

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

October 22, 2019

Jake Bordenave, PE, PS
Bordenave Designs
PO Box 91194
Albuquerque, NM 87199

RE: **Lot 37PI – Oxbow Bluff**
5001 Sandpiper NW
Grading and Drainage Plan
Engineer's Stamp Date: 9/19/19
Hydrology File: G11D014H

Dear Mr. Bordenave,

PO Box 1293

Based on the submittal received on 10/17/19, 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 certification 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 11/2018)

Project Title: BUERGI RESIDENCE **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: _____
City Address: _____

Applicant: BORDENAVE DESIGNS **Contact:** JAKE BORDENAVE
Address: PO BOX 91194, ALBUQUERQUE, NM 17194
Phone#: (505)823 1344 **Fax#:** _____ **E-mail:** jakebordenave@comcast.net
Owner: S. Buergi **Contact:** _____
Address: c/o RICHARD SCHALK, ARCHITECT
Phone#: (505) 843-7227 **Fax#:** _____ **E-mail:** Richard@RichardSchalk.com

TYPE OF SUBMITTAL: _____ PLAT (____ # OF LOTS) ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ OTHER (SPECIFY) _____
- _____ PRE-DESIGN MEETING?

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: 10/14/19 **By:** BORDENAVE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Bohannon Huston

September 19, 2019

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

Mr. Stephen Dixon
Oxbow Bluff ACC Liaison
2317 Royene Ave NE
Albuquerque, NM 87110

Re: Lot 37— Oxbow Bluff; Final Review for Lot Specific Grading and Drainage Plan

Dear Stephen:

Based on the revised grading and drainage plan for the above referenced Lot stamped dated 9/19/19 by Jake Bordenave, it appears that all the comments have been addressed in regard to the grading and drainage. The approved plan is attached for reference.

Please let me know if you have any comments or concerns.

Sincerely,



Yolanda Padilla Moyer, P.E.
Senior Project Manager
Community Development and Planning

