

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 12, 2019

Ron Bohannon, P.E.
Tierra West, LLC
5571 Midway Park Place, NE
Albuquerque, NM 87109

RE: **Maverick at University & Menaul
1901 Menaul NE
Conceptual Grading Plan Stamp Date: 5/22/19
Hydrology File: H15D068**

Dear Mr. Bohannon,

Based on the submittal received on 5/31/19, this project cannot be approved until the following are corrected:

PO Box 1293

Prior to Preliminary Plat & Site Plan:

Albuquerque

NM 87103

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1. Existing and proposed contours need to be labeled.
2. There are 3 type-D inlets at the truck fueling entrance, not 2; all will need to remain; also show the work to remove and replace the damaged/destroyed valley gutter and include on the Infrastructure List.
3. Show the work in the ROW to remove the extra driveways. Also the curb and gutter in Menaul that is damaged/destroyed and will need to be replaced along the entire Menaul frontage; include this work on the Infrastructure List.
4. Show the existing onsite inlets and onsite storm drain to be removed.
5. Include a trenching prism for the private storm drain along Menaul, showing that the 10' easement is adequate and the prism won't encroach on the ROW.
6. Provide waterblocks at least 0.87' high at all entrances and include supporting spot elevations.
7. Include project benchmark and datum; include legal description.
8. Add note on the plan that "No work shall be performed in the public ROW without an approved Work Order or Excavation Permit."

Prior to Building Permit (For Information):

9. Remove all "Conceptual" markings.

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10. Hydraulic calculations are missing (a separate drainage report is recommended):
 - a. Provide inlet capacity calculation, including 2x capacity for inlets in a sump.
 - b. Provide HGL calculations, calculated along the energy grade line.
 - c. Provide pond routing calculations and storage discharge curves.
 - d. Label the SWQV and 100-yr water surface elevation
 - e. Provide an emergency overflow or 2x capacity in the outlet pipe for the pond.
 - f. Provide flow depth calculations for the valley gutters just north of the drive entrances, showing that flows will not jump the waterblock and surface discharge to Menaul.
11. This project requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).
12. Additional comments may be provided at Building Permit, based on the outcome of the above remarks and level of detail shown on plans.

Prior to Certificate of Occupancy (For Information):

PO Box 1293

13. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

Albuquerque

14. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

NM 87103

15. A Bernalillo County Recorded [Drainage Covenant \(No Public Easement\)](#) is required for the storm water ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

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

Sincerely,

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

Proposed Conditions (See Sheet C2-B for Basin Map)

Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				100-Year, 6-Hr			10-Year, 6-Hr						
				Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs				
P1	46,499.93	1.067	0.00167	0%	0.000	1%	0.011	0%	0.000	99%	1.057	2.107	0.187	4.99	1.329	0.118	3.33
P2	45,363.28	1.041	0.00163	0%	0.000	21%	0.219	0%	0.000	79%	0.823	1.839	0.160	4.37	1.117	0.097	2.79
P3	6,100.08	0.140	0.00022	0%	0.000	0%	0.000	0%	0.000	100%	0.140	2.120	0.025	0.66	1.340	0.016	0.44
P4	14,119.56	0.324	0.00051	0%	0.000	5%	0.016	0%	0.000	95%	0.308	2.053	0.055	1.48	1.287	0.035	0.98
P5	1,495.39	0.034	0.00005	0%	0.000	50%	0.017	50%	0.017	0%	0.000	0.955	0.003	0.09	0.400	0.001	0.05
P6	3,697.45	0.085	0.00013	0%	0.000	55%	0.047	45%	0.038	0%	0.000	0.938	0.007	0.23	0.388	0.003	0.11
Total	117,275.69	2.692	0.00421	0%	0.000	55%	0.309	45%	0.055	0%	0.000	2.327	0.437	11.82	0.270	7.70	

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted E * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Excess Precipitation, E (in.)		
Zone 2	100-Year	10-Year
Ea	0.53	0.13
Eb	0.78	0.28
Ec	1.13	0.52
Ed	2.12	1.34

