

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

November 21, 2022

Ronald Bohannan, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM, 87109

**RE: U-Haul
2217 4TH St. NW
Temporary C.O. - Accepted
Engineer's Certification Date: 11/17/22
Engineer's Stamp Date: 04/20/20
Hydrology File: H14D110**

Dear Mr. Bohannan:

PO Box 1293

Based **solely** on the Certification received 11/18/2022, this certification is approved in support of Temporary Release of Occupancy by Hydrology.

Albuquerque

PRIOR TO PERMANENT CERTIFICATE OF OCCUPANCY:

NM 87103

1. Please resubmit application. Hydrology needs a site visit prior to approval.
2. Please provide the Drainage Covenant with Exhibit A for the stormwater quality ponds per Article 6-15(C) of the DPM. Please submit the original copies along with the \$ 25.00 recording fee check made payable to Bernalillo County to Carrie Compton (cacompton@cabq.gov) on the 4th floor of Plaza de Sol.

www.cabq.gov

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

Sincerely,

Renée C. Brissette

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

Project Title: U-Haul 4th & I-40 **Building Permit #** _____ **Hydrology File #** _____

DRB# _____ **EPC#** _____

Legal Description: TR C of Alexander Center (Excl s'ly Port Out to R/W) **City Address OR Parcel** 2217 4th St NW Albuquerque NM

Applicant/Agent: Tierra West, LLC **Contact:** Jonathan Niski

Address: 5571 Midway Park Place NE Albuquerque, NM 87109 **Phone:** 505-858-3100

Email: jniski@tierrawestllc.com

Applicant/Owner: _____ **Contact:** _____

Address: _____ **Phone:** _____

Email: _____

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) ☐ RESIDENCE ☐ DRB SITE ☐ ADMIN SITE: ☒

RE-SUBMITTAL: ☐ YES ☐ NO

DEPARTMENT: ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that apply:

