

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

March 12, 2018

Tyler J. Ashton, P.E.
Wilson & Company
440I Masthead St. NE
Albuquerque, NM, 87113

**RE: Gruet Winery Phase 2
8400 Pan American Fwy NE
Grading and Drainage Plan
Engineer's Stamp Date: 02/15/18
Hydrology File: C18D002**

Dear Mr. Ashton:

PO Box 1293

Based upon the information provided in your submittal received 03/08/2018, the Grading and Drainage Plan is approved Grading Permit.

Albuquerque

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

NM 87103

Sincerely,

Renée C. Brissette

www.cabq.gov

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



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:

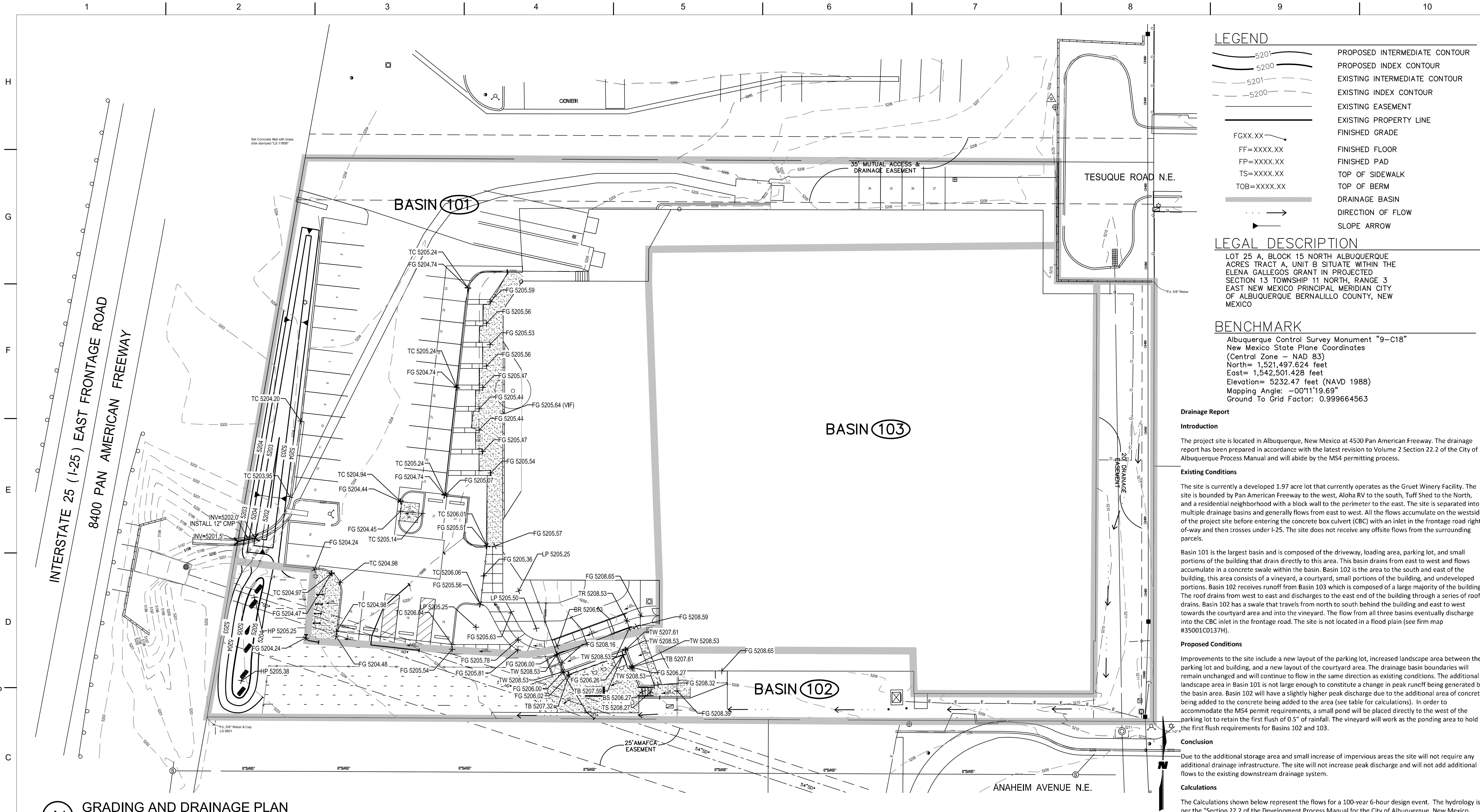
- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT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