Peak Discharge (cfs/acre)		
Zone 2	100-Year	10-Year
Qa	1.56	0.38
Qb	2.28	0.95
Qc	3.14	1.71
Qd	4.70	3.14

Water Quality Volume (Onsite)

Total Impervious Area = 2.327 Acres = 101364.12 SF

Retention depth = 0.28" = 0.023' (redevelopment)

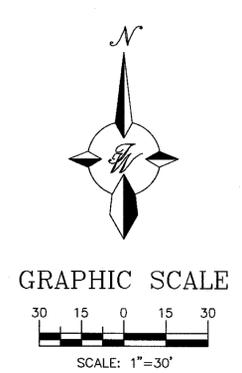
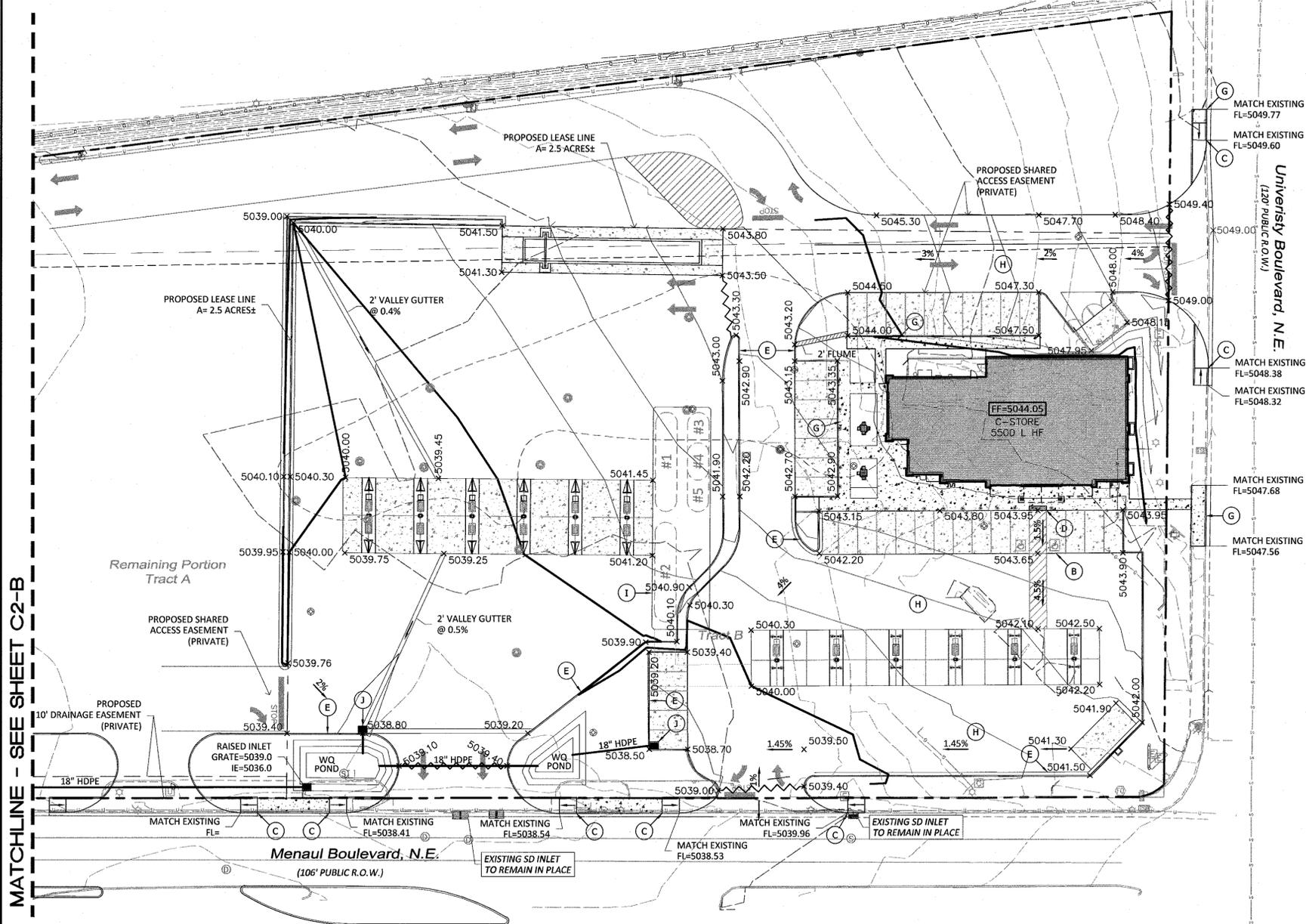
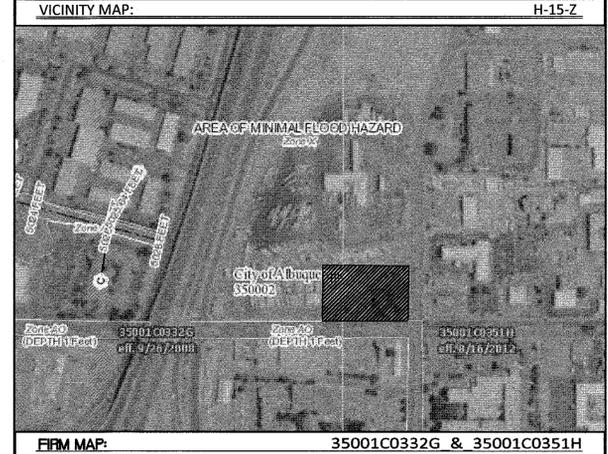
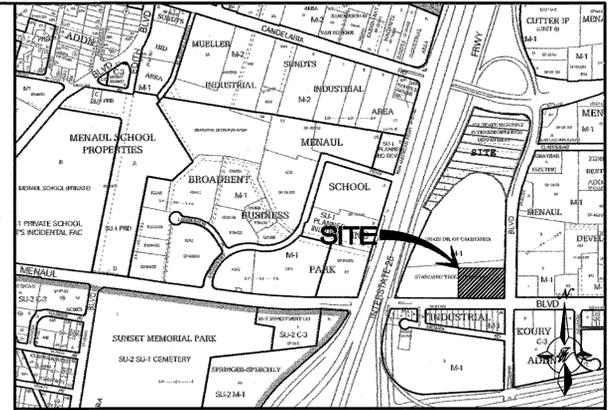
Retention Volume = 0.023 * 101364.12 = 2332 CF = 0.05 Ac-Ft

