

# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

September 7, 2016

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

RE: Abrazo Homes  
**Lot 6 Block 8 Unit 18 SAD 228**  
**6505 Canavio NW**  
**Grading and Drainage Plan**  
**Engineers Stamp Date 10/19/16 (D10D003O6)**

Dear Mr. Soule,

Based upon the information provided in your submittal received 9/8/16, this plan is approved for Grading Permit and Building Permit.

Please inform the builder to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology. Also, notify the owner/contractor that a separate permit for the fence is required.

Prior to construction of the home, a pad certification will be required. A hold on the property will be placed until this certification has been approved.

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,

Abiel Carrillo, P.E.  
Principal Engineer, Hydrology  
Planning Department

RR/AC  
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:**

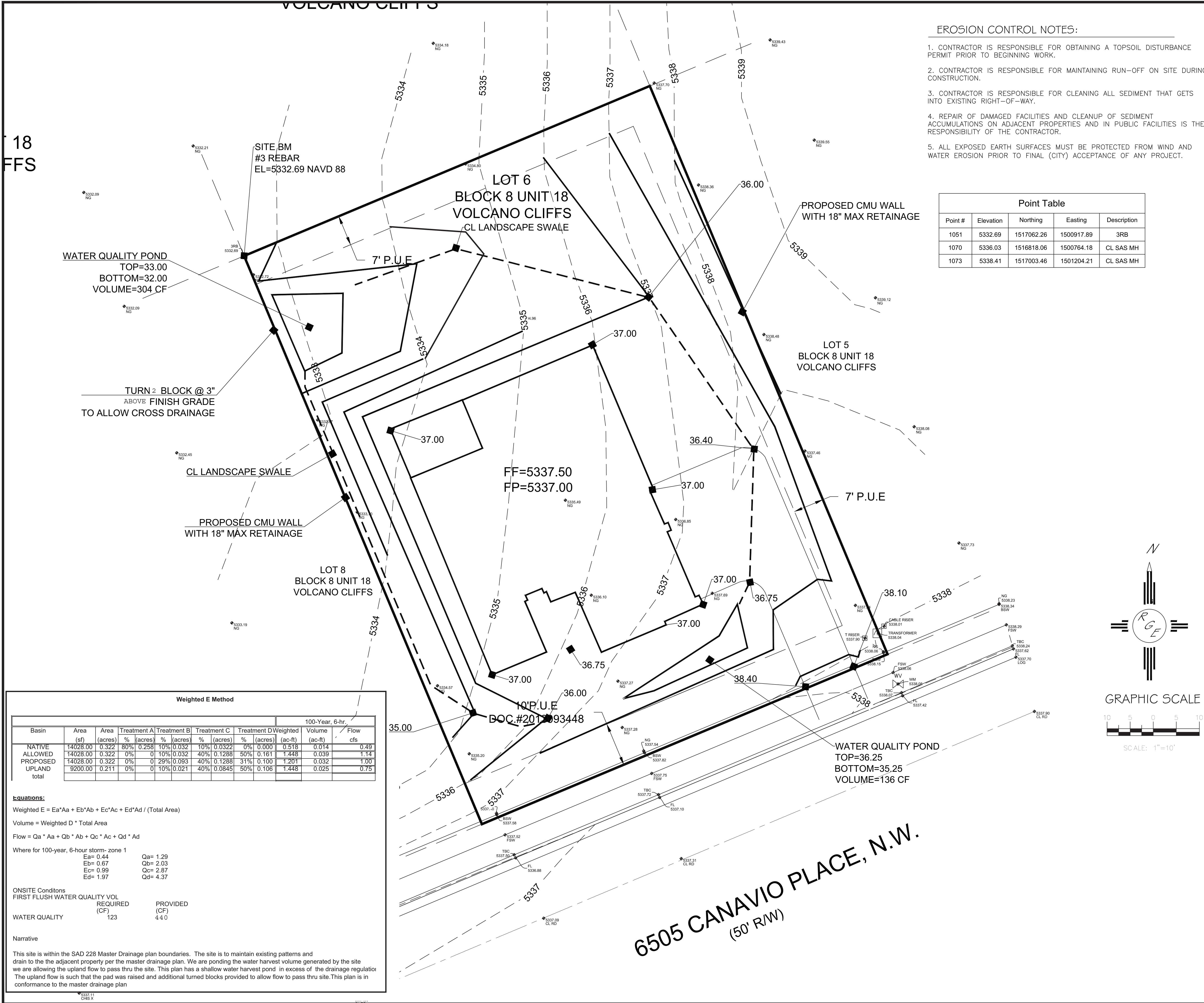
- ☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL  
☐ SITE PLAN FOR SUB'D APPROVAL  
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE  
☐ FOUNDATION PERMIT APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ SO-19 APPROVAL  
☐ 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:** \_\_\_\_\_

