CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

January 19, 2016

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

RE: **Suazo Residence Lot 8 Block 10 Unit 22 Volcano Cliffs**
6511 Petirrojo NW
Grading and Drainage Plan
Engineers Stamp Date 1/15/16 (D10D0003P8)

Dear Mr. Soule,

Based upon the information provided in your submittal received 1/18/15, this plan cannot be approved for Grading Permit and Building Permit until the following comments are addressed.

- Provide turn blocks in the east and west rear yard walls to allow flows to pass through and into the double sidewalk culvert in Picardia Place.

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

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: SUAZO RESIDENCE Building Permit #: _____ City Drainage #: _____

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

Legal Description: lot 8 block 10 volcano cliffs UNIT 22

City Address: 6511 PETIRROJO NW

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: PO BOX 93924, ALBUQUERQUE, NM 87199

Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: DAVID@RIOGRANDEENGINEERING.COM

Owner: DEANNA SUAZO Contact: _____

Address: 6511 PETIRROJO NW 87120

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

Architect: none Contact: _____

Address: _____

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

Other Contact: _____ Contact: _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

x HYDROLOGY/ DRAINAGE

_____ TRAFFIC/ TRANSPORTATION

_____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

_____ ENGINEER/ ARCHITECT CERTIFICATION

_____ CONCEPTUAL G & D PLAN

x GRADING PLAN

_____ DRAINAGE MASTER PLAN

_____ DRAINAGE REPORT

_____ CLOMR/LOMR

_____ TRAFFIC CIRCULATION LAYOUT (TCL)

_____ TRAFFIC IMPACT STUDY (TIS)

_____ EROSION & SEDIMENT CONTROL PLAN (ESC)

_____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: _____ Yes x No

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

x 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) _____

DATE SUBMITTED: 1/15/16 By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year, 6-hr. Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
UPLAND	8651.00	0.199	0%	0	10%	0.020	40%	0.07944	50%	0.099	1.448	0.024	0.70
NATIVE	15620.00	0.359	80%	0.2869	10%	0.036	10%	0.03586	0%	0.000	0.518	0.015	0.55
ALLOWED	15620.00	0.359	0%	0	10%	0.036	40%	0.14343	50%	0.179	1.448	0.043	1.27
PROPOSED	15620.00	0.359	0%	0	24%	0.086	42%	0.15061	34%	0.122	1.246	0.037	1.14
INCREASE												0.022	
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

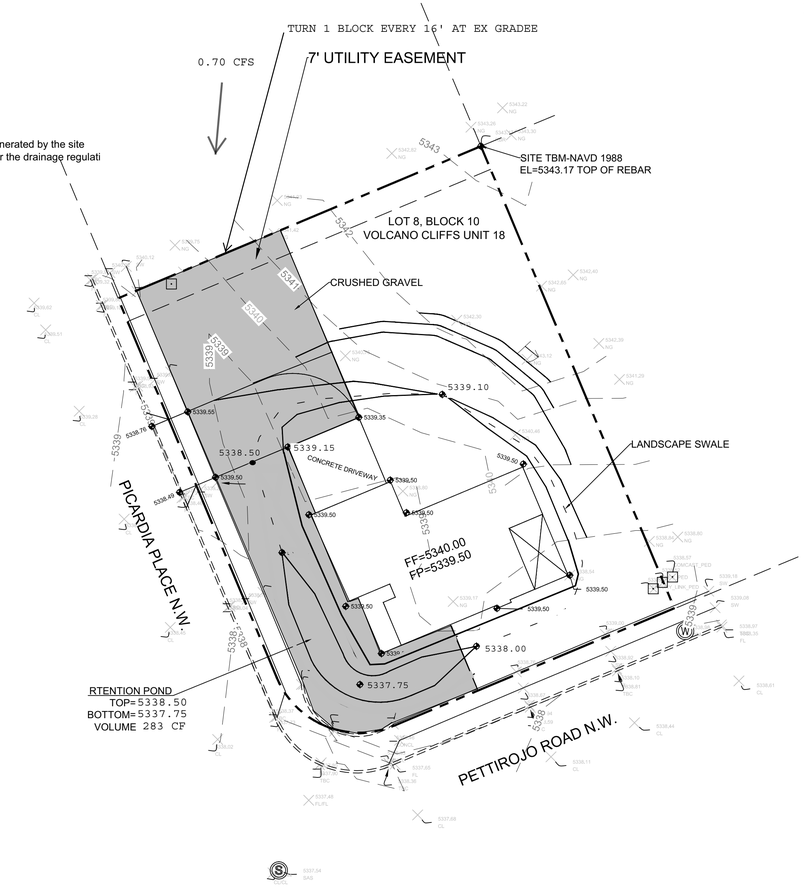
Ea= 0.44 Qa= 1.29
Eb= 0.67 Qb= 2.03
Ec= 0.99 Qc= 2.87
Ed= 1.97 Qd= 4.37