M:\MSD\17-600-084-002_Disciplines_REFERENCES\1315 L201-GRDG PLAN.dwg



LEGEND

	PROPOSED INTERMEDIATE CONTOUR
	PROPOSED INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
	EXISTING INDEX CONTOUR
	EXISTING EASEMENT
	EXISTING PROPERTY LINE
	FINISHED GRADE
	FINISHED FLOOR
	FINISHED PAD
	TOP OF SIDEWALK
	TOP OF BERM
	DRAINAGE BASIN
	DIRECTION OF FLOW
	SLOPE ARROW

LEGAL DESCRIPTION

LOT 25 A, BLOCK 15 NORTH ALBUQUERQUE ACRES TRACT A, UNIT B SITUATE WITHIN THE ELENA GALLEGOS GRANT IN PROJECTED SECTION 13 TOWNSHIP 11 NORTH, RANGE 3 EAST NEW MEXICO PRINCIPAL MERIDIAN CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

BENCHMARK

Albuquerque Control Survey Monument "9-C18"
New Mexico State Plane Coordinates
(Central Zone - NAD 83)
North= 1,521,497.624 feet
East= 1,542,501.428 feet
Elevation= 5232.47 feet (NAVD 1988)
Mapping Angle= -00°11'19.69"
Ground To Grid Factor= 0.999664563

Drainage Report

Introduction

The project site is located in Albuquerque, New Mexico at 4500 Pan American Freeway. The drainage report has been prepared in accordance with the latest revision to Volume 2 Section 22.2 of the City of Albuquerque Process Manual and will abide by the MS4 permitting process.

Existing Conditions

The site is currently a developed 1.97 acre lot that currently operates as the Gruet Winery Facility. The site is bounded by Pan American Freeway to the west, Aloha RV to the south, Thud Saff to the North, and a residential neighborhood with a block wall to the perimeter to the east. The site is separated into multiple drainage basins and generally flows from east to west. All the flows accumulate on the westside of the project site before entering the concrete box culvert (CBC) with an inlet in the frontage road right-of-way and then crosses under I-25. The site does not receive any offsite flows from the surrounding parcels.

Basin 101 is the largest basin and is composed of the driveway, loading area, parking lot, and small portions of the building that drain directly to this area. This basin drains from east to west and flows accumulate in a concrete swale within the basin. Basin 102 is the area to the south and east of the building, this area consists of a vineyard, a courtyard, small portions of the building, and undeveloped portions. Basin 102 receives runoff from Basin 103 which is composed of a large majority of the building. The roof drains from west to east and discharges to the east end of the building through a series of roof drains. Basin 102 has a swale that travels from north to south behind the building and east to west towards the courtyard area and into the vineyard. The flow from all three basins eventually discharge into the CBC inlet in the frontage road. The site is not located in a flood plain (see firm map #35001C0137H).

Proposed Conditions

Improvements to the site include a new layout of the parking lot, increased landscape area between the parking lot and building, and a new layout of the courtyard area. The drainage basin boundaries will remain unchanged and will continue to flow in the same direction as existing conditions. The additional landscape area in Basin 101 is not large enough to constitute a change in peak runoff being generated by the basin area. Basin 102 will have a slightly higher peak discharge due to the additional area of concrete being added to the concrete being added to the area (see table for calculations). In order to accommodate the MS4 permit requirements, a small pond will be placed directly to the west of the parking lot to retain the first flush of 0.5" of rainfall. The vineyard will work as the ponding area to hold the first flush requirements for Basins 102 and 103.