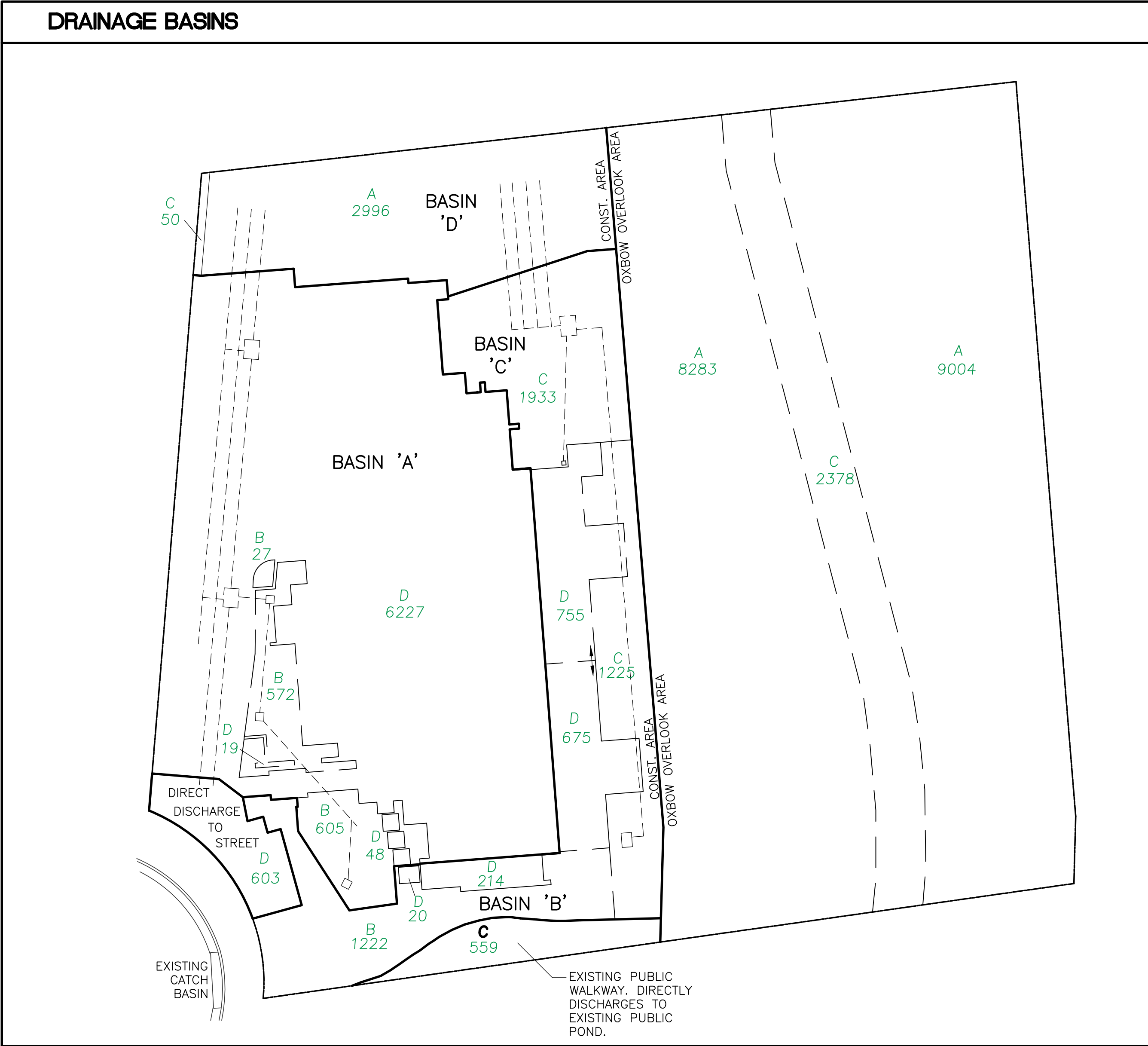
YPM/cc

cc: Richard Schalk
Jake Bordenave

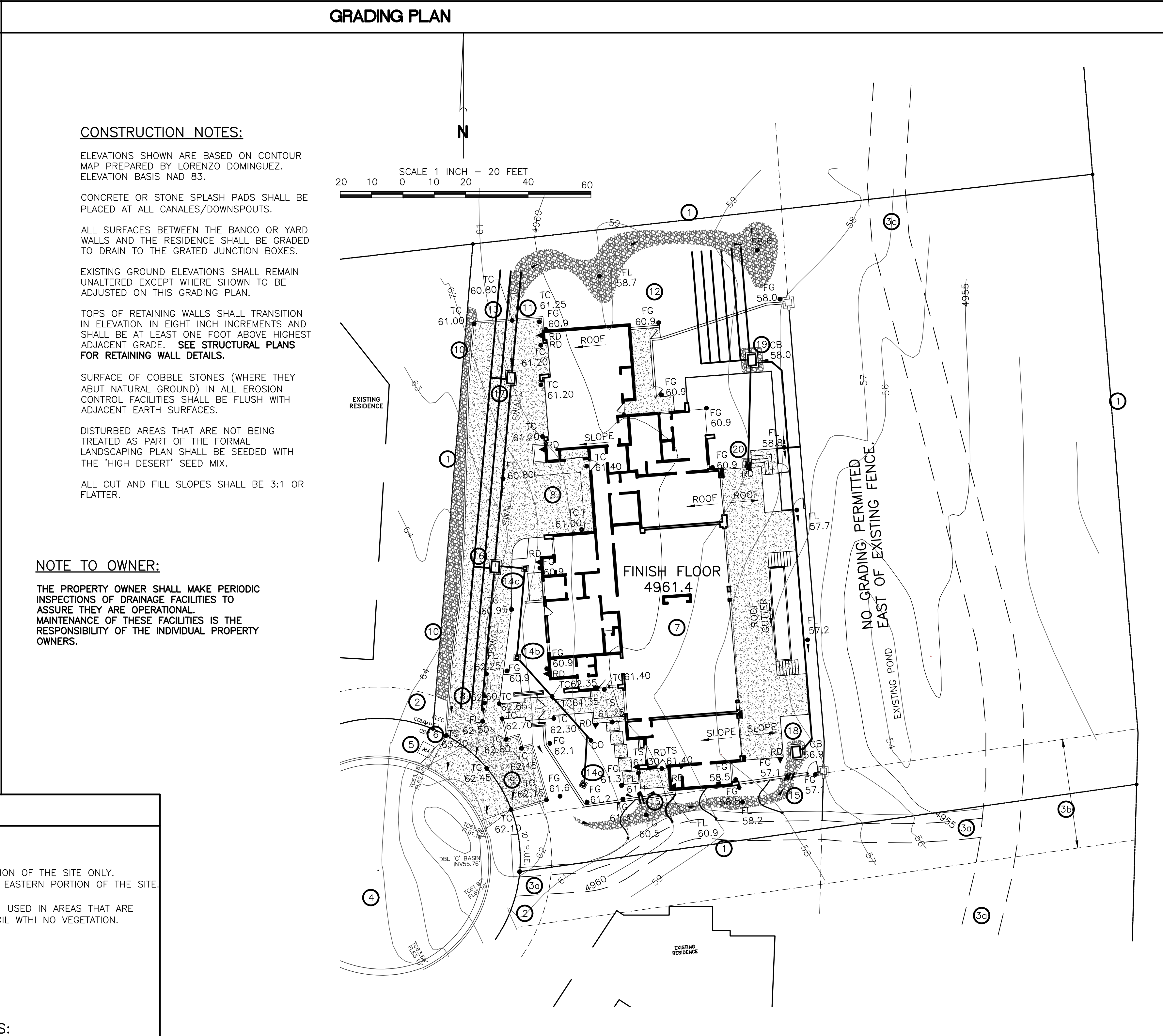
Engineering ▲

Spatial Data ▲

P:\97142\cdp (compare 2004)\Lot 37\Final Review\Lot37 OxbowBluff _letterhead_ _Final review.docx **Advanced Technologies** ▲



DRAINAGE DATA		CONDITION	BASIN	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
				year		sq. ft.	in.	cfs/acre	cu. ft.	cfs
EXISTING	W E S T	10	A	(table 4)		21918	0.08	0.24	146	0.12
			B		0	0.22	0.76	0	0.00	
			C		0	0.44	1.49	0	0.00	
			D		0	1.24	2.89	0	0.00	
			TOTAL		21918				146	0.12
S I T E	100		A		21918	0.44	1.29	804	0.65	
			B		0	0.67	2.03	0	0.00	
			C		0	0.99	2.87	0	0.00	
			D		0	1.97	4.37	0	0.00	
			TOTAL		21918				804	0.65
DEVELOPED	W E S T	10	A		2294	0.08	0.24	15	0.01	
			B		1212	0.22	0.76	22	0.02	
			C		3065	0.44	1.49	112	0.10	
			D		13056	1.24	2.89	1349	0.87	
			TOTAL		19627			1499	1.00	