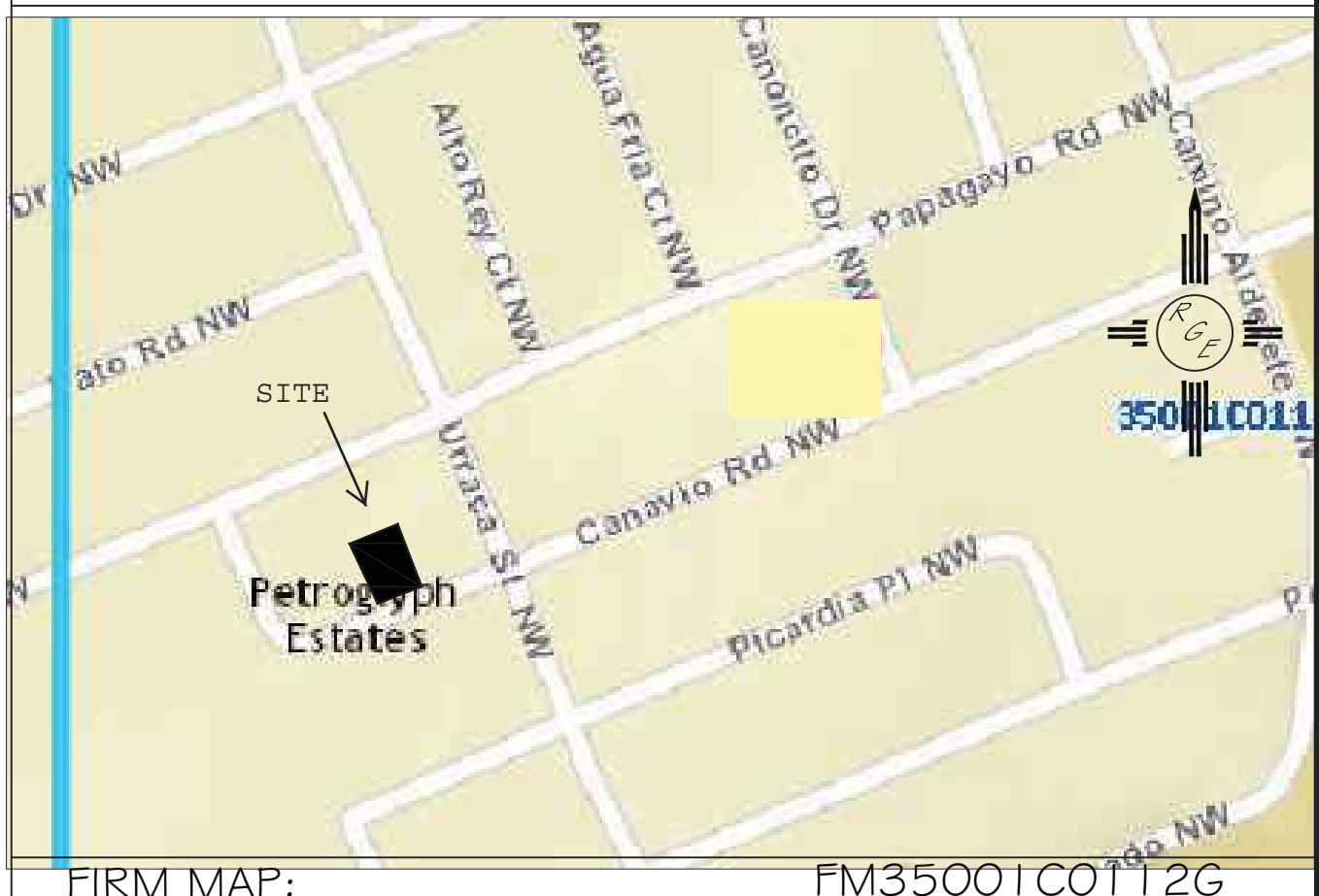
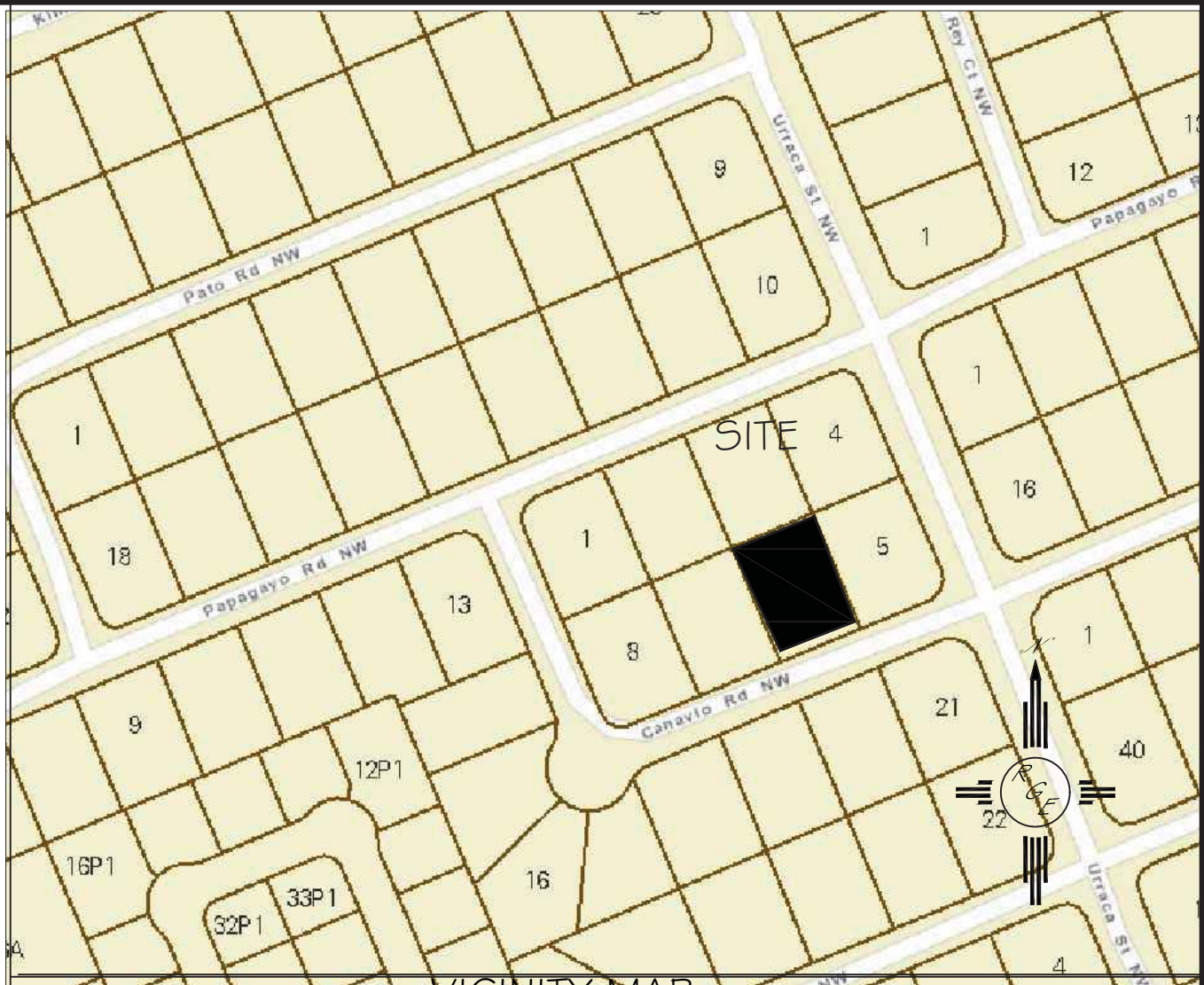
COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_