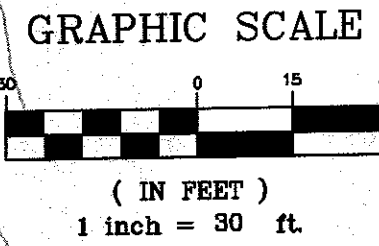
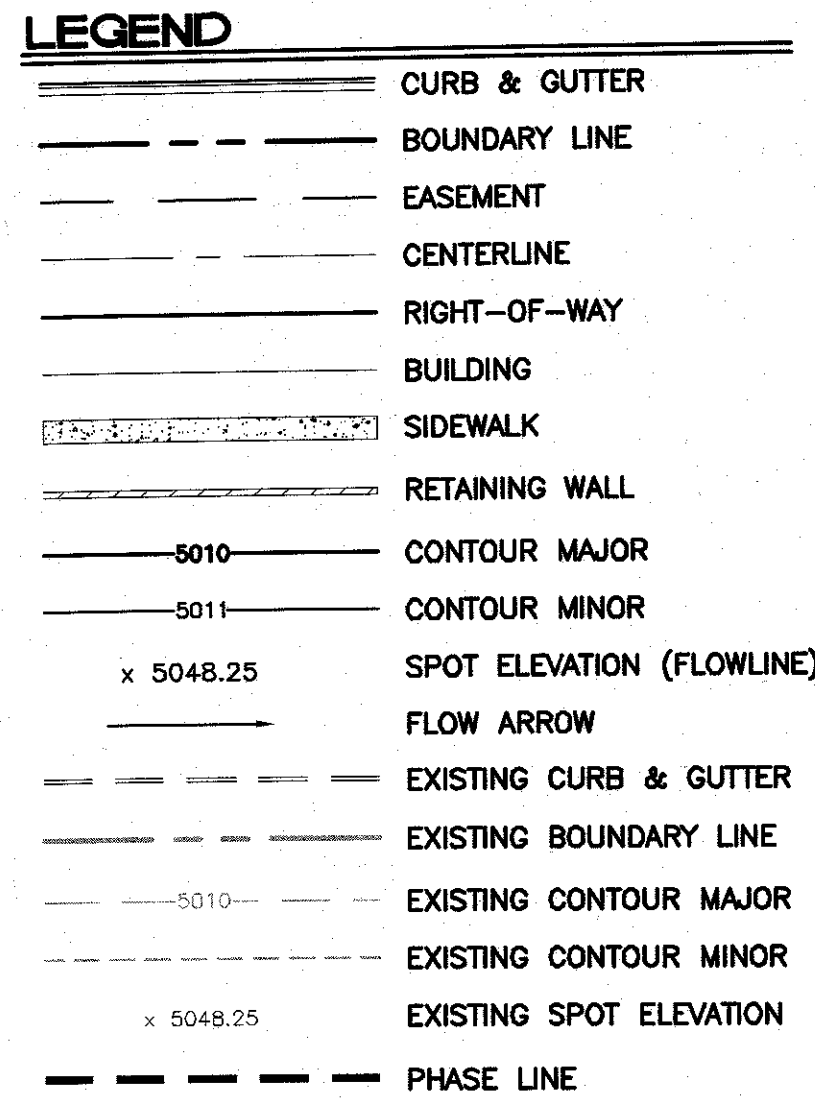
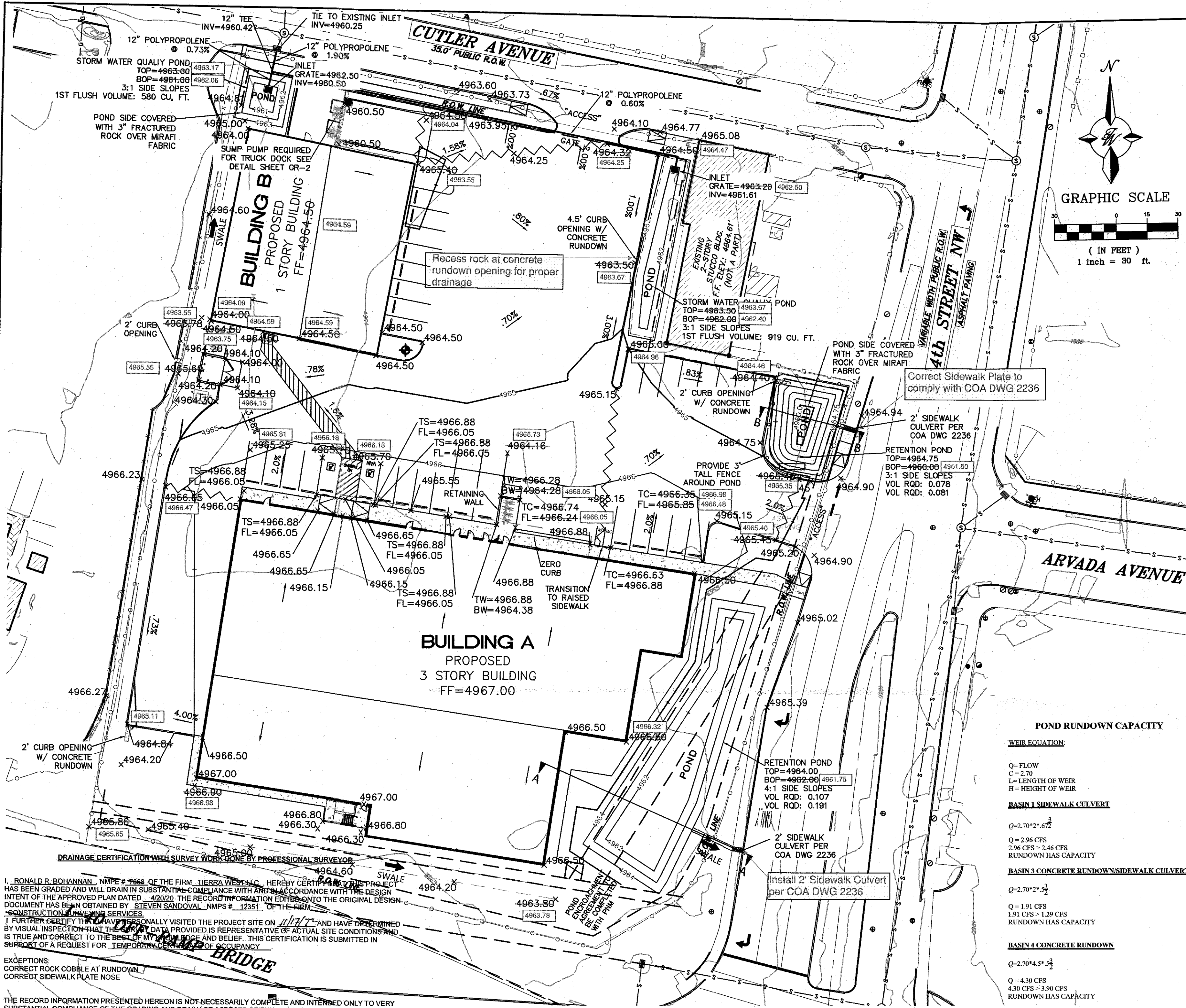
TYPE OF SUBMITTAL:

- ☒ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOOD PLAN DEVELOPMENT PERMIT APP.
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY)
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY (TEMPORARY)
- ☐ CONCEPTUAL TCL DRB APPROVAL
- ☐ 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
- ☐ FLOOD PLAN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 11.17.22/ Jonathan Niski



EXISTING DRAINAGE CONDITION
THE SITE IS AN EXISTING UNDEVELOPED 2.5 ACRE LOT. THE SITE DRAINS FROM SOUTH TO NORTH AND THE SURFACE RUNOFF IS DISCHARGED INTO CUTLER AVE. WHERE IT IS CAPTURED BY AN EXISTING DRAIN INLET NEAR THE NORTHWEST CORNER OF THE SITE. THERE IS NO OFFSITE RUNOFF THAT ENTERS THE SITE. THE SITE MAY HAVE BEEN USED AS A GRAVEL PARKING LOT IN THE PAST, AS SUCH THE EXISTING LAND TREATMENT WAS CONSIDERED COMPACT GRAVEL WITH TREATMENT "C" GENERATING A RUNOFF OF 7.53 CFS. A PORTION OF THE SITE IS LOCATED IN SHADED ZONE X WITH THE REST IN ZONE X.

PROPOSED DRAINAGE CONDITION
THE SITE WAS DIVIDED UP INTO SEVEN BASINS AS SHOWN ON THE BASIN MAP ON THIS SHEET. BASIN ONE CONSISTS OF THE BACK HALF OF THE LARGE BUILDING AND THE REAR LANDSCAPED AREA. THIS BASIN WILL DRAIN FROM WEST TO EAST IN A SWALE TO A RETENTION POND LOCATED BETWEEN THE BUILDING AND 4TH STREET. THE POND IS SIZED FOR THE 100YR, 10 DAY STORM AND IS ONLY 2 FEET DEEP. THAT POND IS LOCATED IN AN EXISTING OVERHEAD POWERLINE EASEMENT FOR WHICH AN ENCROACHMENT AGREEMENT WILL BE EXECUTED WITH PNM.

BASIN 2 CONTAINS THE WESTERN PORTION OF THE SITE AND THE BACK HALF OF THE SMALL BUILDING. THE RUNOFF WILL FLOW IN A SWALE BEHIND THE SMALL BUILDING TO A STORM WATER QUALITY POND LOCATED AT THE NORTHWEST CORNER OF THE SITE. THE POND IS SIZED TO HOLD THE FIRST FLUSH VOLUME PRIOR TO DISCHARGING 3.90 CFS INTO A DROP INLET. THE STORM WATER FROM BASINS 2, 3 AND 4 WILL DISCHARGE 5.76 CFS VIA STORM SEWER TO THE EXISTING DROP INLET IN CUTLER AVE.