S I T E	100		A		2294	0.44	1.29	84	0.07	
			B		1212	0.67	2.03	68	0.06	
			C		3065	0.99	2.87	253	0.20	
			D		13056	1.97	4.37	2143	1.31	
			TOTAL		19627			2548	1.64	
BASINS	A	100	A		0	0.44	1.29	0	0.00	
			B		1204	0.67	2.03	67	0.06	
			C		0	0.99	2.87	0	0.00	
			D		10379	1.97	4.37	1704	1.04	
			TOTAL		11583			1771	1.10	
	B	100	A		0	0.44	1.29	0	0.00	
			B		1522	0.67	2.03	85	0.07	
			C		1125	0.99	2.87	93	0.07	
			D		909	1.97	4.37	149	0.09	
			TOTAL		3556			327	0.24	
	C	100	A		0	0.44	1.29	0	0.00	
			B		0	0.67	2.03	0	0.00	
			C		1125	0.99	2.87	93	0.07	
			D		755	1.97	4.37	124	0.08	
			TOTAL		1880			217	0.15	
	D	100	A		2996	0.44	1.29	110	0.09	
			B		0	0.67	2.03	0	0.00	
			C		0	0.99	2.87	0	0.00	
			D		50	1.97	4.37	8	0.01	
			TOTAL		3046			118	0.09	
FROM DRIVE TO STREET	O F F	100	D		603	1.97	4.37	99	0.06	
FROM WALKWAY TO POND	S I T E	100	C		559	0.99	2.87	46	0.04	



