

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

October 10, 2017

Robert Fierro, P.E.  
Fierro & Company  
5508 Costa Uerde Rd. NW  
Albuquerque, NM, 87120

**RE: Plaza Hacienda at Old Town Phase II**  
**Grading and Drainage Plan**  
**Stamp Date: 10/5/17**  
**Hydrology File: J13D037**

Dear Mr. Fierro:

PO Box 1293

Based upon the information provided in your submittal received 10/6/17, the Grading and Drainage Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

1. Sheet C-1. Please provide the benchmark information for the survey contour information provided.

NM 87103

2. Sheet C-1. For the first flush basins (the depressed landscape areas), please provide the volumes of each and indicate them on the Grading plan.

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3. Sheet C-1. Please show how the drainage going into these basins.

4. Sheet C-1. Please show any roof drains if any and how they are to drain to the first flush basins.

5. Sheet C-1. There are currently several large trees on the site. Are these going to be removed or stay. Please show the trees w/ canopy and indicate if they are to be removed.

6. Sheet C-1. At the connection between the new curbing and the existing island curbing, there appears to be some of the existing curbing shown beyond the proposed curbing. Please clean up the drafting.

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

7. Sheet C-1. At the existing parking on the east side of the property, the proposed curbing stops at the parking strip. Shouldn't the proposed curbing continue to the edge of the existing parking lot? Also, is the existing asphalt going to stay between the proposed curbing and the proposed building? The existing parking stripping is still shown. Please clarify.
8. Sheet C-2. Under the Introduction, please fix the sq ft of the proposed bldg..
9. Sheet C-2. Under Existing Conditions, it states, "Refer to the grading & drainage plan on Sheet C-1 for the surface flows of the surrounding lots." There are not surface flows of the surrounding lots on Sheet C-1. Please provide them.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

PO Box 1293

*Reneé C. Brissette*

Albuquerque

Reneé Christina Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department

NM 87103

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# 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: \_\_\_\_\_