Conclusion

Due to the additional storage area and small increase of impervious areas the site will not require any additional drainage infrastructure. The site will not increase peak discharge and will not add additional flows to the existing downstream drainage system.

Calculations

The Calculations shown below represent the flows for a 100-year 6-hour design event. The hydrology is per the "Section 22.2 of the Development Process Manual for the City of Albuquerque, New Mexico, latest revision.

Basin Data: COA Zone: 2
Precip. in: 2.2

Existing Conditions

Basin	Total Area (sq ft)	Total Area (Ac)	A		B		C		D		Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6 _{hr} , acre-ft)	Volume (24 _{hr} , acre-ft)	Volume (10 _{day} , acre-ft)
101	38269.1	0.879	0	0	0	0	7	0.06	93	0.82	4.0	2.05	0.1501	0.1815	0.2502
102	15356.9	0.353	0	0	0	0	85	0.30	15	0.05	1.2	1.28	0.0376	0.0396	0.0440
103	37191.9	0.854	0	0	0	0	0	0.00	100	0.85	4.0	2.12	0.1508	0.1836	0.2554

Proposed Conditions

Basin		Total Area	A		B		C		D		Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6 _{hr} , acre-ft)	Volume (24 _{hr} , acre-ft)	Volume (10 _{day} , acre-ft)
			%	Ac	%	Ac	%	Ac	%	Ac					
101	38269.1	0.879	0	0.00	0	0.00	10	0.09	90	0.79	4	2.02	0.1480	0.1783	0.2448
102	15356.9	0.353	0	0.00	0	0.00	73	0.26	27	0.10	1.3	1.40	0.0411	0.0447	0.0527
103	37191.9	0.854	0	0.00	0	0.00	0	0.00	100	0.85	4	2.12	0.1508	0.1836	0.2554

Pond 1

Stage	Area	Storage	Cum. Storage	Cum. Storage
(MSL)	ft ²	ft ³	ft ³	Ac-ft
5204	42	0.000	0	
5203	672	357,000	357	
5202	1528	1100,000	1457	0.0416

Vineyard Pond

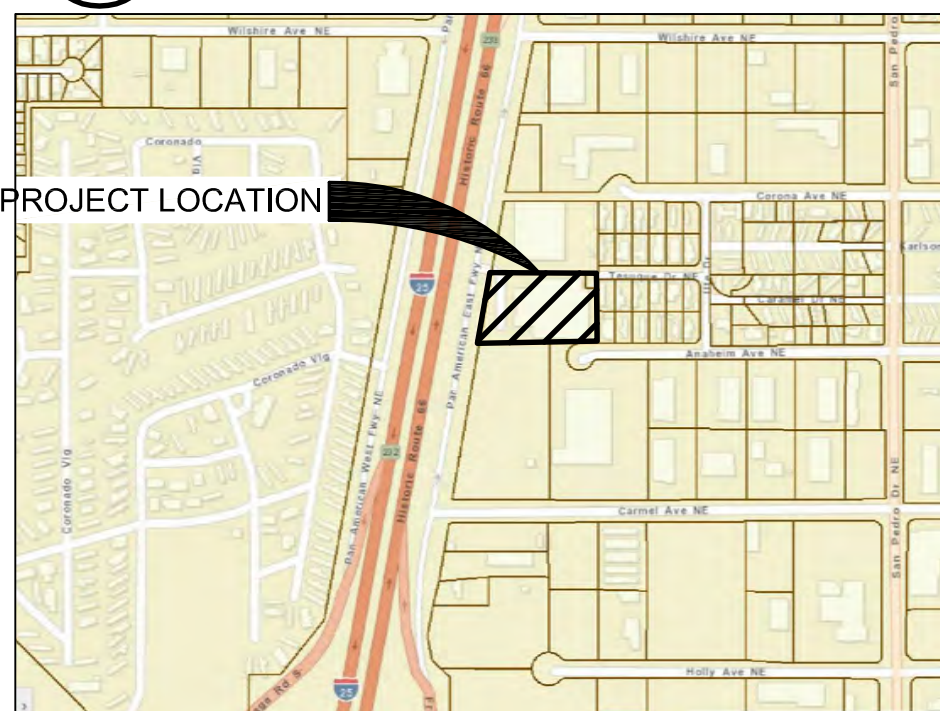
Stage	Area	Storage	Cum. Storage	Cum. Storage
(MSL)	ft ²	ft ³	ft ³	Ac-ft
5393	2630	0.000	0	
5394	3301	2965,500	2966	0.0681

