

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

January 10, 2018

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

**RE: Lot 14 Block 6, Volcano Cliffs Unit 9, SAD 228 Unit 22
6212 Camino Alto NW
Grading and Drainage Plan
Engineers Stamp Date 1/5/18 (D10D003B14)**

Dear Mr. Soule,

Based upon the information provided in your submittal received 1/8/18, 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 and letter 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 and Pad Certification.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is 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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

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

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

Architect: _____ **Contact:** _____

Address: _____

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

Other Contact: _____ **Contact:** _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

CHECK 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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

Weighted E Method													
										100-Year, 6-hr.			
Basin	Area (sf)	Area (acres)	Treatment A % (acres)		Treatment B % (acres)		Treatment C % (acres)		Treatment D % (acres)		Weighted (ac-ft)	Volume (ac-ft)	Flow cfs
UPLAND ALLOWED PROPOSED	25861.00	0.594	0%	0	10%	0.059	40%	0.2375	50%	0.297	1.448	0.072	2.10
	13730.00	0.315	0%	0	10%	0.032	40%	0.1261	50%	0.158	1.448	0.038	1.11
	13730.00	0.315	0%	0	30%	0.095	42%	0.1324	28%	0.088	1.168	0.031	0.96

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 1

Ea= 0.44	Qa= 1.29
Eb= 0.67	Qb= 2.03
Ec= 0.99	Qc= 2.87
Ed= 1.97	Qd= 4.37

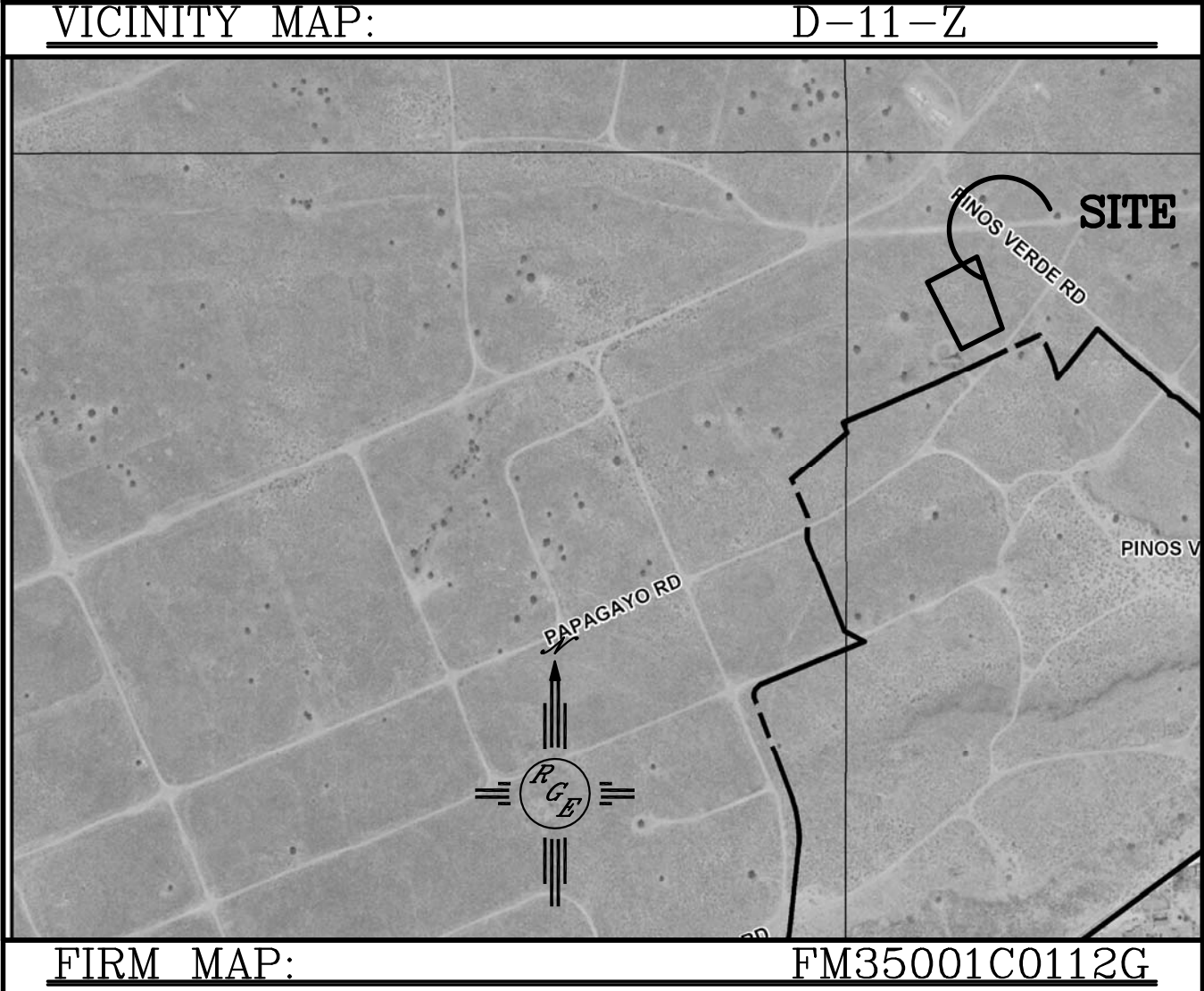
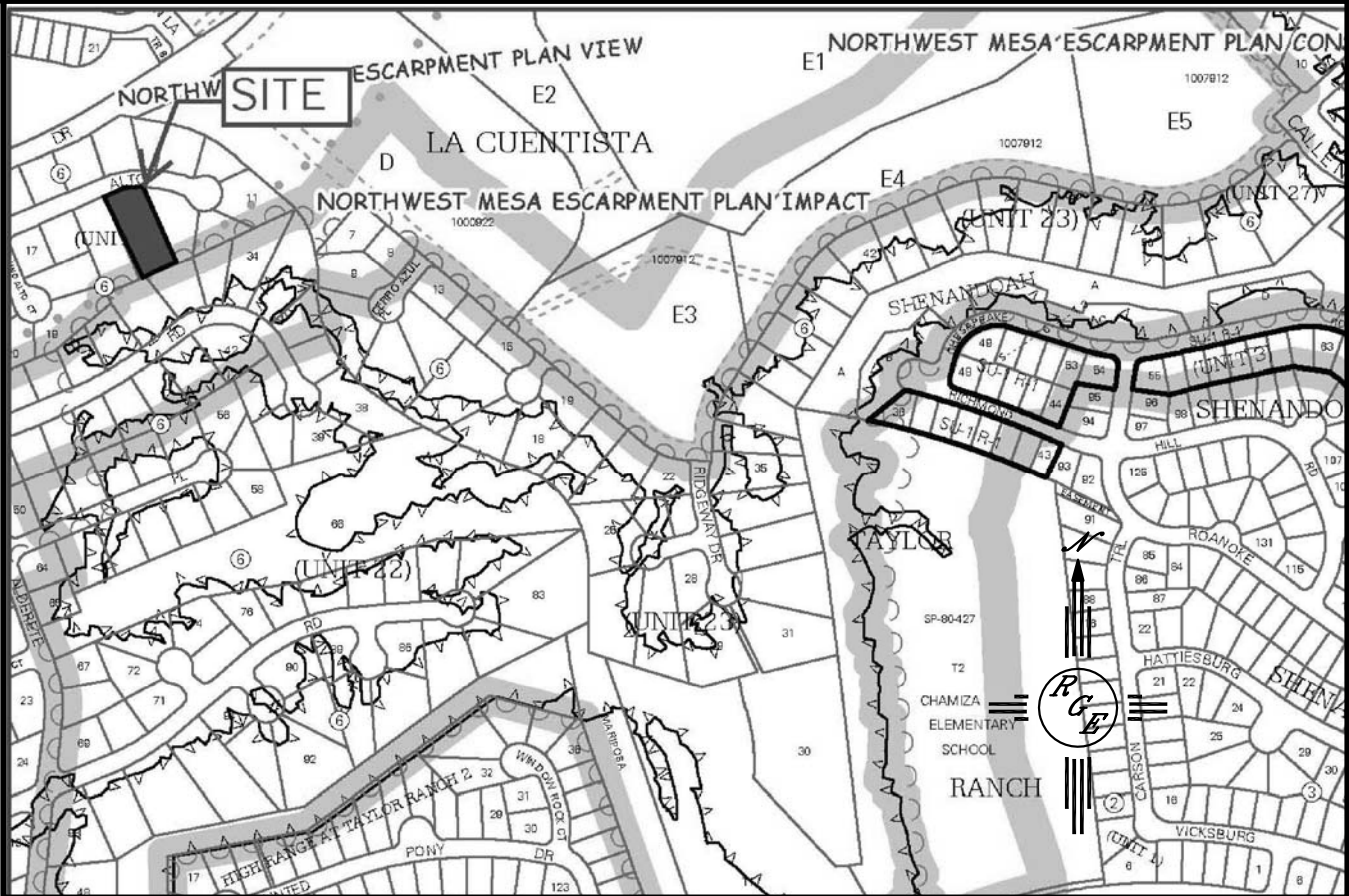
ONSITE Conditions		
FIRST FLUSH WATER QUALITY VOLUME	REQUIRED	PROVIDED
	(CF)	(CF)
WATER QUALITY	109	1556