BASIN 3 CONTAINS THE EASTERN PARKING LOT AND A SMALL PORTION OF THE LARGE BUILDING. THE RUNOFF WILL SURFACE FLOW TO A RETENTION POND SIZED FOR THE 100YR, 10 DAY STORM AND IS 4 FEET DEEP. THIS POND WILL BE SURROUNDED BY A FENCE TO KEEP PEDESTRIANS OUT.

BASIN 4 CONTAINS MOST OF THE PARKING LOT AND THE FRONT PORTION OF BOTH BUILDINGS. THE RUNOFF WILL SURFACE FLOW TO A STORM WATER QUALITY POND LOCATED IN THE NORTHEAST CORNER OF THE SITE. THE POND IS SIZED TO HOLD THE FIRST FLUSH VOLUME PRIOR TO DISCHARGING 3.90 CFS INTO A DROP INLET. THE STORM WATER FROM BASINS 2, 3 AND 4 WILL DISCHARGE 5.76 CFS VIA STORM SEWER TO THE EXISTING DROP INLET IN CUTLER AVE.

BASIN 5 CONSISTS OF A LOADING DOCK THAT WILL DRAIN TO A SUMP PUMP. THE SUMP PUMP WILL DISCHARGE THE STORM WATER INTO THE STORM WATER QUALITY POND BEHIND THE LOADING DOCK.