- 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.

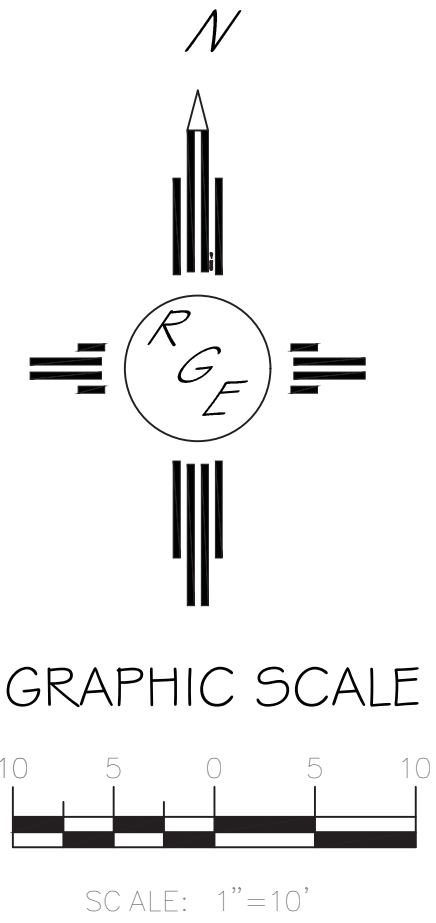
Point Table				
Point #	Elevation	Northing	Easting	Description
1051	5332.69	1517062.26	1500917.89	3RB
1070	5336.03	15166818.06	1500764.18	CL SAS MH
1073	5338.41	1517003.46	1501204.21	CL SAS MH



LEGAL DESCRIPTION:  
LOT 6, BLOCK 8, UNIT 18, VOLCANO CLIFFS

NOTES:  
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.  
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, DAVID ACOSTA PLS 210811, OCTOBER 2016

- LEGEND
- -5411--- EXISTING CONTOUR
  - -5410--- EXISTING INDEX CONTOUR
  - -5411--- PROPOSED CONTOUR
  - -5410--- PROPOSED INDEX CONTOUR
  - FLOW DIRECTION-SWALE
  - PROPOSED SPOT (FLOW-LINE)



**Weighted E Method**

Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted Volume (ac-ft)	100-Year, 6-hr. Flow cfs					
NATIVE	14028.00	0.322	80%	0.258	10%	0.032	0.000	0.49					
ALLOWED	14028.00	0.322	0%	0	10%	0.032	40%	0.1288	50%	0.161	1.448	0.039	1.14
PROPOSED	14028.00	0.322	0%	0	29%	0.093	40%	0.1288	31%	0.100	1.201	0.032	1.00
UPLAND	9200.00	0.211	0%	0	10%	0.021	40%	0.0845	50%	0.106	1.448	0.025	0.75
total													