ONSITE Conditons
FIRST FLUSH WATER QUALITY VOLUME

	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	150	283

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to drain to the the adjacent street per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the minor upland flow to pass thru the site. This plan has a shallow water harvest pond per the drainage regulati This plan is in conformance to the masterplan



COORDINATES SYSTEM IS NEW MEXICO STATE PLANE CENTRAL ZONE NAD1983/NAVD 1988 AND ARE REFERENCED TO THE ALBUQUERQUE GEODETIC REFERENCE SYSTEM AS DETERMINED BY GPS OBSERVATIONS OBTAINED USING THE ALBUQUERQUE REAL TIME GNSS NETWORK (ARTGN). DISTANCES ARE GROUND. THESE VALUES WERE PROVIDED BY CONSTRUCTION SURVEY TECHNOLOGIES NMPLS 21082

EROSION CONTROL NOTES:

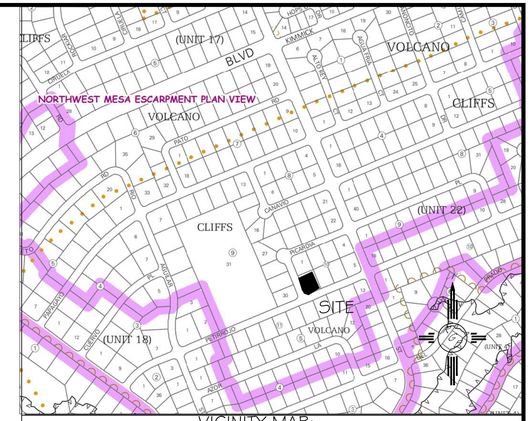
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

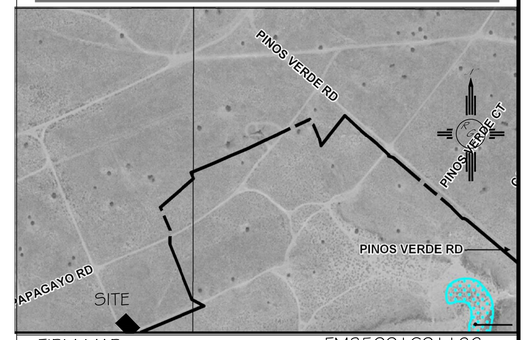
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

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.



VICINITY MAP:



FIRM MAP: FM35001C0112G

LEGAL DESCRIPTION:

LOT 8, BLOCK 10, 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 20811, DATED JANUARY 2016

LEGEND

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

N

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20'