KEYED NOTES	LEGEND	DRAINAGE NOTES
- PROPERTY LINE. 10' UTILITY EASEMENT. - SUBDIVISION PEDESTRIAN EASEMENT w/ CRUSHER FINES WALKWAY. 35' PUBLIC STORM DRAIN AND SANITARY SEWER EASEMENT AND 35' PRIVATE ACCESS AND LANDSCAPE EASEMENT. - EXISTING ASPHALT STREET WITH STANDARD CONCRETE CURB. - EXISTING WATER METER. - EXISTING DRY UTILITY PEDESTALS/CABINETS. - NEW RESIDENCE. - NEW 16' +/- CONCRETE DRIVEWAY. RECONSTRUCT CURB IN CITY ROW PER COA STD. DWG 2425 "DRIVE PAD". - NEW CONCRETE PAD w/ 6" HIGH CONC. HEADER CURB. SEE CURB DETAIL ON SHEET C-2. - NEW VARIABLE HEIGHT COBBLE FACED SLOPE. CONSTRUCT ON FILTER FABRIC WHEN SLOPE IS FLATTER THAN 3:1. GROUT COBBLE AND DELETE FILTER CLOTH WHEN SLOPE IS STEEPER THAN 3:1. - NEW 2" WIDE x 8' LONG CONCRETE CHANNEL PER DETAIL ON SHEET C-2. - THIS AREA (BASIN D) IS TO BE UNDISTURBED TO EXTENT POSSIBLE. DISTURBED AREAS ARE TO BE TREATED TO RETURN TO A NATURAL LANDSCAPE. INSTALL AN 18" ± BOTTOM WIDTH MEANDERING, COBBLE SWALE PER DETAIL ON SHEET C-2 w/ SHALLOW PONDS (MIN. TOTAL CAPACITY 160 C.F.). SEE LANDSCAPING FOR DETAILS. 24" WIDE x 3" DEEP NOTCH IN CURB FOR EMERGENCY OVERFLOW. 6" PVC DRAIN SYSTEM WITH 12"x12" MINOR CATCH BASIN PER DETAIL ON SHT. C-2, GRATE ELEV. 61.1 AND OUTLET ELEV. 60.0 AT BASIN A. 6" PVC DRAIN SYSTEM WITH 12"x12" MINOR CATCH BASIN PER DETAIL ON SHT. C-2, GRATE ELEV. 60.8 AND OUTLET ELEV. 59.6 AT BASIN B. 6" PVC DRAIN SYSTEM WITH 12"x12" MINOR CATCH BASIN PER DETAIL ON SHT. C-2, GRATE ELEV. 60.8 AND OUTLET ELEV. 58.5 AT BASIN C. 2-3" BRASS PIPES THRU WALL. INVERT AT GROUND LEVEL. 4-3" BRASS PIPES THRU WALL. INVERT AT GROUND LEVEL. - TYPE SINGLE 'D' CATCH BASIN PER COA STD. DWG. 2206 WITH CONNECTION TO UNDERGROUND DRAINAGE SYSTEM PER DETAIL ON SHEET C-2. GRATE ELEV. 60.65, 8" OUTLET PIPE INVERT 57.70, 8" DISTRIBUTION PIPES. - TYPE SINGLE 'D' CATCH BASIN PER COA STD. DWG. 2206 WITH CONNECTION TO UNDERGROUND DRAINAGE SYSTEM PER DETAIL ON SHEET C-2. GRATE ELEV. 60.65, 8" OUTLET PIPE INVERT 57.70, 8" DISTRIBUTION PIPES. - TYPE SINGLE 'D' CATCH BASIN PER COA STD. DWG. 2206 WITH 6" PVC CONNECTION TO KEYED NOTE NO. 19. GRATE ELEV. 56.90, 10" OUTLET PIPE INVERT 54.07. - TYPE SINGLE 'D' CATCH BASIN PER COA STD. DWG. 2206 WITH CONNECTION TO UNDERGROUND DRAINAGE SYSTEM PER DETAIL ON SHEET C-2. GRATE ELEV. 58.30, 10" INLET PIPE INVERT 53.50 FROM KEYED NOTE 18. 