

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

February 27, 2019

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

**RE: Lot 39PI – Oxbow Bluff
5004 Sandpiper NW
Grading and Drainage Plan
Engineer's Stamp Date: 2/1/19
Hydrology File: G11D014D39**

Dear Mr. Soule,

PO Box 1293

Based on the submittal received on 2/11/19, the Grading and Drainage Plan is approved for Building Permit.

Albuquerque

Please note: Oxbow Bluff ACC has a contract with Bohannon-Houston to perform the reviews. Please submit the engineer's certificate to BHI for their approval, which they should then submit to the Planning Department for our files.

NM 87103

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

www.cabq.gov

Sincerely,

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 5004 sandpiper **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 39PI OXBLOW BLUFF
City Address: 5004 SANDPIPER

Applicant: BRANDON CABLE **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												
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-Hr.	
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)
Existing	25755.00	0.591	100%	0.5913	0%	0.000	0%	0.000	0%	0.000	0.440	0.022
PROPOSED	25755.00	0.591	0%	0	40%	0.237	28%	0.166	32%	0.189	1.176	0.058
ALLOWED	25755.00	0.591	0%	0	61%	0.361	0%	0.000	39%	0.231	1.177	0.058

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):

Qa= 1.29
Ea= 0.44
Eb= 0.67
Ec= 0.99
Ed= 1.97

First flush pond requirements (.34") x 10044

234 cubic feet

Ponding required to reduce flow to allowed by retaining the difference between the 100-year 10-day volume:

243 cubic feet

Ponding provided

512 cubic feet

DRAINAGE NARRATIVE

THIS SITE IS LOCATED WITHIN BASIN F OF THE OXBOW BLUFF DRAINAGE MASTER PLAN G11/D14. THE PLAN CALLS FOR FREE DISCHARGE BASED UPON 39% IMPERVIOUS AND 61% TYPE B.

THE MASTER DRAINAGE PLAN ALLOWS FOR FREE DISCHARGE TO ROADWAY. THE FLOWS ARE THEN CONVEYED TO AN EXISTING INLET AND OUTFALL.

THE LAND TREATMENT OF THIS LOT GENERATES .04 CFS GREATER FLOW THAN ALLOWED, YET 243CF LESS TOTAL DISCHARGE IN THE 100 YEAR, 10-DAY DESIGN STORM

A WATER QUALITY POND WAS ADDED TO CONTAIN THE 234 CFS REQUIRED PER THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, THEREFORE THE PEAK RATE WILL BE LESS THAN ALLOWED

THE NO FLOW IS ALLOWED TO ENTER THE SITE AND DUE TO EXISTING ROADWAY AND CURB AND GUTTER, THE POND DISCHARGES OVER TOP OF CURB VIA A LINED SWALE

THIS SITE CONFORMS TO THE OXBOW BLUFF MASTER PLAN AND THE CITY OF ALBUQUERQUE FIRST FLUSH ORDINANCE

EROSION CONTROL NOTES:

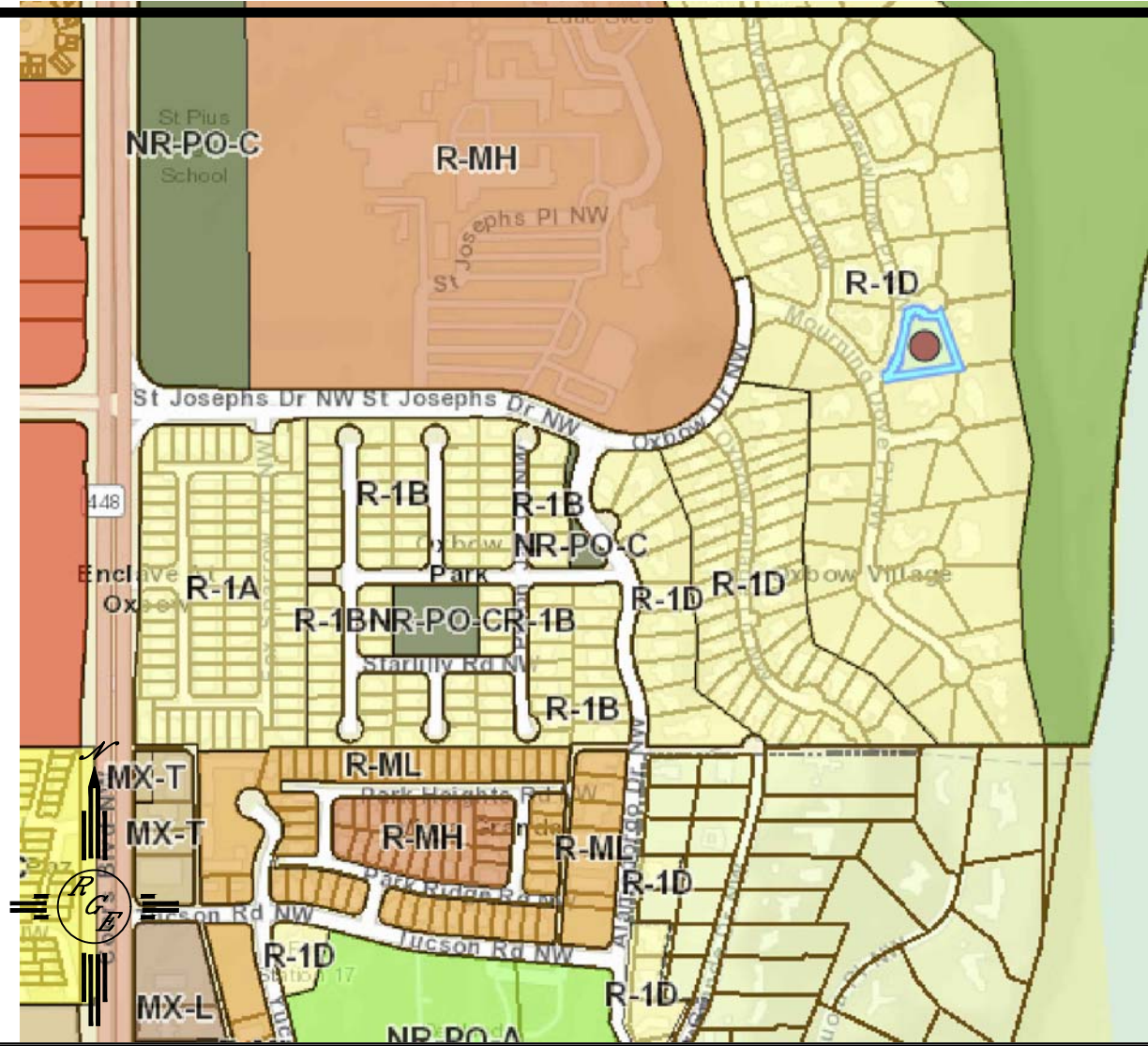
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES 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.