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- RIGHT-OF-WAY
- BUILDING
- SIDEWALK
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- x 5048.25 EXISTING SPOT ELEVATION
- ⊠ 12"x12" CATCH BASIN (NDS OR EQUAL)
- ⊠ DROP INLET
- ⊠ CURB INLET

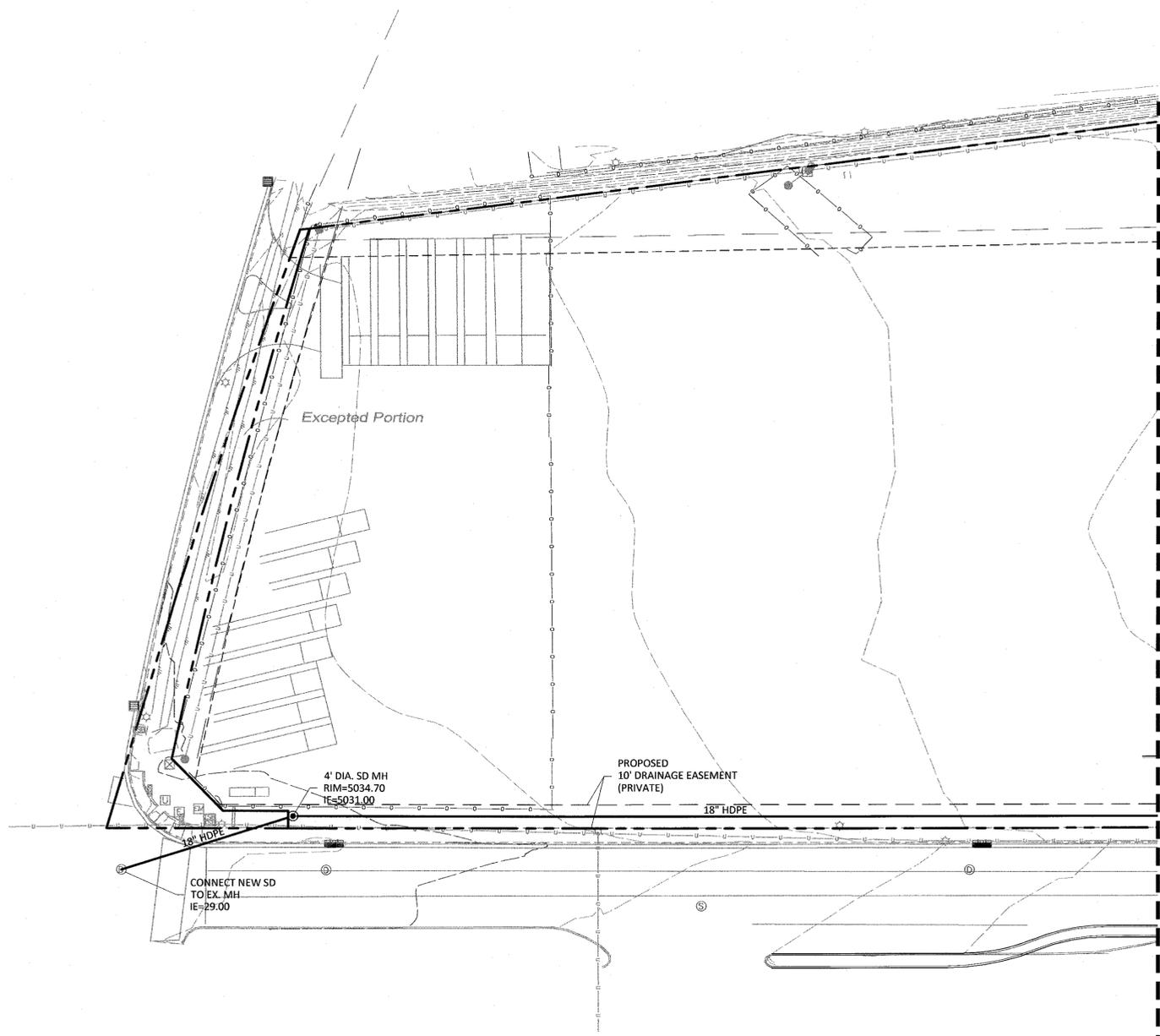
KEYED NOTE:

- (A) SINGLE "D" INLET PER COA STD DWG #2206, #2220
- (B) ACCESSIBLE PARKING PER ADA STANDARDS WITH SIGN (SEE DETAIL SHT. C5)
- (C) UNIDIRECTIONAL ACCESSIBLE RAMP (SEE DETAIL SHT. C8)
- (D) TRUNCATED DOMES (SEE DETAIL SHT. C8)
- (E) ON-SITE CURB & GUTTER (SEE DETAIL SHT. C6)
- (F) ZERO CURB
- (G) CONCRETE SIDEWALK (SEE DETAIL SHT. C7)
- (H) ASPHALT PAVING (SEE GEOTECH REPORT)
- (I) CONCRETE SLAB W/ CHAMFERED CORNERS
- (J) WATER QUALITY INLET



