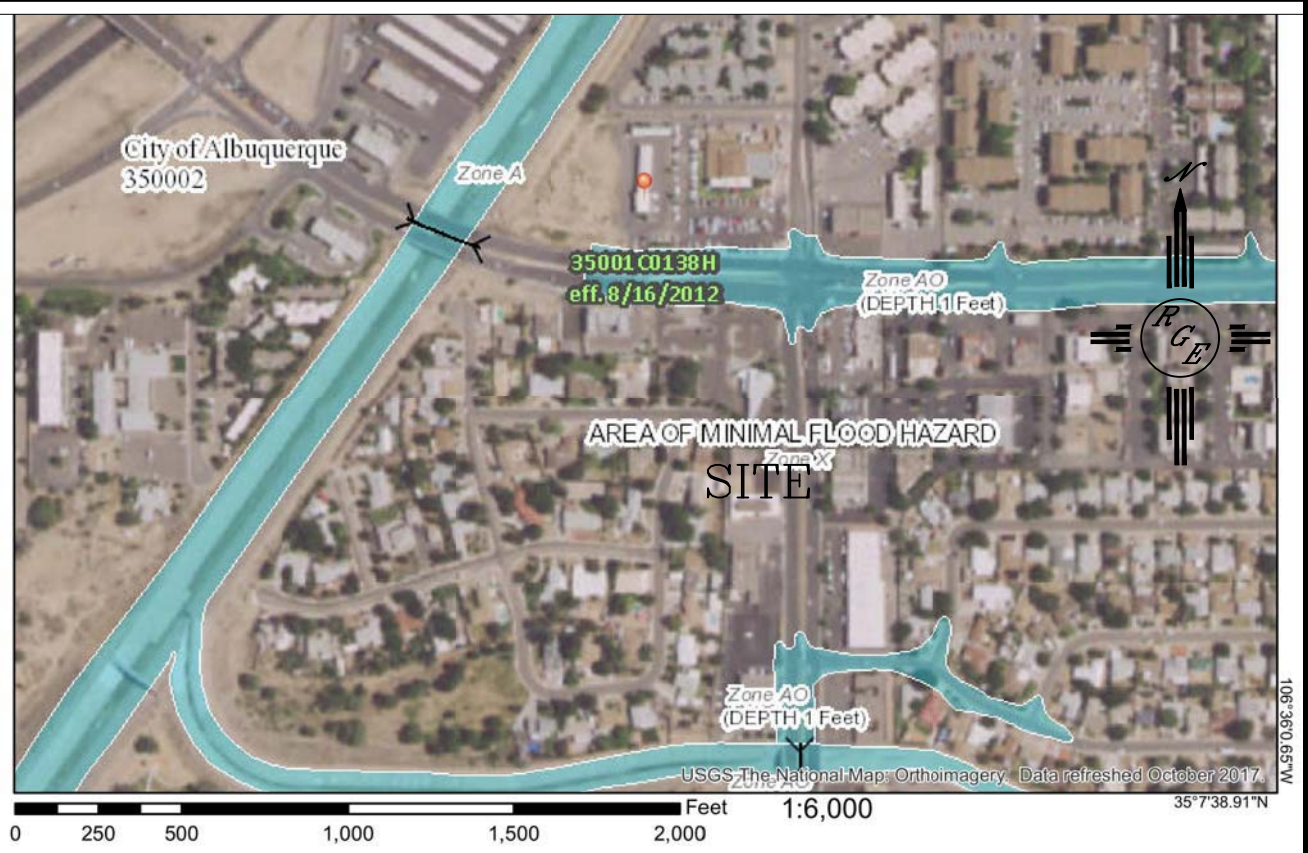
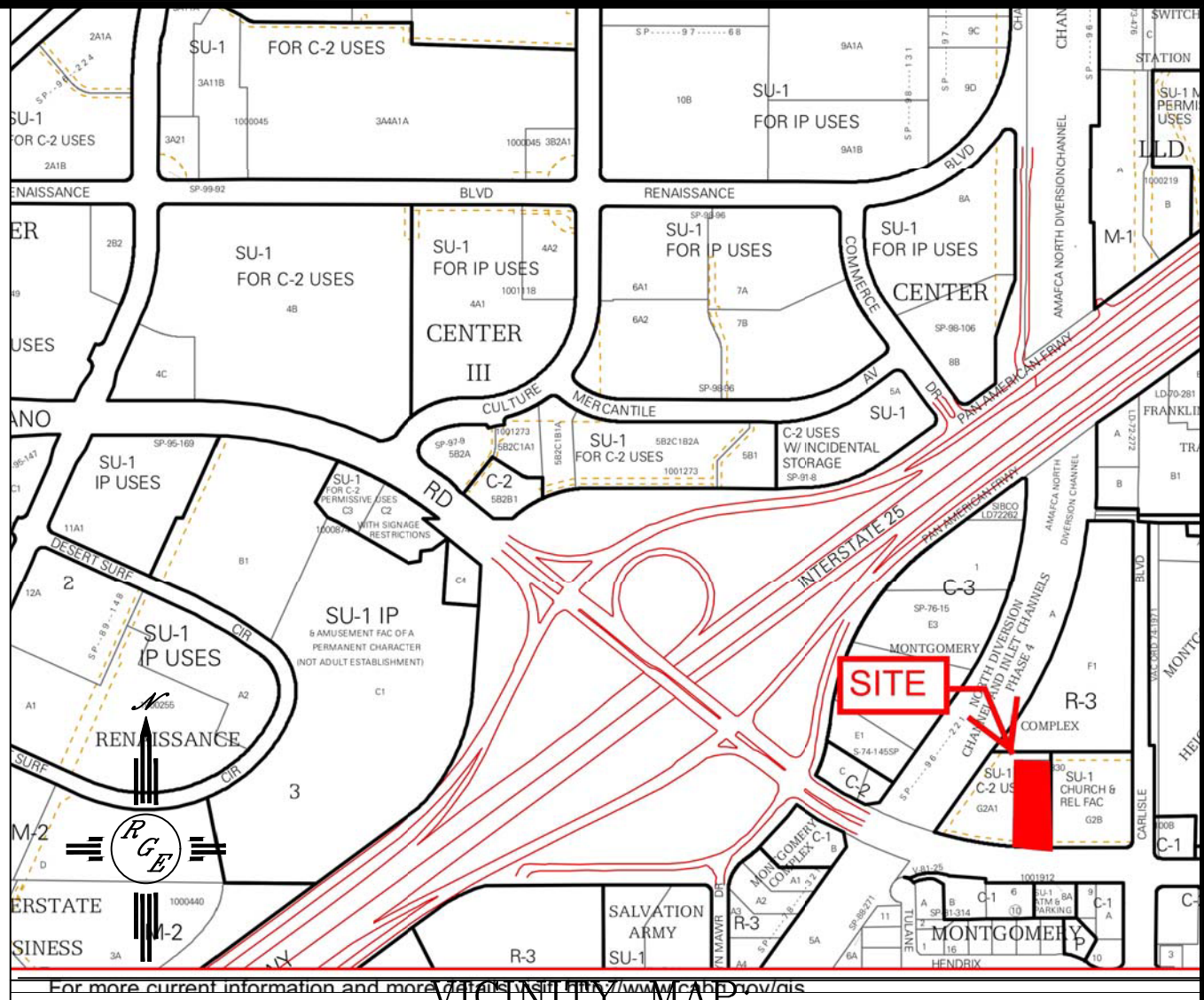
Manning's Equation:

Q = 1.49 * A * R^{2/3} * S^{1/2}
A = Area
R = D/4
S = Slope
n = 0.015



EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.



FIRM MAP:

LEGAL DESCRIPTION:

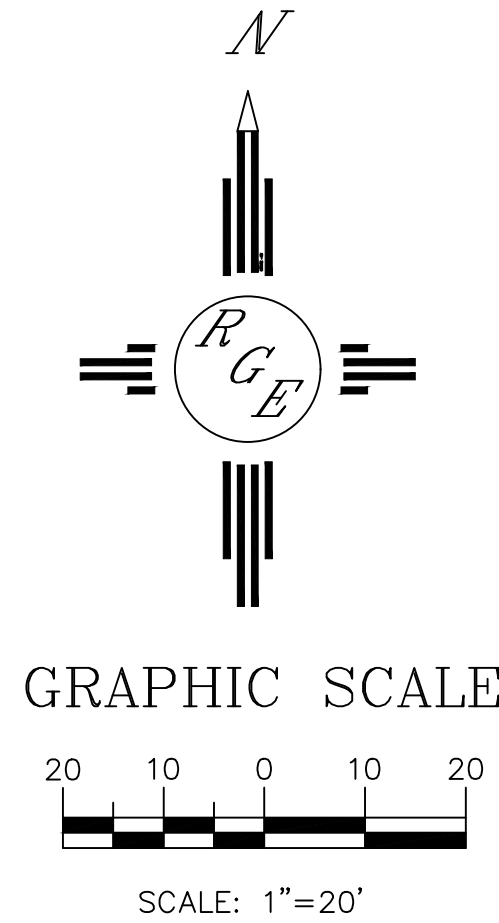
TRACT G-2-A, MONTGOMERY COMPLEX

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY COMMUNITY SCIENCES, DATED AUGUST 2018. NAVD 88 DATUM
3. ALL DISTURBED AREAS MUST BE RESEED OR LANDSCAPED PRIOR TO FINAL C.O.. ALL AREAS OUTSIDE THE BUILDING ENVELOPE MUST BE RESEED WITH NATIVE MIX

LEGEND

---	-5411-	EXISTING CONTOUR
---	-5410-	EXISTING INDEX CONTOUR
---	-5411-	PROPOSED CONTOUR
---	-5410-	PROPOSED INDEX CONTOUR
---	100.00	PROPOSED FLOWLINE ELEVATIONS
---	---	PROPERTY LINE



ENGINEER'S SEAL DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522 10/31/18	TRACT G-2-A-2 MONTGOMERY COMPLEX GRADING AND DRAINAGE PLAN Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	DRAWN BY JDG DATE 10-31-2018 SHEET # 1 OF 1 JOB #
---	--	--