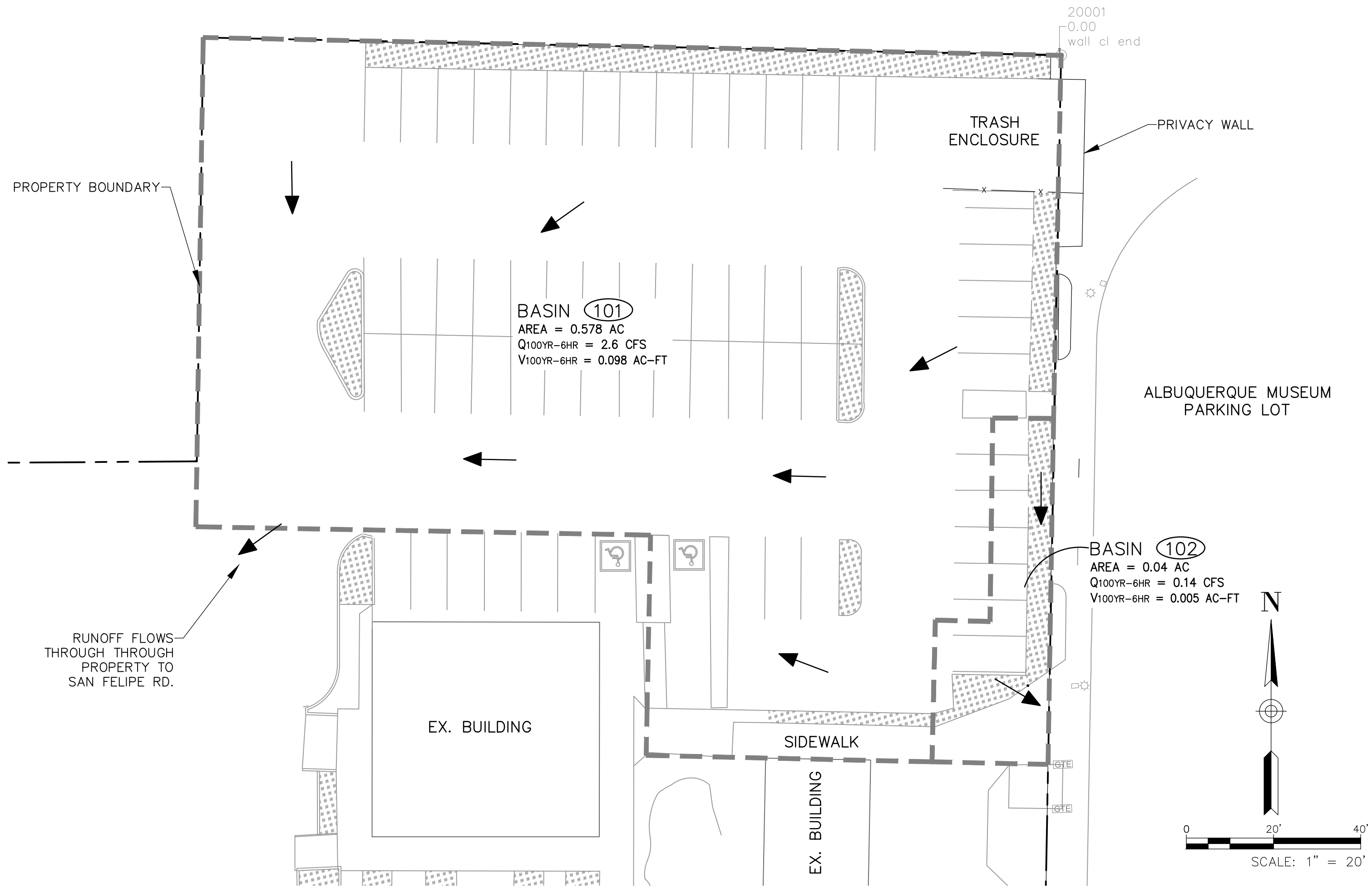
**KEYED NOTES:**

- ① CONSTRUCT 6" RAISED CURB & GUTTER.
- ② CONSTRUCT TURNDOWN SIDEWALK  
W/ 6" FROM TOP OF SIDEWALK TO FG.
- ③ CONSTRUCT TURNDOWN SIDEWALK AT ACCESSIBLE  
ZONES.
- ④ CONSTRUCT ASPHALT PAVEMENT.