MS4 Calculations

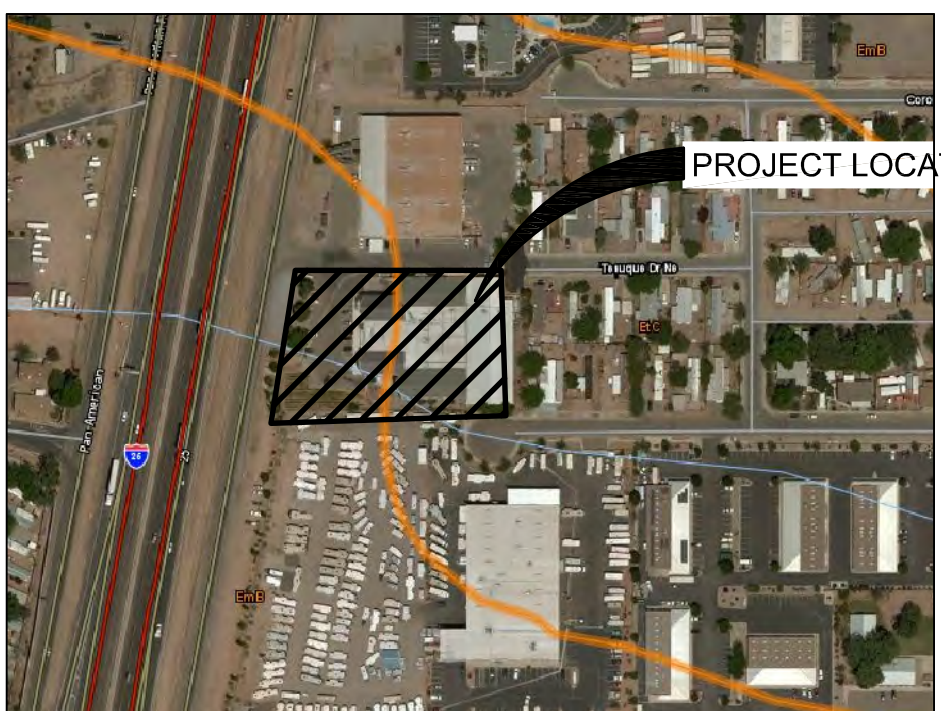
Basin	Area	Volume	Volume
	ft ²	ft ³	Ac-ft
101	38269.1	1594.55	0.04
102	15356.9	639.87	0.01
103	37191.9	1549.66	0.04
Total			0.080

A1 GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'



LEGAL DESCRIPTION: LOT 25A BLK 15
NORTH ALBUQUERQUE ACRES TR A UNIT B CONT 1.9696
AC M/L OR 85,796 SQ. FT M/L



PERMIT DOCUMENTS

REVISIONS:

NO	DATE	NOTE



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GRUET WINERY ABQ, PHASE 2

8400 PAN AMERICAN FWY NE
ALBUQUERQUE, NM 87113

SCALE: AS NOTED
DATE: 5 FEBRUARY 2018
PROJECT: 1315
DRAWN BY:

GRADING AND DRAINAGE PLAN

C102