Curve Table

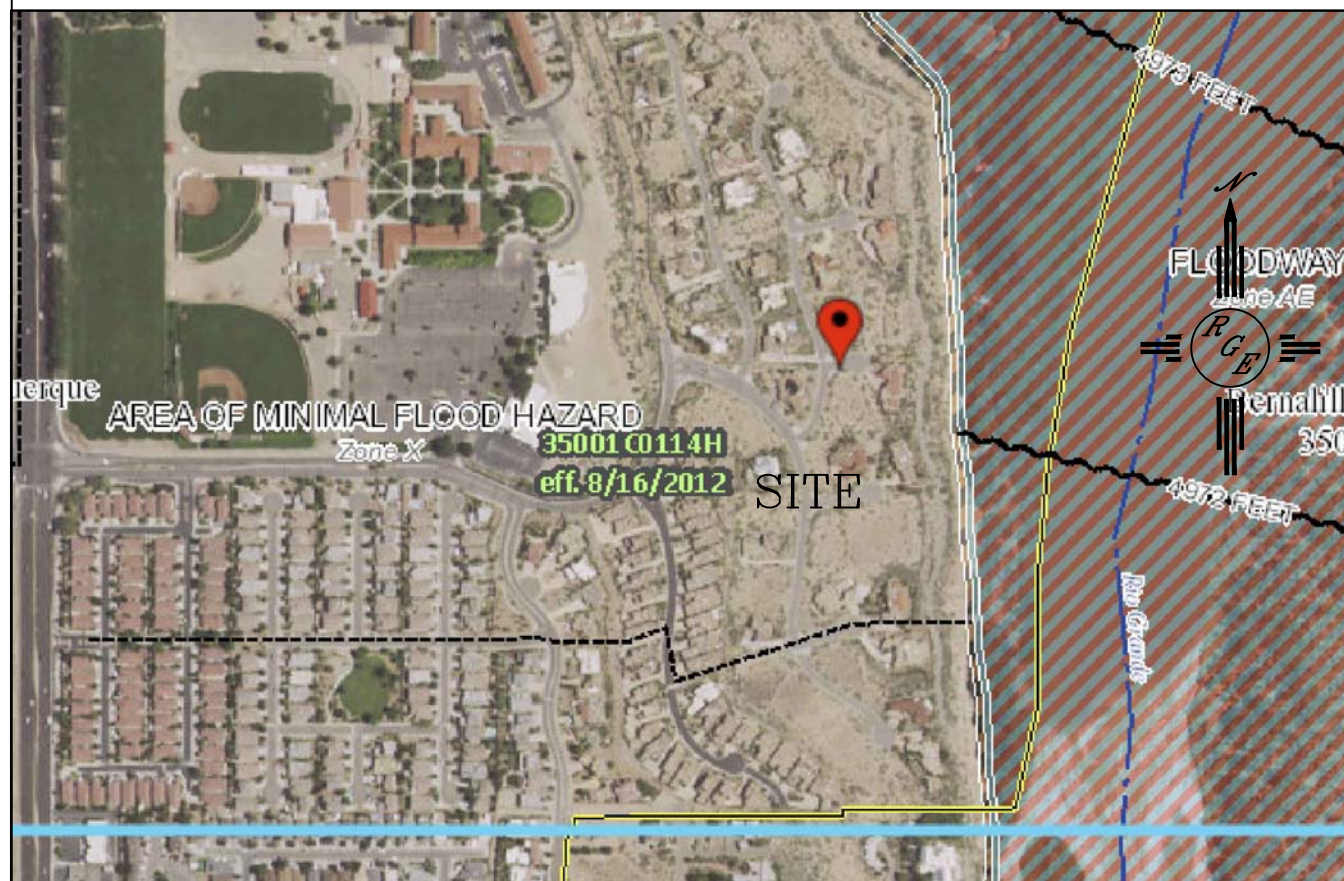
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C6	85.56	142.00	34.52	N31° 04' 35"E	84.27
C7	37.00	247.00	8.58	N9° 31' 25"E	36.97
C8	34.93	25.00	80.05	S45° 15' 33"W	32.16
C9	20.87	25.00	47.83	N70° 47' 56"W	20.27
C10	56.11	45.00	71.44	S82° 36' 16"E	52.55

BENCHMARK/PROPERTY CORNER

Point #	Elevation	Northing	Easting	Description
1	5033.90	1502434.87	1507832.43	LS 6544
2	5037.14	1502441.49	1507780.34	LS 12447
3	5039.16	1502448.00	1507758.19	LS 6544
4	5042.14	1502388.95	1507729.23	LS 6544
5	5045.51	1502317.78	1507711.71	LS 12447
6	5049.35	1502245.50	1507668.14	LS 6544
109	5045.48	1502322.96	1507690.33	CL MON
115	5041.93	1502394.16	1507707.89	CL MON
125	5040.26	1502466.37	1507713.60	CL MON
169	5034.49	1502474.48	1507811.11	CL MON



VICINITY MAP: Z-11



FIRM MAP:

LEGAL DESCRIPTION:

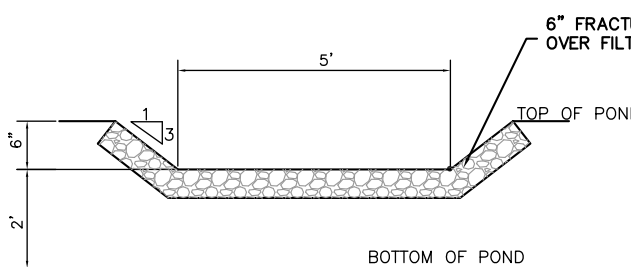
LOT 39 OXBOW BLUFF SUBDIVISION

NOTES:

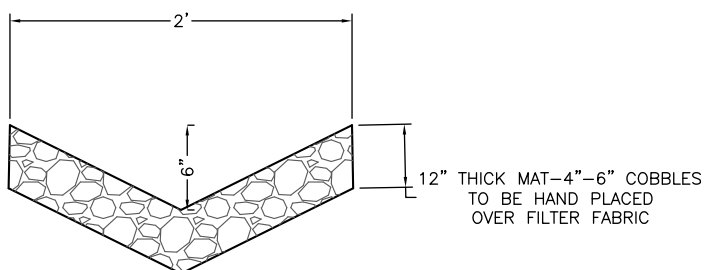
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECH DATED JANUARY 2019
- 3.. ALL DISTURBED AREAS MUST BE RESEED OR LANDSCAPED PRIOR TO FINAL C.O..
4. DUE TO EXISTING TOPOGRAPHY AND UNDEVELOPED NATURE OF THE DOWN STEAM AREA, PERIODIC MAINTENANCE OF PONDS AND SWALES ARE REQUIRED.