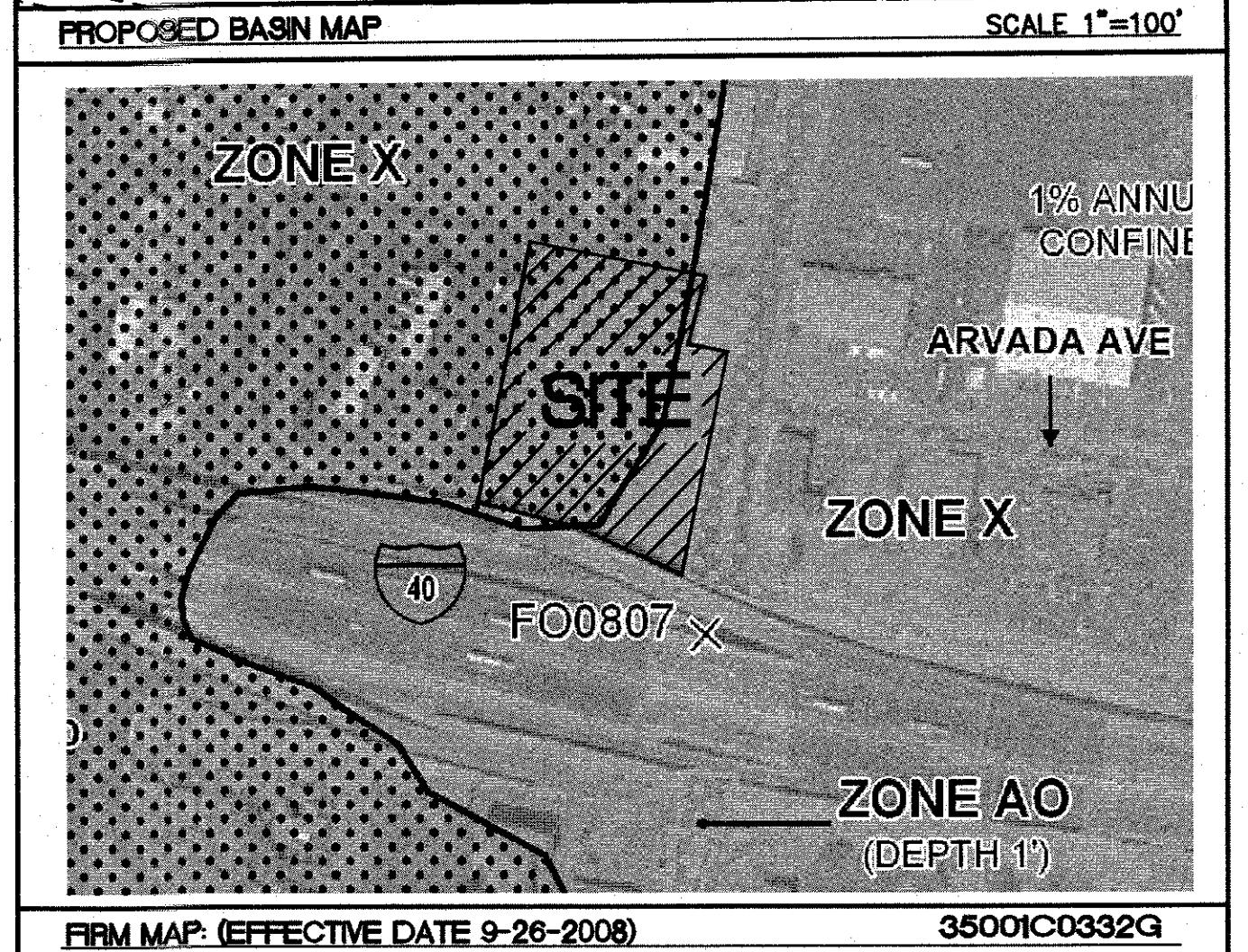
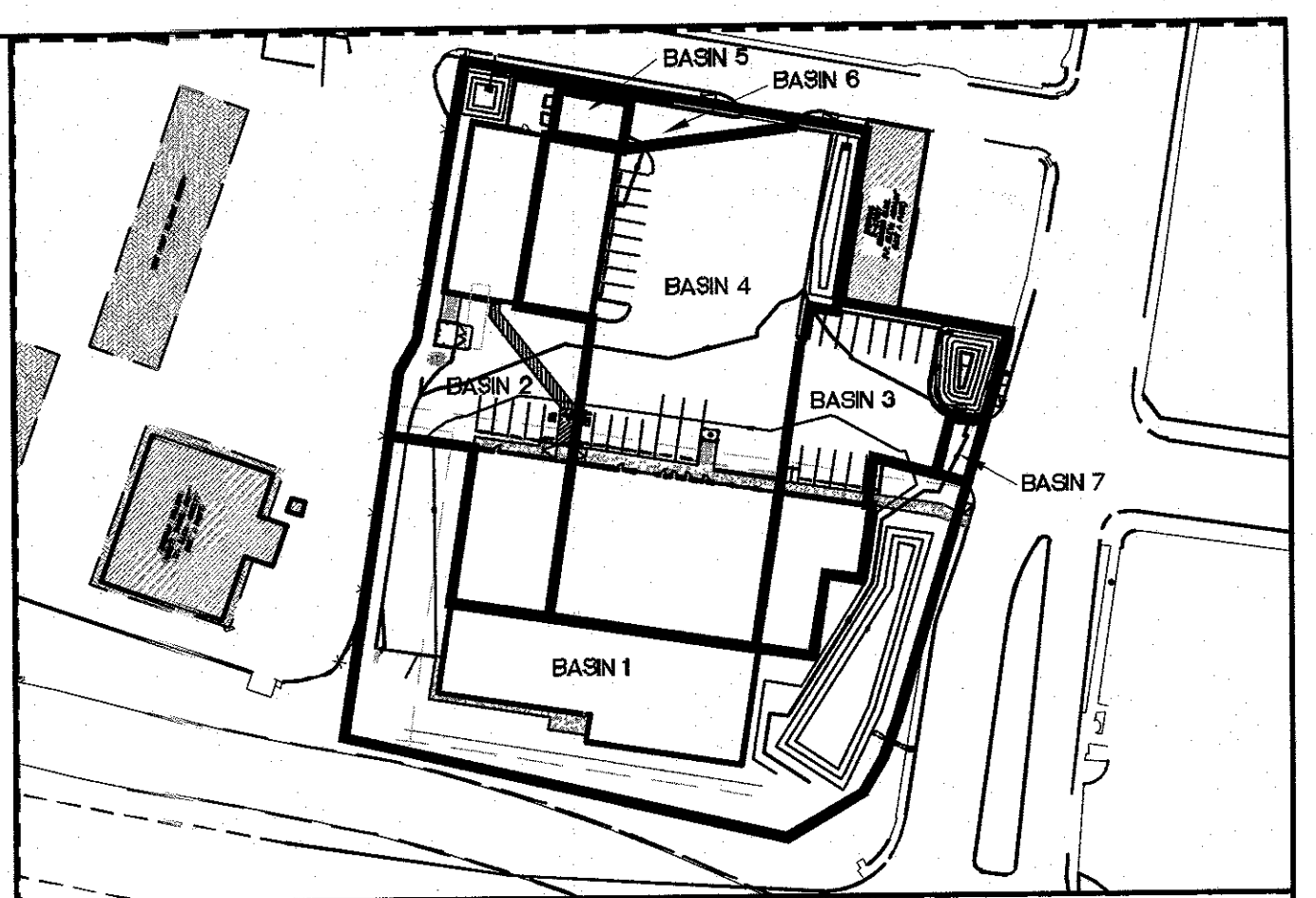
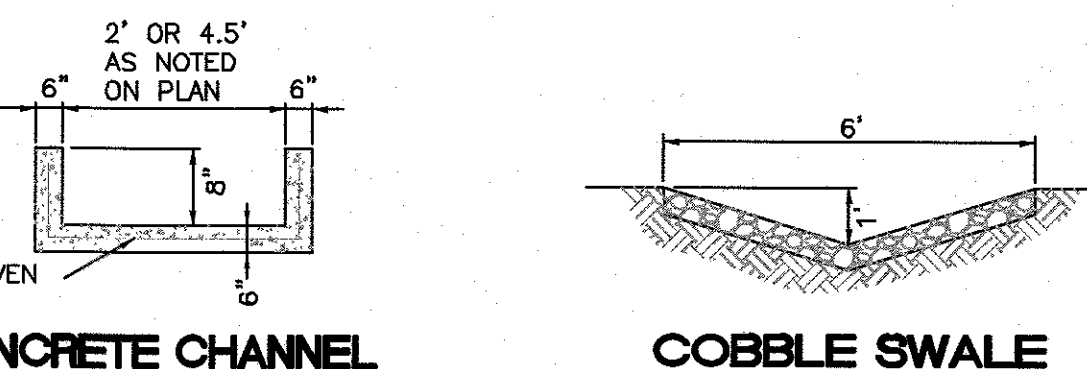
BASINS 6 AND 7 CONSIST OF THE ENTRANCE WATER BLOCKS AND WILL DISCHARGE A TOTAL OF .25 CFS TO CUTLER AVE AND 4TH STREET. THE TOTAL STORM WATER DISCHARGED FROM THE PROPOSED PROJECT IS 7.42 CFS WHICH IS BELOW THE EXISTING DISCHARGE OF 7.53.

