

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

www.cabq.gov

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
- Albuquerque
- NM 87103
- www.cabq.gov
13. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
 14. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.
 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.

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 Descriptions										100-Year, 6-Hr			10-Year, 6-Hr				
Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Treatment A	Treatment B	Treatment C	Treatment D	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs				
				% (acres)	% (acres)	% (acres)	% (acres)										
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	14119.56	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	3697.45	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	0.000	0.000	0.309	0.055	2.327	0.938	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 D * 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)

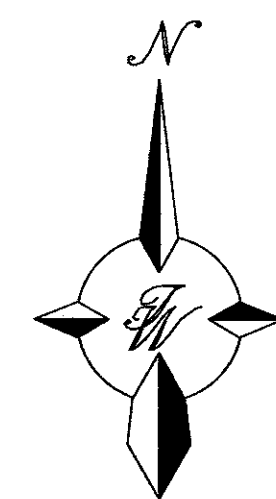
Retention Volume = 0.023' * 101364.12 = 2332 CF = 0.05 Ac-Ft

LEGEND

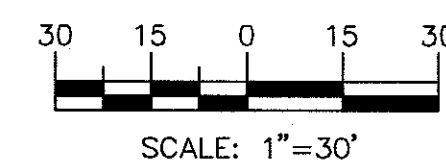
	CURB & GUTTER
	BOUNDARY LINE
	EASEMENT
	RIGHT-OF-WAY
	BUILDING
	SIDEWALK
	CONTOUR MAJOR
	CONTOUR MINOR
	SPOT ELEVATION
	FLOW ARROW
	EXISTING CURB & GUTTER
	EXISTING BOUNDARY LINE
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING SPOT ELEVATION
	12'x12' CATCH BASIN (NDS OR EQUAL)
	DROP INLET
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

KEYED NOTE:

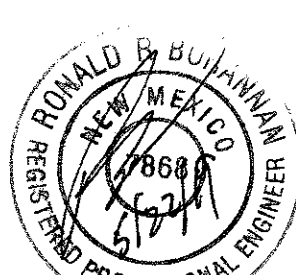
- (A) SINGLE "D" INLET PER COA STD DWG #2206, #2220
- (B) ACCESSIBLE PARKING PER ADA STANDARDS WITH SIGN (SEE DETAIL SHT. C5)
- (C) UNIDIRECTIONAL ACCESSIBLE RAMP (SEE DETAIL SHT. C8)
- (D) TRUNCATED DOMES (SEE DETAIL SHT. C8)
- (E) ON-SITE CURB & GUTTER (SEE DETAIL SHT. C6)
- (F) ZERO CURB
- (G) CONCRETE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