10" OUTLET PIPE INVERT TO 6" DISTRIBUTION PIPES. 12"x12" MINOR CATCH BASIN PER DETAIL ON SHT. C-2. GRATE ELEV. 58.75, 6" PVC OUTLET PIPE TO KEYED NOTE 19. OUTLET PIPE INVERT 57.50.	TBM TEMPORARY BENCHMARK G EXISTING GROUND FF FINISH FLOOR FG FINISH GRADE FL FLOWLINE TA TOP OF ASPHALT TC TOP OF CONCRETE SLAB BC TOP OF CURB TS TOP OF SIDEWALK TRW TOP RETAINING WALL TW TOP OF YARD WALL FH FIRE HYDRANT WM WATER METER WV WATER VALVE MH MANHOLE CB CATCH BASIN GRATE GM GAS METER GV GAS VALVE LP LIGHT POLE PP POWER POLE GW GUY WIRE PED ELEC., TEL. OR CBL PED. OHU OVERHEAD UTILITIES RD/C ROOF DRAINAGE POINT DIRECTION OF FLOW EXISTING PROPOSED STRUCTURES YARD WALL FEMA FLOODPLAIN BOUNDARY DRAINAGE BASIN BOUNDARY EROSION SETBACK LINE EXISTING CONTOUR PROPOSED CONTOUR EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION RECORD SPOT ELEVATION	1. THE SITE IS PRESENTLY UNDEVELOPED. THE LOTS ON THE NORTH, SOUTH AND WEST SIDES OF THE PROPOSED CONSTRUCTION ARE DEVELOPED. THE LOT SLOPES RELATIVELY UNIFORMLY AND MILDLY TO THE SOUTHWEST. THE PROPOSED GRADING WILL ROUTE DEVELOPED FLOWS UNDERGROUND STORAGE CHAMBERS. THE SITE SOILS ARE SANDS AND HIGHLY PERMEABLE AND THE STORAGE WILL DRAIN INTO THE UNDERLYING SOILS QUICKLY. BASED ON LONG TERM EXPERIENCE WITH SIMILAR SOILS IN THE IMMEDIATE AREA (LA LUZ DEL SOL) THE RAINFALL WILL PERCOLATE QUITE QUICKLY. 2. THE SITE IS LOCATED IN RAINFALL ZONE 1. THERE IS AN INCREASE (ABOVE NATURAL CONDITIONS) IN RUNOFF VOLUMES AND FLOW RATES DUE TO DEVELOPMENT. THE INCREASE IN THE 6 HOUR RUNOFF VOLUMES FOR THE 10 YEAR AND 100 YEAR STORMS ARE 1558 AND 2124 CUBIC FEET AND FLOW RATES OF 1.11 AND 1.25 CFS RESPECTIVELY. THE SITE REQUIRES DETENTION PONDING TO MITIGATE EXCESS RUNOFF RATES. 3. THE SITE IS LOCATED IN A "ZONE X" PER FEMA FIRM MAP NO. 114H, DATED AUGUST, 2012. 4. THERE IS AN EXISTING FENCE ON THE EAST SIDE OF THE ALLOWABLE DEVELOPMENT AREA. CMU WALLS ARE PROPOSED ON THE EAST SIDE OF THE A PORTION OF THE DRIVEWAY AND ONE THE WEST AND SOUTH SIDES OF THE ENTRY PATIO. 5. TOPOGRAPHY DATA WAS PREPARED BY LORENZO E. DOMINGUEZ MEDINA ON 09/25/2018.