- NOTICE TO CONTRACTORS**
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
 - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
 - TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 785-1234, FOR LOCATION OF EXISTING UTILITIES.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
 - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
 - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 - WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
 - PRIOR TO WORK WITHIN THE INTERSTATE 40 RIGHT-OF-WAY, A NMDOT PERMIT WILL BE REQUIRED.

Pipe Capacity							
Pipe	D (in)	Slope (%)	Area (ft ²)	R	Q Provided (cfs)	Q Required (cfs)	Velocity (ft/s)
1	12	0.6	0.79	0.250	3.27	3.90	4.97
2	10	0.73	0.55	0.208	2.22	1.86	3.41
3	12	1.9	0.79	0.250	5.82	5.76	7.33

Manning's Equation:
 $Q = 1.49 \cdot m \cdot A \cdot R^{2/3} \cdot S^{1/2}$

A = Area
R = D/4
S = Slope
n = 0.011



Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" or (505) 260-1990 for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Augie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.

STORMWATER QUALITY
WATER QUALITY MEASURES WILL CONSIST OF RETENTION PONDS SIZED TO RETAIN THE STORMWATER QUALITY VOLUME FROM THE DEVELOPED AREAS. FLOWS WILL BE CONVEYED TO THE PONDS PRIMARILY BY SURFACE DRAINAGE AS WELL AS A PRIVATE STORM DRAIN SYSTEM BETWEEN BUILDINGS "A" AND "B". DRAINAGE VOLUMES IN EXCESS OF THE STORMWATER QUALITY WILL BE DISCHARGED THROUGH A PROPOSED STORM DRAIN SYSTEM AND INTO THE EXISTING PUBLIC STORM DRAIN WITHIN 4TH STREET.

STORMWATER QUALITY CALCULATIONS
BASIN 1: $9847 \times .32"/12" = 213$ CU.FT.
BASIN 2: $15246 \times .32"/12" = 329$ CU.FT.
BASIN 3: $10890 \times .32"/12" = 237$ CU.FT.
BASIN 4: $34648 \times .32"/12" = 751$ CU.FT.
BASIN 5: $1307 \times .32"/12" = 94$ CU.FT.
BASIN 6: $1742 \times .32"/12" = 38$ CU.FT.
BASIN 7: $436 \times .32"/12" = 15$ CU.FT.
TOTAL STORMWATER QUALITY VOLUME = 1677 CU.FT.

CAUTION:
ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILT SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

11.17.2022
Developed On-Site Basins

Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	100-Year, 6-Hr			10-Year, 6-Hr			100-Year, 10-Day		
							Weighted E	Volume (ac-ft)	Flow cfs	Weighted E	Volume (ac-ft)	Flow cfs	Weighted E	Volume (ac-ft)	Flow cfs
1	36,471	0.84	0%	0%	73%	0.61	0%	0.27	0.23	1.142	0.080	2.46	1.142	0.107	2.46
2	19,484	0.45	0%	0%	22%	0.10	0%	0.78	0.35	1.825	0.068	1.86	1.825	0.111	1.86
3	13,027	0.30	0%	0%	16%	0.05	0%	0.84	0.25	1.906	0.047	1.29	1.906	0.078	1.29
4	37,672	0.86	0%	0%	8%	0.07	0%	0.92	0.80	2.013	0.145	3.90	2.013	0.243	3.90
5	1,106	0.03	0%	0%	0%	0.00	0%	0.100	0.03	2.120	0.004	0.12	2.120	0.008	0.12
6	1,739	0.04	0%	0%	0%	0.00	0%	0.100	0.04	2.120	0.007	0.19	2.120	0.012	0.19
7	600	0.01	0%	0%	0%	0.00	0%	0.100	0.01	2.120	0.002	0.06	2.120	0.004	0.06
Total Discharge							6.13								

Undeveloped On-Site Basins

Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	100-Year, 6-Hr		
							Weighted E	Volume (ac-ft)	Flow cfs
1	110,000	2.53	0%	0%	0%	0.00	1.130	0.238	7.93

ENGINEER'S SEAL

RONALD R. BOHANNAN
NEW MEXICO
7868
PROFESSIONAL ENGINEER

4/20/2020

RONALD R. BOHANNAN
P.E. #7868

U-HAUL
4TH AND I-40

GRADING AND DRAINAGE PLAN

TIERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY
RMG

DATE
04/20/2020

2019070-GR

SHEET #
C-2

JOB #
2019070