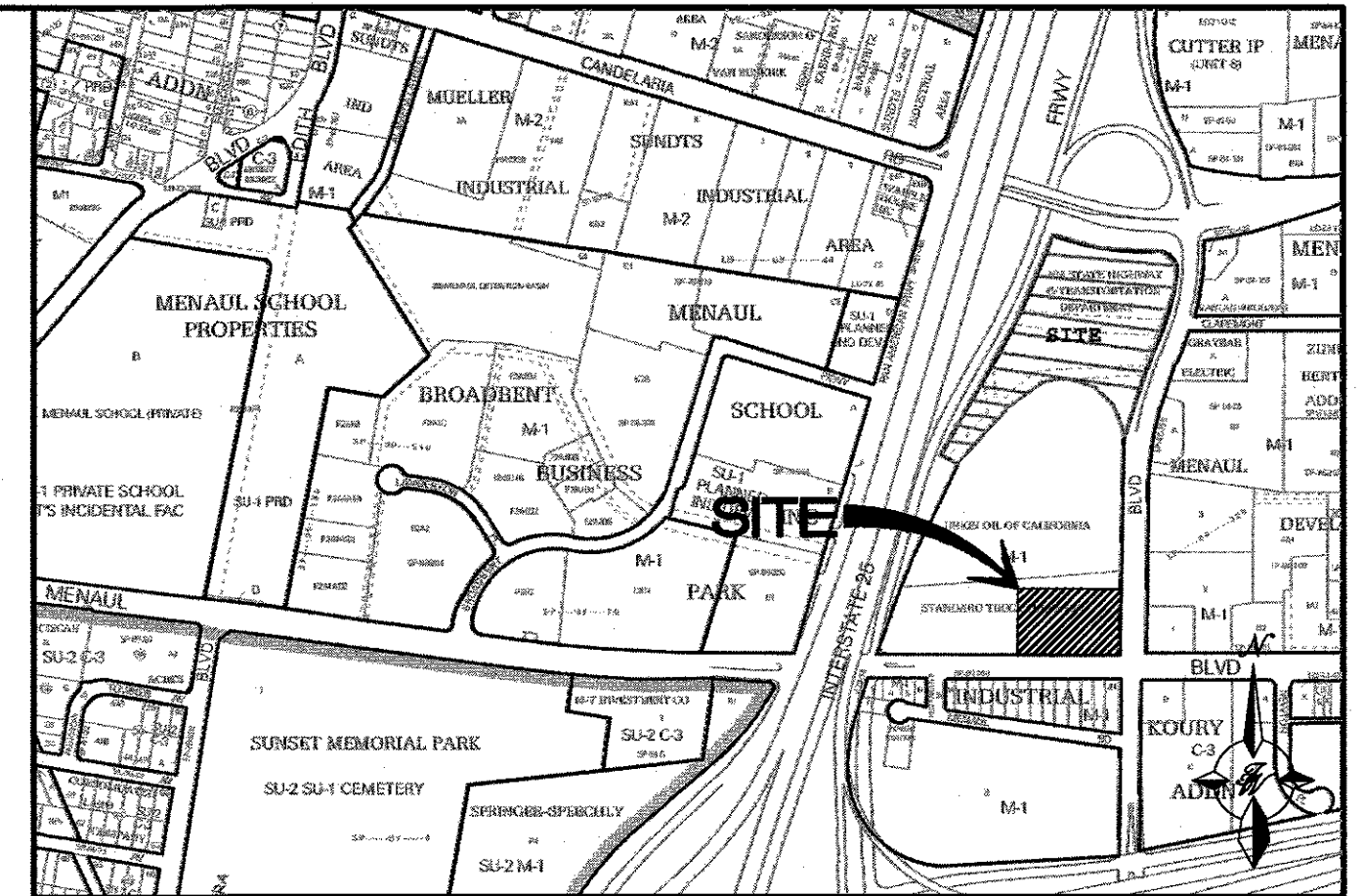


GRAPHIC SCALE



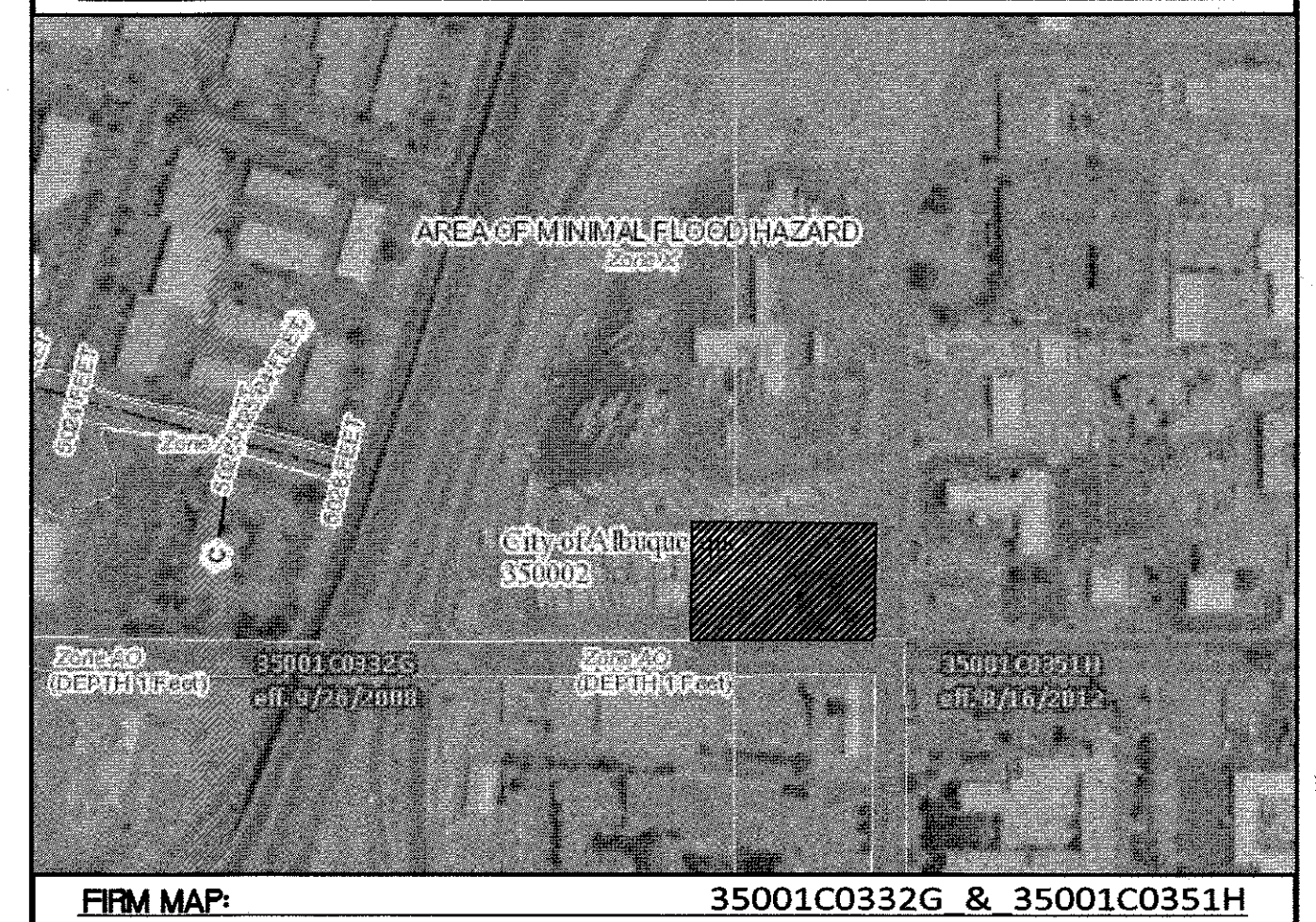
NOT FOR CONSTRUCTION

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



VICINITY MAP:

H-15-Z



FIRM MAP:

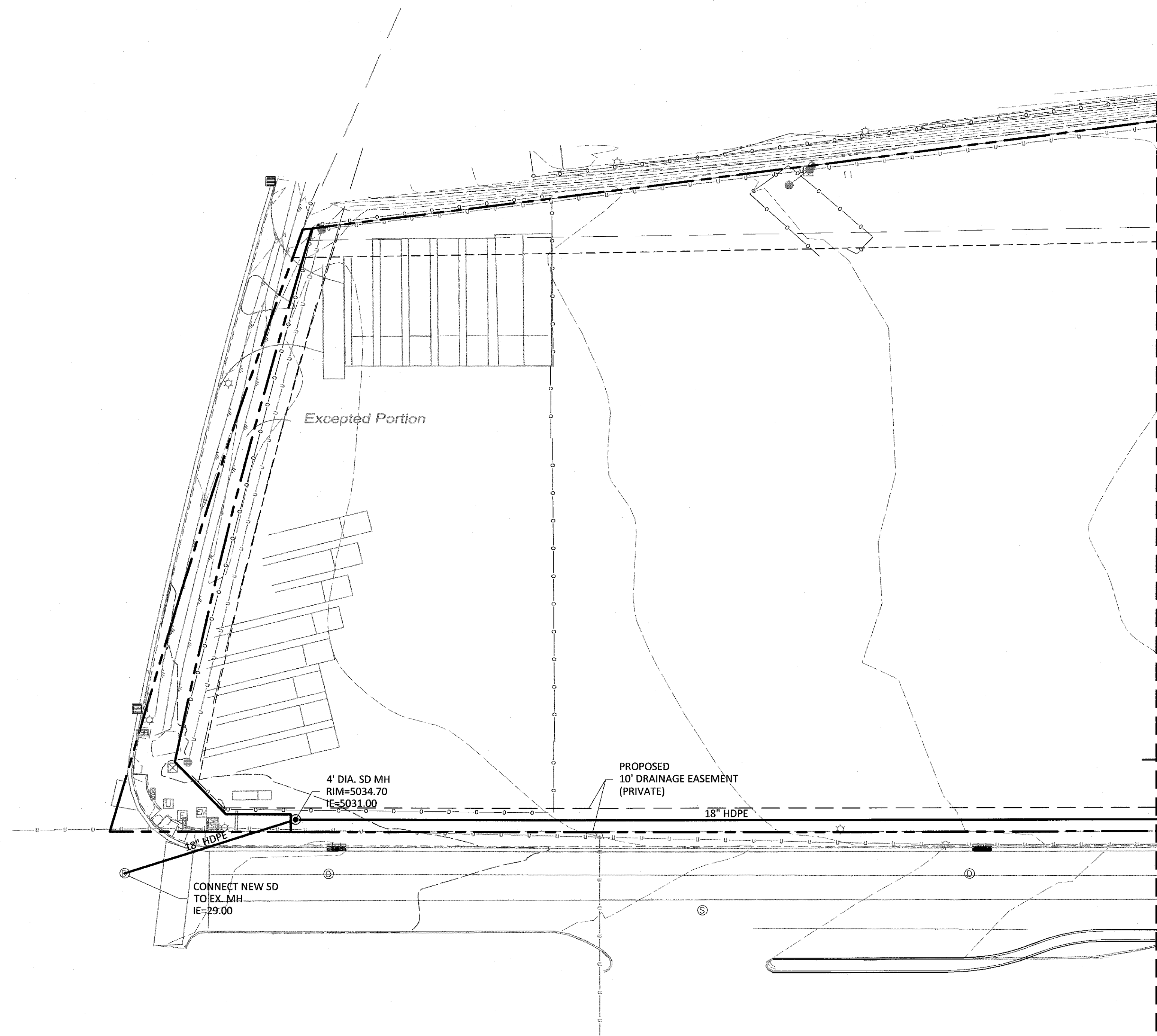
35001C0332G & 35001C0351H

EXISTING DRAINAGE:

THE SUBJECT SITE IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF MENAUL BLVD AND UNIVERSITY BLVD. ADDRESS IS 1901 MENAUL BLVD NE. THE PROPERTY EXTENDS ALL THE WAY TO THE I-25 NB FRONTAGE ROAD, HOWEVER THE SITE IS ONLY 2.5 ACRES OF THE SOUTHEAST PORTION OF THE PROPERTY, TO BE SUBDIVIDED DURING THE DEVELOPMENT PROCESS. THE SITE CURRENTLY HAS AN EXISTING BUILDING THAT IS TO BE DEMOLISHED DURING CONSTRUCTION. IT IS BOUND BY A TRUCK PARKING LOT TO THE WEST AND A TRUCK/TRAVEL CENTER TO THE NORTH. THE SITE IS CURRENTLY 95% IMPERVIOUS WITH RUNOFF FLOW TRAVELING FROM NORTHEAST TO SOUTHWEST. THERE ARE DRAINAGE INLETS ON-SITE THAT ARE SUPPOSED TO CAPTURE FLOW, HOWEVER THESE INLETS ARE COMPLETELY SILTED AND CLOGGED. DUE TO THE INLET CONDITIONS, RUNOFF INSTEAD SURFACE FLOWS TOWARDS MENAUL BLVD AND ENTERS THE PUBLIC STORM DRAIN SYSTEM AT A 100-YR PEAK DISCHARGE OF 14.61 CFS. THERE IS CURRENTLY A VAPOR INTRUSION AND MONITORING WELL SYSTEM ON-SITE TO MITIGATE A SUBSURFACE OIL SPILL THAT IS TO REMAIN IN PLACE AND CONTINUE TO OPERATE.