VICINITY MAP

FEMA FIRM PANEL NO. 114-H

City of Albuquerque 350002

BUERGI RESIDENCE
5001 SANDPIPER CT. NW
ALBUQUERQUE, NM

GRADING AND DRAINAGE PLAN

drawn by: METO
design by: JUB
project no.: 1809

BORDENAVE DESIGNS
P.O. BOX 91194, ALBUQUERQUE, NM 87199
ph (505)823-1344 cell (505)480-6812
fax (505)821-9105 email jakebordenave@comcast.net

DRY STREAM

The diagram illustrates a cross-section of a dry stream. The stream bed is composed of gravel (uncrushed) per chart, which sits on a filter fabric. The filter fabric is supported by the finish grade of the adjacent earth. The diagram shows the stream bed sloping down to a minimum width and then sloping back up. The width of the stream bed at its minimum is labeled as 'BOTTOM WIDTH' SHOWN ON PLAN MINIMUM. The width of the stream bed at the top of the slopes is labeled as 'VARIES 1' MIN.'. The diagram also shows the 'FINISH GRADE OF ADJACENT EARTH' and the 'FILTER FABRIC'.

STONE SIZE	PERCENT BY VOL.
> 6"	0-5
3"-6"	40-60
1"-3"	10-30
3/8"-1"	10-15
< 3/8"	0-5

CONSTRUCTION NOTES:
BOTTOM AND BANK WIDTHS SHALL VARY TO SIMULATE A NATURAL STREAM. CONSTRUCTED BOTTOM WIDTH SHALL BE AT LEAST AS WIDE AS NOTED IN THE BUILD NOTE. STONES GREATER THAN 4" SHALL BE LIMITED TO BANK AREAS.

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NOTE:
AT INSTALLATIONS WHERE THE SIDEWALK PENETRATES A CURB
FACE THE GUTTER SHALL BE POURED MONOLITHICALLY WITH
SIDEWALK CULVERT.

HEADER CURB

1'-0" MIN.

6" MIN.

15"

6"

10"

2-#4 REINFORCING STEEL BARS

PORTLAND CEMENT CURB

SUBGRADE PREPARATION
(95% MODIFIED PROCTOR)

COMPACTED SUBGRADE
(90% MODIFIED PROCTOR)

CONCRETE PAVEMENT

* ROUND TOP EDGES WITH
1/2" EDGING TOOL.

NOTE:

PROVIDE CONTRACTION JOINTS AT 5 FEET ON CENTER AND EXPANSION JOINTS AT 50 FEET ON CENTER UNLESS OTHERWISE STATED ON SITE PLANS OR IF CURB ABUTS SIDEWALK; WHERE CURB JOINTS SHALL MATCH SIDEWALK JOINTS.

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Technical drawing of a concrete catch basin showing two views: a top view and a side elevation.

Top View Labels:

- GRADE TO DRAIN TO BASIN
- 2" MIN.
- NO. 4 REBAR (BENT)
- GROUT
- 6"

Side Elevation Labels:

- 12" CAST IRON GRATE & FRAME
- SLOPE GROUT 1/2" MINIMUM ACROSS BASIN.
- NO. 4 REBAR @ 6" O.C. EACH WAY
- FLOW
- OUTLET PIPE PER PLAN

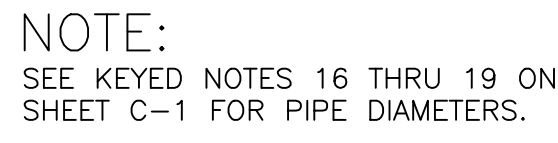
NOTE:
CONCRETE CATCH BASIN SHOWS CATCH BASIN MAY BE SUBJECT TO APPROVAL.

NOTE:
CONCRETE CATCH BASIN SHOWN. PLASTIC OF METAL
CATCH BASIN MAY BE SUBSTITUTED UPON ARCHITECT'S
APPROVAL.

[illegible]

THE PROPERTY OWNER SHALL MAKE PERIODIC INSPECTIONS OF DRAINAGE FACILITIES TO ASSURE THEY ARE OPERATIONAL. MAINTENANCE OF THESE FACILITIES IS THE RESPONSIBILITY OF THE INDIVIDUAL PROPERTY OWNERS.

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1. THE STORAGE CAPACITY OF THE EACH STORAGE CHAMBER IS APPROXIMATELY 4.6 CUBIC FT/LINEAR FT.

SEE SHEET C-1 IN REFERENCE TO THE FOLLOWING NOTES:

2. THE 8" PVC PIPE FROM KEYED NOTE 16 TO KEYED NOTE 17 IS FLAT AND THE INVERT ELEVATION OF THE PIPE IS TO BE 57.55 OR LOWER.
3. THE 8" PVC PIPE FROM KEYED NOTE 17 TO KEYED NOTE 18 IS ON A 1.4% GRADE DOWN TO KEYED NOTE 19. THE INVERT ELEVATION AT KEYED NOTE 18 IS TO BE 53.40 OR LOWER AND AT INVERT ELEVATION 51.40
4. THE 6" PVC PIPE FROM KEYED NOTE 20 TO KEYED NOTE 19 IS TO BE CONSTRUCTED ON A 1.0 % GRADE DOWN TO KEYED NOTE 19. THE INVERT ELEVATION AT KEYED NOTE 20 IS TO BE 57.20 OR LOWER.