LEGEND

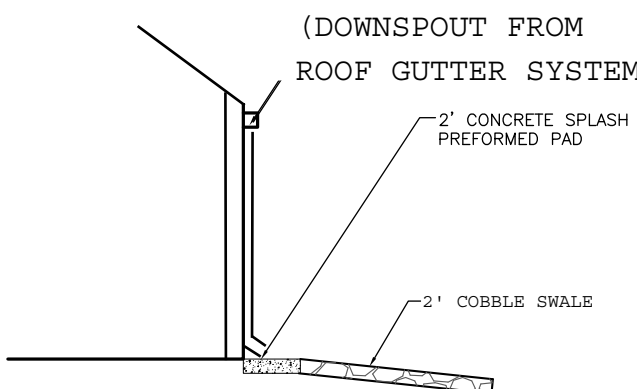
- 5411--- EXISTING CONTOUR
- 5410--- EXISTING INDEX CONTOUR
- 5411--- PROPOSED CONTOUR
- 5410--- PROPOSED INDEX CONTOUR
- 5410--- PROPOSED FLOWLINE ELEVATIONS
- 5410--- PROPERTY LINE
- 5410--- COBBLE SWALE



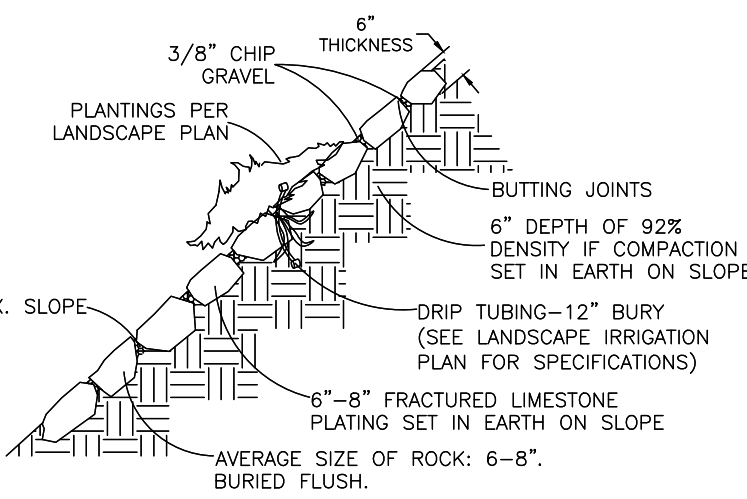
EMERGENCY OVERFLOW DETAIL



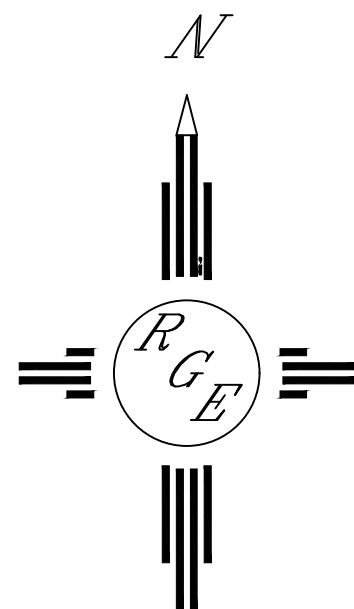
COBBLE SWALE DETAIL



ROOF DRAIN SPLASH PAD DETAIL


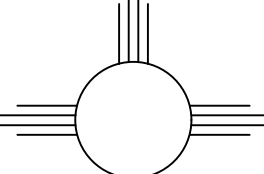


ROCK PLATING DETAIL



GRAPHIC SCALE

SCALE: 1"=10'

ENGINEER'S SEAL 	5004 SANDPIPER NW LOT 39-PI OXBOW BLUFF SUBDIVISION	DRAWN BY JDG
	GRADING AND DRAINAGE PLAN	DATE 02-01-2019
 Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999		SHEET # 1 OF 1
		JOB #