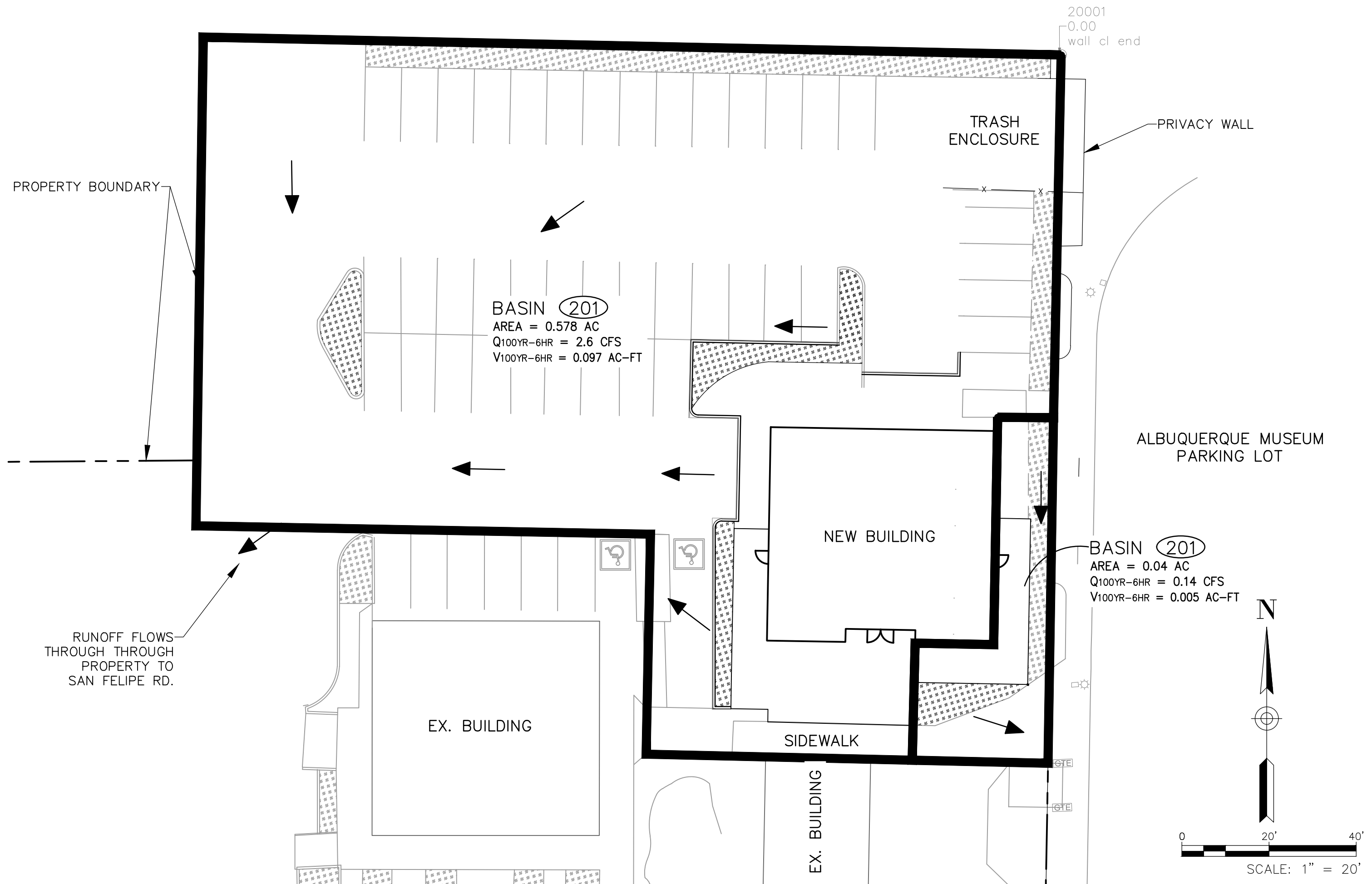
	PROPERTY BOUNDARY
	FLOW PATH
	PROPOSED RETAINING WALL
	FLOWLINE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	FINISHED GRADE
	FLOW LINE
	TOP OF ASPHALT
	TOP BACK OF CURB
	TOP OF CURB
	TOP OF CONCRETE
	TOP OF SIDEWALK
	TOP OF WALL
	BOTTOM OF WALL
	SURFACE FLOW

[illegible]