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is designed to drain the front portion to the street and there rear port to the national monument. The drainage divide is in accordance to the master drainage plan basin lines. The site is impacted by the upland flow the amount of 2.1 cfs. The site will pond in excess of the first flush volume required. This plan is in conformance to the master drainage plan

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 ACCEPTANCE OF ANY PROJECT.



LEGAL DESCRIPTION:

Lot 14, Block 6, Volcano Cliffs Unit 22

NOTES:

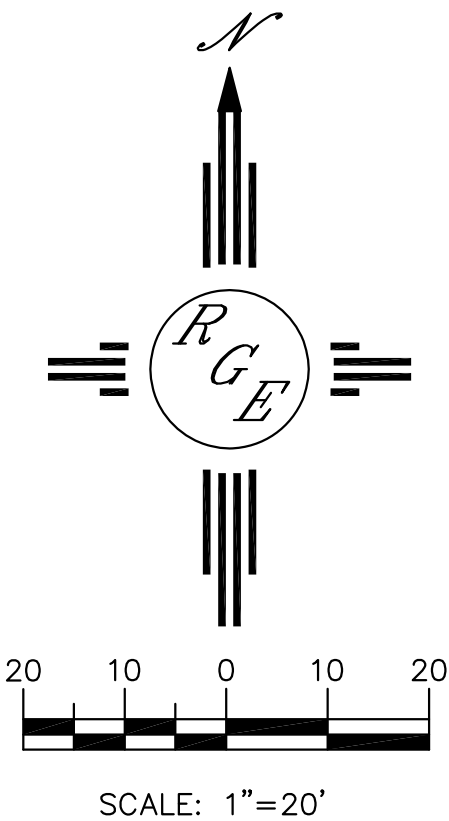
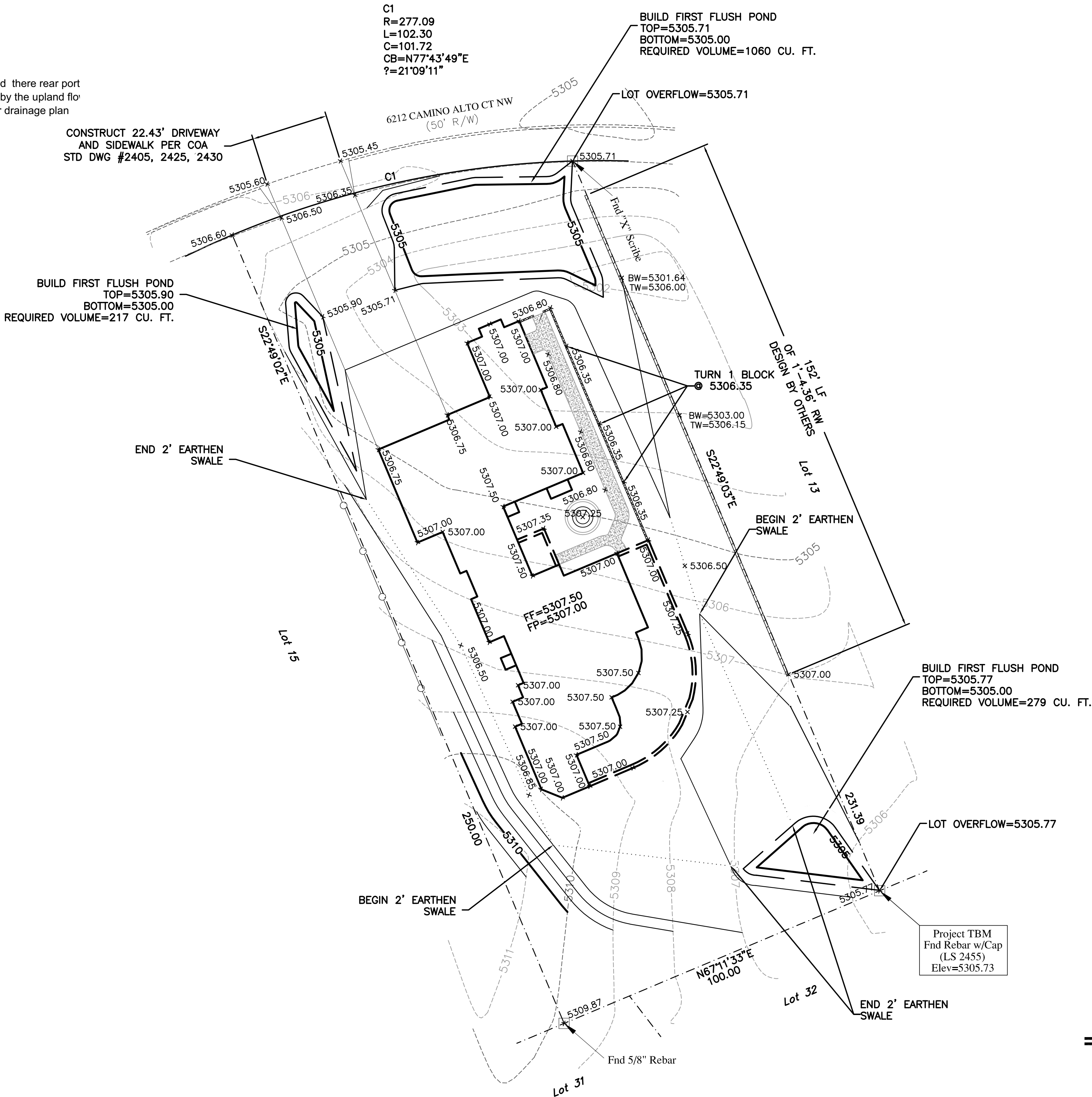
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. A PAD CERTIFICATION IS REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT
4. ANY PERIMTER WALLS SHALL BE CONSTRUCTED UNDER A SEPARATE BUILDING PERMIT AND MUST CONFORM TO THE APPROVED GRADING PLAN ALLOWING CROSS LOT DRAINAGE

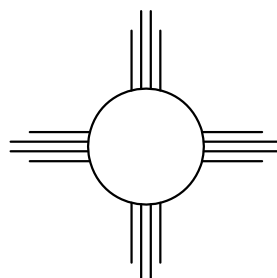
LEGEND

- XXXX--- EXISTING CONTOUR
- - - - -XXXX- - - - - EXISTING INDEX CONTOUR
- XXXX----- PROPOSED CONTOUR
- XXXX----- PROPOSED INDEX CONTOUR
- >--- SLOPE TIE
- + XXXX EXISTING SPOT ELEVATION
- + XXXX PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- ===== EXISTING CURB AND GUTTER
- ===== PROPOSED CMU SCREEN WALL

CAUTION:

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.