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

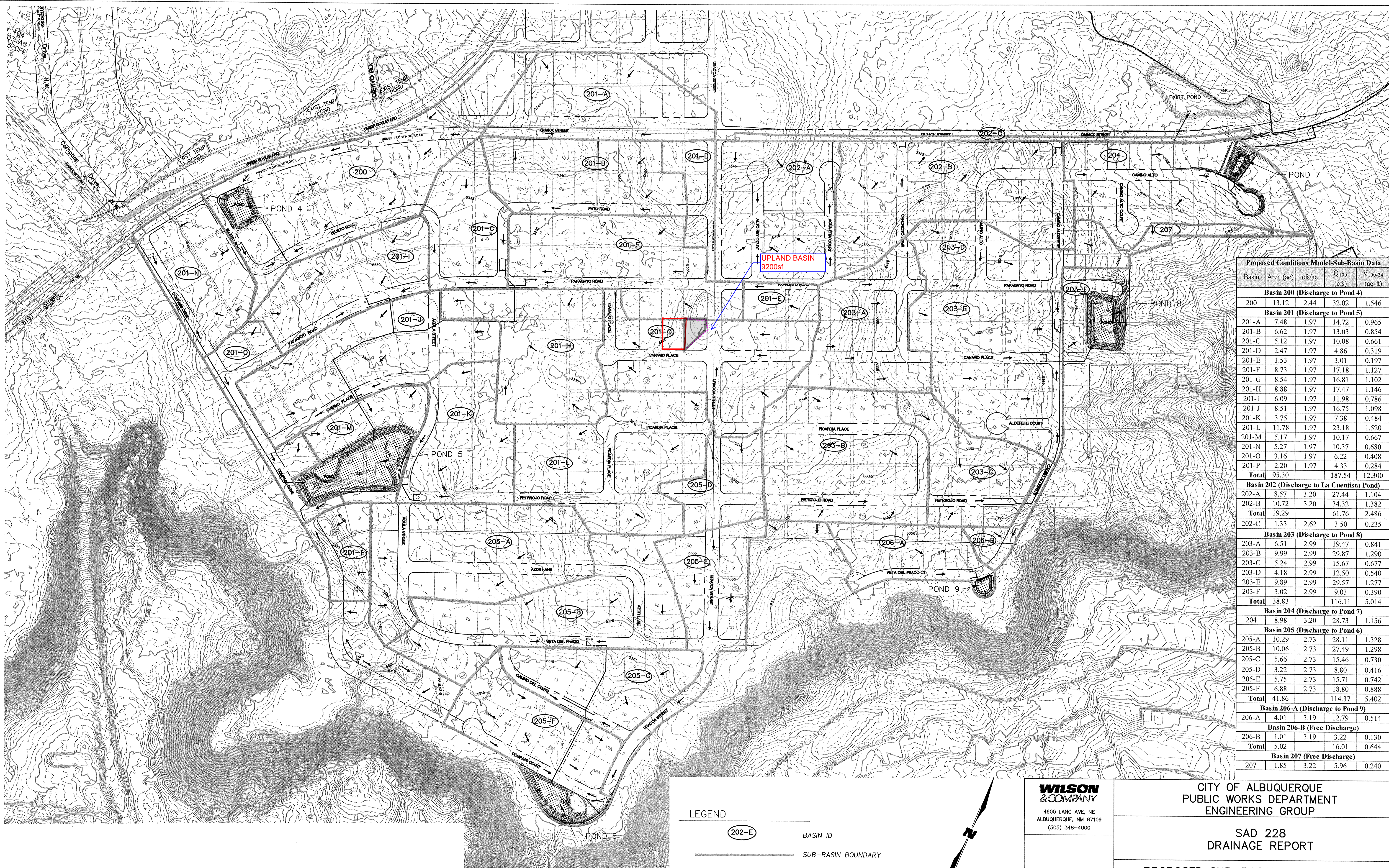
ONSITE Conditions  
FIRST FLUSH WATER QUALITY VOL  
REQUIRED (CF) PROVIDED (CF)  
WATER QUALITY 123 440

Narrative  
This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent property per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulation. The upland flow is such that the pad was raised and additional turned blocks provided to allow flow to pass thru site. This plan is in conformance to the master drainage plan

6505 CANAVIO PLACE, N.W.  
(50' R/W)

ENGINEER'S SEAL	LOT 6 BLOCK 8 UNIT 18 VOLCANO CLIFFS SUBDIVISION	DRAWN BY JDG
DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 10-18-2016
	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # 1 OF 1 JOB #
10/19/16 DAVID SOULE P.E. #14522		





Proposed Conditions Model-Sub-Basin Data				
Basin	Area (ac)	cfs/ac	Q <sub>100</sub> (cfs)	V <sub>100-24</sub> (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