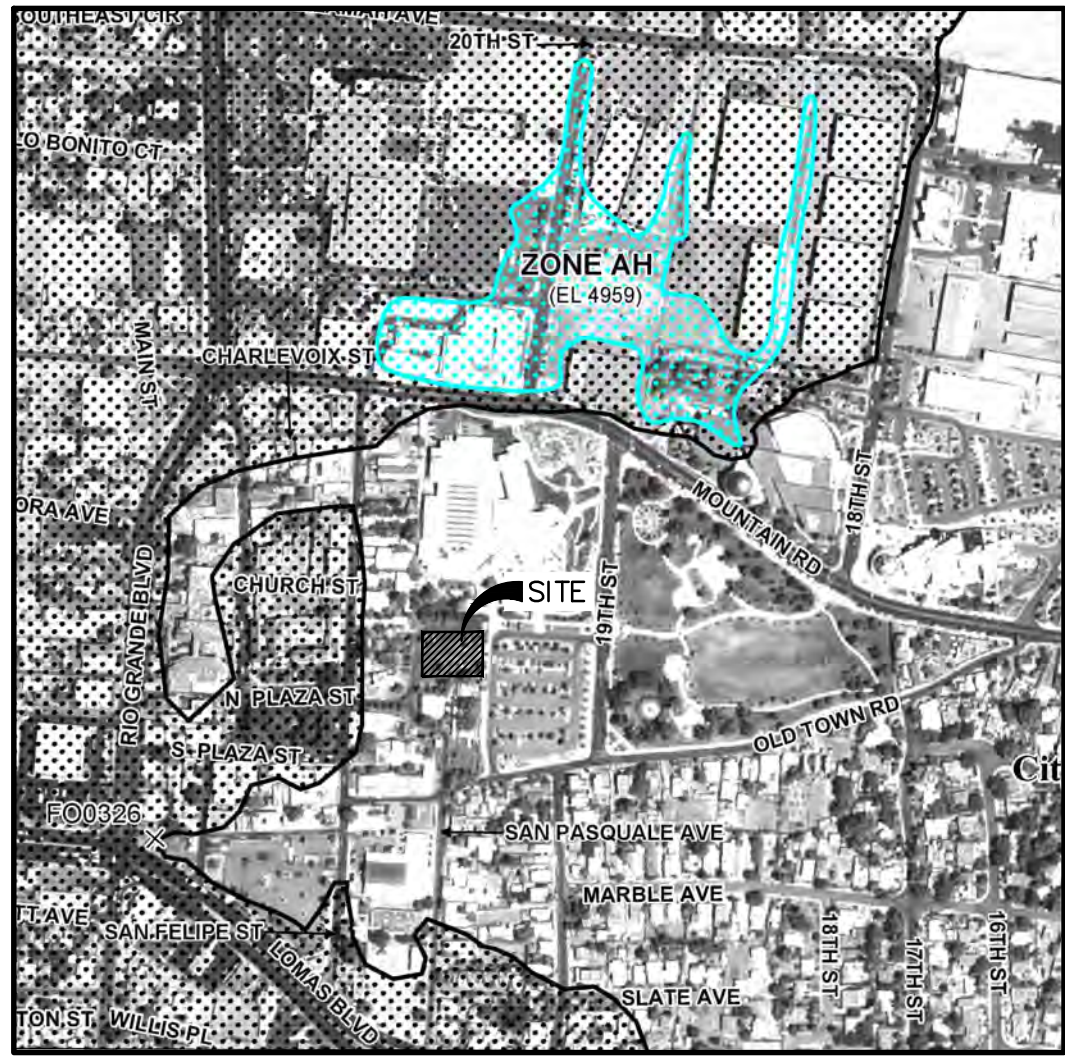
\\Seagate-4004ED\Public\PROJECTS\2017\17069\CADD\SHEETS\17069-DRAINAGE.dwg 10/5/2017 10:26:17 AM



1 EXISTING BASIN MAP



2 PROPOSED BASIN MAP



**Introduction**  
Phase II is being proposed, which includes a xxxx sq.ft. retail building. The site is located in the Casa De Armijo and Plaza Hacienda Subdivision, which is within the historic Old Town. Phase I was completed earlier this year. The project site for Phase II is not in a Flood Plain. The purpose of this Grading & Drainage Plan is to 1) provide hydrologic and hydraulic analysis of the allowable and proposed condition, 2) satisfy the first flush requirement, and 3) seek building approval.

**Methodology**  
Hydrologic procedures presented in the Hydrology Section of the DMP, Section 22.2, revised April 7, 1993 were followed.

**Existing Condition**  
Phase II is within said Lot B which is approximately 2.2 acres; however, Phase II drainage analysis only covers a portion of said Lot B with approximately 0.60 acres. Phase II site does not receive offsite runoff. Refer to the grading & drainage plan on Sheet C-1 for the surface flows of the surrounding lots. Runoff from Sub-basin 101 is conveyed through said Lot B and discharges to San Felipe Rd. Runoff from Sub-basin 102 discharges to the Albuquerque's Museum's parking lot, which then drains to Old Town Rd. Hydrologic analysis for the existing condition is included on this Sheet.

**Proposed Condition**  
Phase II proposes a 2,000 sq.ft. retail building. The proposed drainage pattern will not alter from the existing. Phase two does not adversely impact drainage to the site nor offsite basins. Depressed landscaping of 3-inches is proposed to treat the first flush. Refer to Sheet C-1 and this sheet for location of the depressed landscaping. Refer to this sheet for the first flush calculations. Hydrologic analysis for the proposed condition is included on this Sheet.

**Conclusion**  
The City's requirements have been satisfied under this grading & drainage plan. The contractor shall use this plan (Sheet C-1 and Sheet C-2), and will need a drainage certification in order to obtain a Close-out. This drainage report seeks approval for building permit.