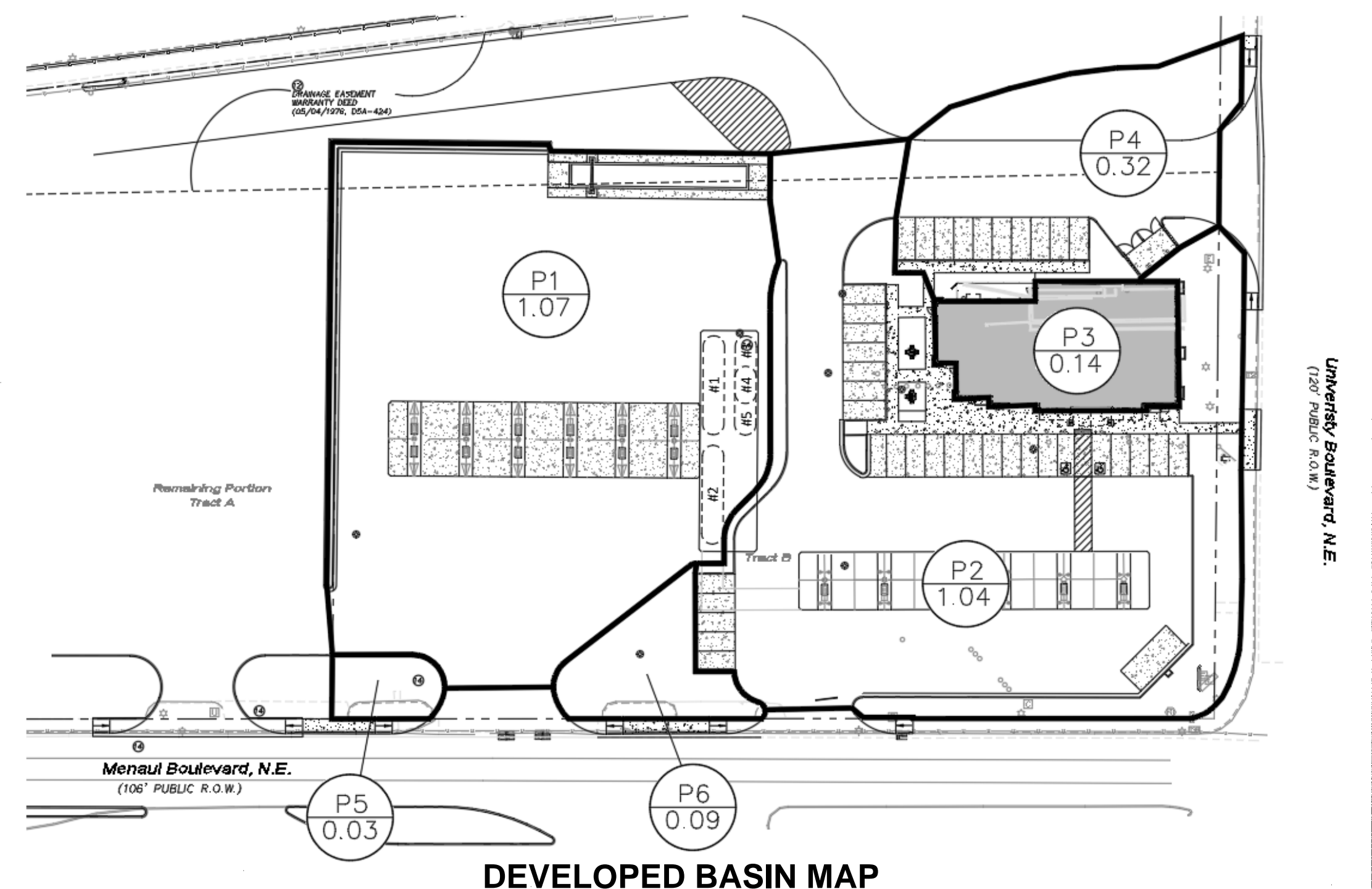
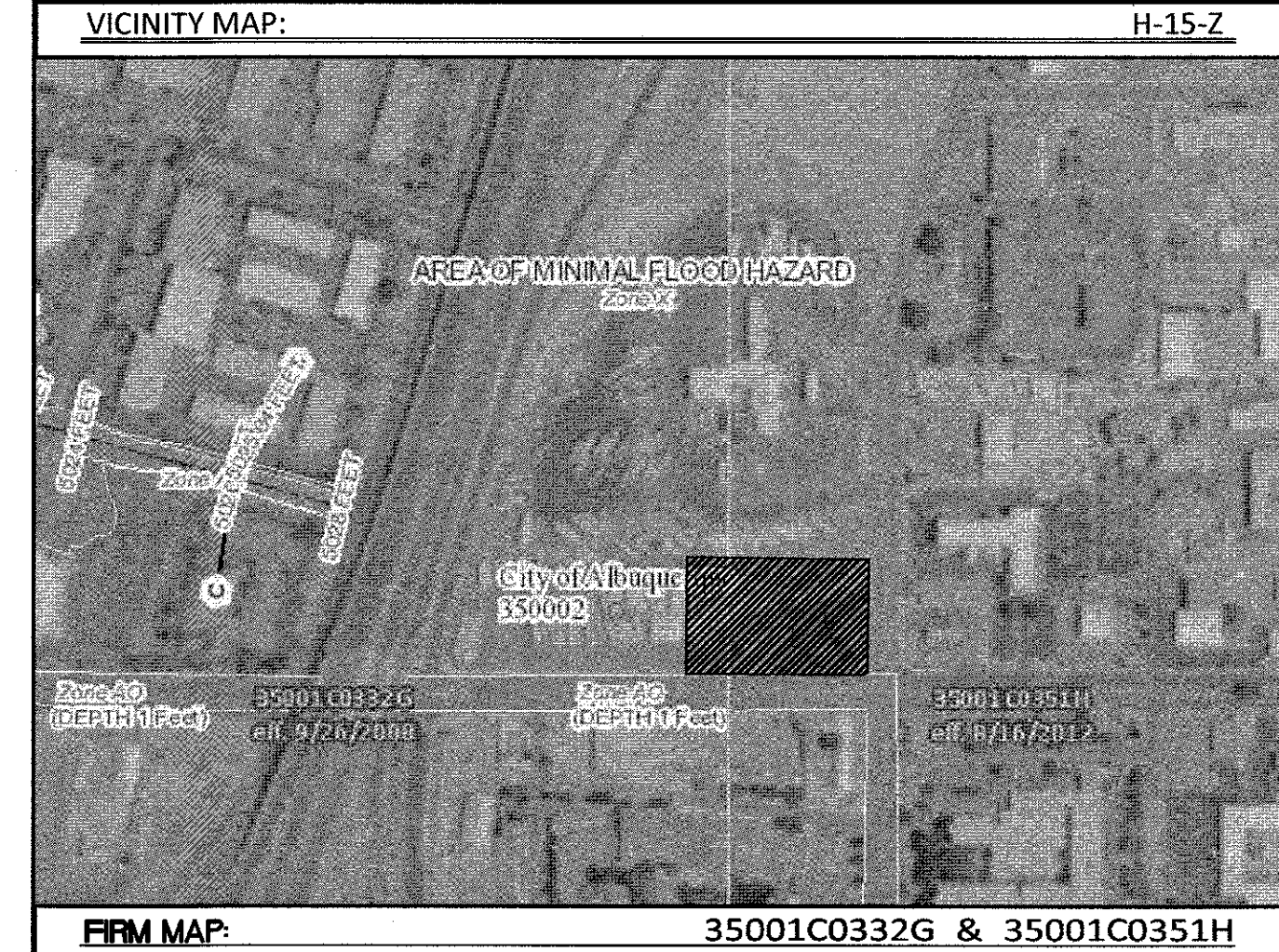