<div>ENGINEER'S SEAL</div> <div>DAVID SOULE 14522 REGISTERED PROFESSIONAL ENGINEER</div> <div>1/5/17</div> <div>DAVID SOULE P.E. #14522</div>	6212 CAMINO ALTO CT NW WALTON RESIDENCE	DRAWN By WCUJ
	GRADING AND DRAINAGE PLAN	DATE 1-05-17
	<div><div>Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-5999</div></div>	21844-LAYOUT-1-05-18
		SHEET # —
		JOB # 21844



Proposed Conditions Model-Sub-Basin Data				
Basin	Area (ac)	cfs/ac	Q ₁₀₀ (cfs)	V ₁₀₀₋₂₄ (ac-ft)
Basin 200 (Discharge to Pond 4)				
200	13.12	2.44	32.02	1.546
Basin 201 (Discharge to Pond 5)				
201-A	7.48	1.97	14.72	0.965
201-B	6.62	1.97	13.03	0.854
201-C	5.12	1.97	10.08	0.661
201-D	2.47	1.97	4.86	0.319
201-E	1.53	1.97	3.01	0.197
201-F	8.73	1.97	17.18	1.127
201-G	8.54	1.97	16.81	1.102
201-H	8.88	1.97	17.47	1.146
201-I	6.09	1.97	11.98	0.786
201-J	8.51	1.97	16.75	1.098
201-K	3.75	1.97	7.38	0.484
201-L	11.78	1.97	23.18	1.520
201-M	5.17	1.97	10.17	0.667
201-N	5.27	1.97	10.37	0.680
201-O	3.16	1.97	6.22	0.408
201-P	2.20	1.97	4.33	0.284
Total	95.30		187.54	12.300
Basin 202 (Discharge to La Cuentista Pond)				
202-A	8.57	3.20	27.44	1.104
202-B	10.72	3.20	34.32	1.382
Total	19.29		61.76	2.486
202-C	1.33	2.62	3.50	0.235
Basin 203 (Discharge to Pond 8)				
203-A	6.51	2.99	19.47	0.841
203-B	9.99	2.99	29.87	1.290
203-C	5.24	2.99	15.67	0.677
203-D	4.18	2.99	12.50	0.540
203-E	9.89	2.99	29.57	1.277
203-F	3.02	2.99	9.03	0.390
Total	38.83		116.11	5.014
Basin 204 (Discharge to Pond 7)				
204	8.98	3.20	28.73	1.156
Basin 205 (Discharge to Pond 6)				
205-A	10.29	2.73	28.11	1.328
205-B	10.06	2.73	27.49	1.298
205-C	5.66	2.73	15.46	0.730
205-D	3.22	2.73	8.80	0.416
205-E	5.75	2.73	15.71	0.742
205-F	6.88	2.73	18.80	0.888
Total	41.86		114.37	5.402
Basin 206-A (Discharge to Pond 9)				
206-A	4.01	3.19	12.79	0.514
Basin 206-B (Free Discharge)				
206-B	1.01	3.19	3.22	0.130
Total	5.02		16.01	0.644
Basin 207 (Free Discharge)				
207	1.85	3.22	5.96	0.240

- LEGEND
- 202-E BASIN ID
 - SUB-BASIN BOUNDARY
 - INDEX CONTOUR
 - INTERMEDIATE CONTOUR

SCALE: 1" = 200'

WILSON & COMPANY
4900 LANG AVE. NE
ALBUQUERQUE, NM 87109
(505) 348-4000

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

SAD 228
DRAINAGE REPORT

PROPOSED SUB-BASIN BOUNDARY PLAN
UNIT 18, 19 & 20

PLATE 3