Basin 101			
Area of Treatment A	=	0.000	ft <sup>2</sup>
Area of Treatment B	=	1453.00	ft <sup>2</sup>
Area of Treatment C	=	0.033	ac
Area of Treatment D	=	0.000	ac
Area of Treatment E	=	23710.00	ft <sup>2</sup>
Area of Treatment F	=	0.544	ac
Total Area	=	25163.00	ft <sup>2</sup>
		0.578	ac
Volumetric Flow			
Weighted E	=	2.043	inches
Volume (6hr)	=	0.098	acre-ft
Volume (24hr)	=	0.116	acre-ft
Volume (4days)	=	0.141	acre-ft
Volume (10days)	=	0.171	acre-ft
Peak Rate of Discharge			
Q <sub>100</sub>	=	2.634	cfs

Basin 102			
Area of Treatment A	=	0.000	ft <sup>2</sup>
Area of Treatment B	=	460.00	ft <sup>2</sup>
Area of Treatment C	=	0.011	ac
Area of Treatment D	=	0.000	ac
Area of Treatment E	=	1050.00	ft <sup>2</sup>
Area of Treatment F	=	0.024	ac
Total Area	=	1510.00	ft <sup>2</sup>
		0.035	ac
Volumetric Flow			
Weighted E	=	1.712	inches
Volume (6hr)	=	0.005	acre-ft
Volume (24hr)	=	0.006	acre-ft
Volume (4days)	=	0.007	acre-ft
Volume (10days)	=	0.008	acre-ft
Peak Rate of Discharge			
Q <sub>100</sub>	=	0.137	cfs

Basin 201			
Area of Treatment A	=	0.000	ft <sup>2</sup>
Area of Treatment B	=	1824.00	ft <sup>2</sup>
Area of Treatment C	=	0.042	ac
Area of Treatment D	=	0.000	ac
Area of Treatment E	=	23339.00	ft <sup>2</sup>
Area of Treatment F	=	0.536	ac
Total Area	=	25163.00	ft <sup>2</sup>
		0.578	ac
Volumetric Flow			
Weighted E	=	2.023	inches
Volume (6hr)	=	0.097	acre-ft
Volume (24hr)	=	0.115	acre-ft
Volume (4days)	=	0.140	acre-ft
Volume (10days)	=	0.169	acre-ft
Peak Rate of Discharge			
Q <sub>100</sub>	=	2.614	cfs

Basin 202			
Area of Treatment A	=	0.000	ft <sup>2</sup>
Area of Treatment B	=	474.00	ft <sup>2</sup>
Area of Treatment C	=	0.011	ac
Area of Treatment D	=	0.000	ac
Area of Treatment E	=	1035.00	ft <sup>2</sup>
Area of Treatment F	=	0.024	ac
Total Area	=	1509.00	ft <sup>2</sup>
		0.035	ac
Volumetric Flow			
Weighted E	=	1.699	inches
Volume (6hr)	=	0.005	acre-ft
Volume (24hr)	=	0.006	acre-ft
Volume (4days)	=	0.007	acre-ft
Volume (10days)	=	0.008	acre-ft
Peak Rate of Discharge			
Q <sub>100</sub>	=	0.136	cfs

**FIRST FLUSH STORAGE:**

**DEPRESSED LANDSCAPING**  
NEW LAND TREATMENT "D" ROUTED THROUGH DEPRESS LANDSCAPING:  
TOTAL AREA = 4,300 SQ.FT.  
WATER QUALITY STORAGE NEEDED=4,300 SQ.FT.\*(.34")\*(1'/12")=121.8 CU.FT.

WATER QUALITY STORAGE DESIGNED = 491 SQ.FT\*(3")\*(1'/12")= 122.8 CU.FT.

WQDESIGNED (122.8 CU.FT.) > WQNEEDED (121.8 CU.FT.)

**LEGEND**

- SWALE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- SURFACE FLOW DIRECTION
- EXISTING BASIN MAP
- PROPOSED BASIN MAP
- DEPRESSED LANDSCAPING 3"-4"

- 101 EXISTING BASIN
- 201 PROPOSED BASIN

BY	DESCRIPTION	DATE	REV.

PROJECT NO:	10/5/2017
DESIGNED BY:	RJF
DRAWN BY:	RJF
CHECKED BY:	RJF
DATE:	OCT 2017

SHEET TITLE

DRAINAGE PLAN

SHEET NO:

C-2