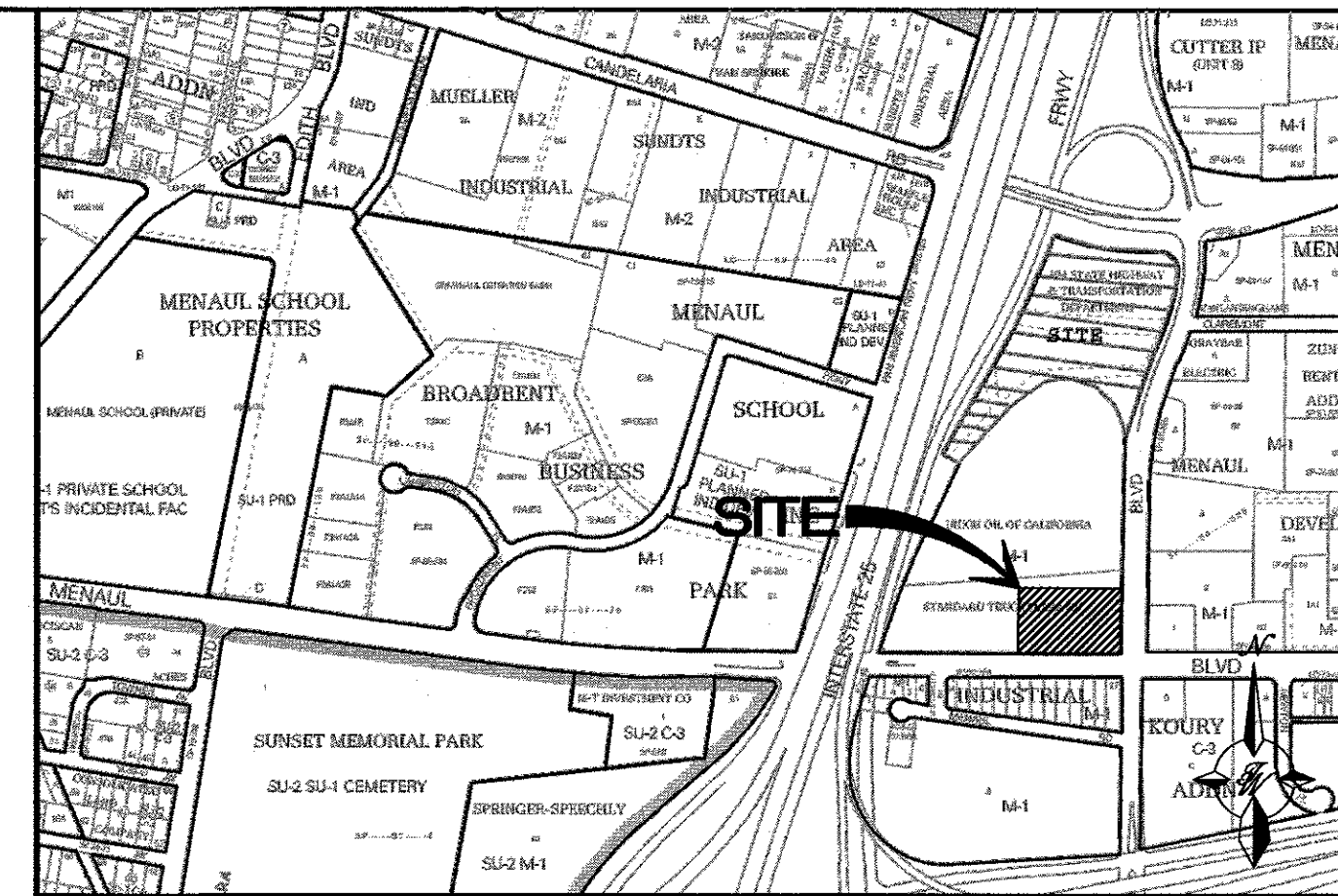
PROPOSED DRAINAGE:

THE PROPOSED DEVELOPMENT WILL BE GRADED TO ACCOMMODATE A HEAVY AND LIGHT FUELING GAS STATION/CONVENIENCE STORE WITH A 5500 SQUARE FOOT BUILDING, NEW ASPHALT AND CONCRETE PAVING, TWO FUELING CANOPIES, REFUSE ENCLOSURE, UTILITIES, AND LANDSCAPING. RUNOFF FROM THE SITE WILL CONTINUE TO FLOW FROM NORTHEAST TO SOUTHWEST, HOWEVER THE EXISTING SILTED INLETS ARE TO BE REMOVED. THE ON-SITE RUNOFF WILL BE DIRECTED TO TWO WATER QUALITY PONDS LOCATED ON BOTH SIDES OF THE WESTERMOST PROPOSED DRIVEWAY OFF OF MENAUL BLVD VIA SURFACE FLOW AND WATER QUALITY INLETS. THE TWO WATER QUALITY PONDS WILL BE INTERCONNECTED WITH A STORM CULVERT TO ACT AS ONE POND FOR WATER QUALITY RETENTION. A RAISED STORM DRAIN OUTFALL WILL COME FROM THE WESTERMOST POND AND WILL FREE DISCHARGE INTO A NEW STORM DRAIN DIRECTED WEST TOWARDS AN EXISTING MANHOLE IN THE MENAUL/I-25 FRONTAGE ROAD INTERSECTION. THE STORM DRAIN WILL BE PLACED IN THE BALANCE OF THE CURRENT PROPERTY AND WILL REQUIRE A PRIVATE DRAINAGE EASEMENT. THE 100-YR PEAK DISCHARGE FROM THE SITE TO THE PUBLIC STORM DRAIN SYSTEM WILL BE 11.82 CFS WHICH IS LESS THAN THE HISTORICAL FLOW INTO THIS SYSTEM.



MATCHLINE-SEE SHEET C2-A

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



NOT FOR CONSTRUCTION

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