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

1/15/16

DAVID SOULE
P.E. #14522

LOT 8, BLOCK 10, UNIT 18
VOLCANO CLIFFS SUBDIVISION

GRADING AND DRAINAGE PLAN

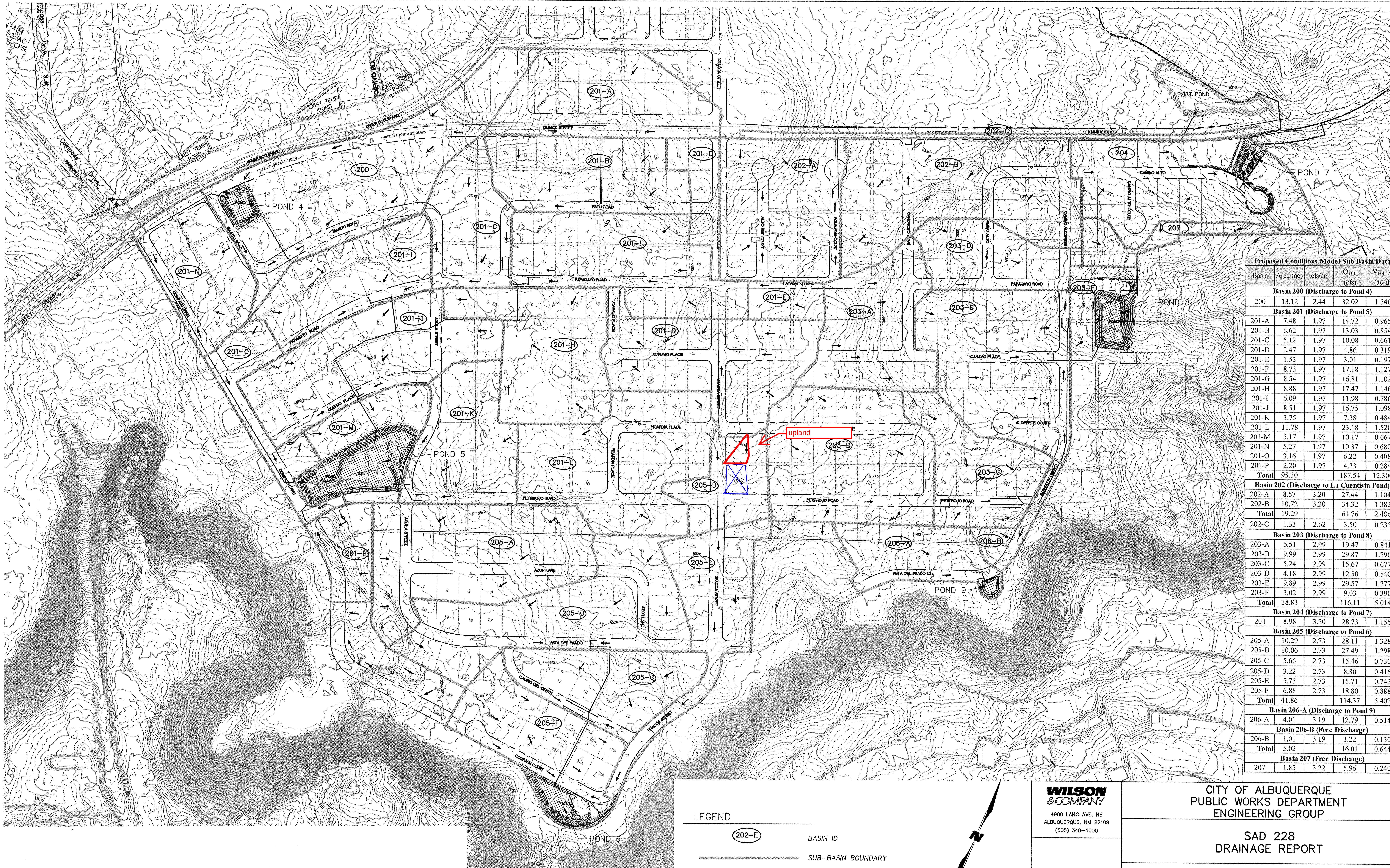
Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY JDG

DATE 01-14-2015

SHEET # 1 OF 1

JOB #



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

N

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

WCI #0840010400
NOVEMBER 2011

M:\RR\08–400–104–00\CADD\SAD 228 DRAINAGE REPORT\PLATE 03 _OVERALL DRN 01.dwg 1/4/2012 9:36:47 AM MST