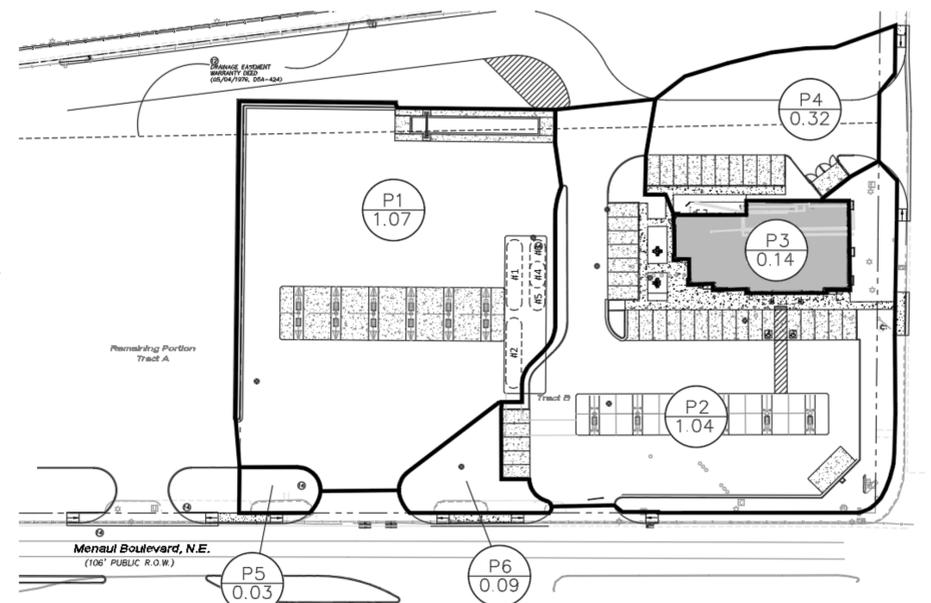
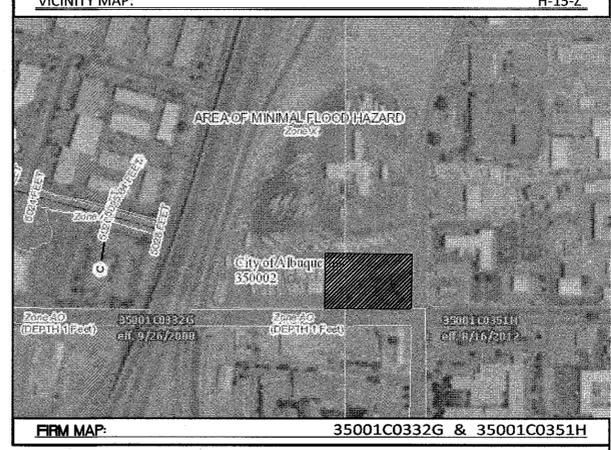
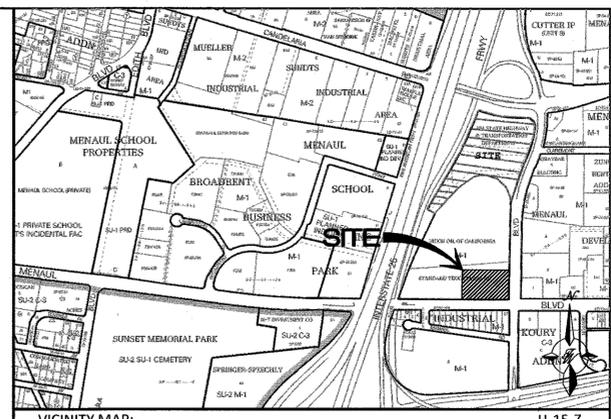
NOT FOR CONSTRUCTION

ENGINEER'S SEAL 	MAVERIK UNIVERSITY & MENAUL CONCEPTUAL GRADING & DRAINAGE PLAN	DRAWN BY DY DATE 5/21/19 2018062-GRB
	 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C2-A JOB # 2018062



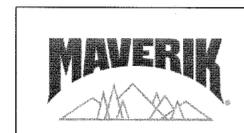
MATCHLINE-SEE SHEET C2-A

- LEGEND**
- CURB & GUTTER
 - BOUNDARY LINE
 - EASEMENT
 - RIGHT-OF-WAY
 - BUILDING
 - SIDEWALK
 - CONTOUR MAJOR
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 - x 5048.25 EXISTING SPOT ELEVATION
 - ☒ 12"x12" CATCH BASIN (NDS OR EQUAL)
 - DROP INLET
 - ▢ CURB INLET



DEVELOPED BASIN MAP

NOT FOR CONSTRUCTION



ENGINEER'S SEAL  RONALD R. BOHANNAN P.E. #7868	MAVERIK UNIVERSITY & MENAUL CONCEPTUAL GRADING & DRAINAGE PLAN	DRAWN BY DY DATE 5/21/19 2018062-GRB
	TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C2-B JOB # 2018062