

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

March 24, 2023

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

**RE: Sawmill Tract H, 1921 Bellamah Ave. NW**  
**Grading & Drainage Plan**  
**Engineer's Stamp Date: 3/23/2023**  
**Hydrology File: J13D017B**

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 3/24/2023, the Grading & Drainage Plan is approved for Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval/comments.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3695 or [tchen@cabq.gov](mailto:tchen@cabq.gov).

Sincerely,

Tiequan Chen, P.E.  
Principal Engineer, Hydrology  
Planning Department, Development Review Services



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

**Project Title:** TRACT H SAWMILL **Building Permit #**                      **Hydrology File #**                     

**DRB#**                      **EPC#**                     

**Legal Description:** TRA A-2 PLAT OF TRACTS A-1 A-2 AND A-3 LANDS OF WILLIAM ANDREW MCCORD CONT 20290AC **City Address OR Parcel** UPC: 101305817952322307

**Applicant/Agent:** Tierra West LLC **Contact:** Jon 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
- 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: 01.04.2023



# TIERRA WEST, LLC

March 16, 2023

Mr. Tiequan Chen, P.E.  
Planning Department, Development Review Services  
600 Second NW – Plaza del Sol Building  
Albuquerque, NM. 87102

**RE: SAWMILL TRACT H, 1921 BELLAMAH AVE. NW  
GRADING & DRAINAGE PLAN  
HYDROLOGY RESPONSE TO COMMENT**

Dear Mr. Chen:

Per the correspondence dated March 7, 2023, please find the following responses addressing the comments listed below:

1. Please provide pond 2 location, volume, and cross-section on sheet #GR-1.  
**That was a left over sentence from a previous concept. That paragraph was removed and the narrative updated to reflect the current drainage.**
2. Show the bioswale for proposed basin 1.  
**The bioswale is along the north property line and is now labeled.**
3. On sheet #GR-1, Proposed Drainage: It states that "The pond in basin 2 will retain the developed runoff of 0.036 ac-ft which is less than the required water quality volume of 0.40 ac-ft". – This statement is confusing. First of all, the retention pond volume should not be less than the SWQV. Secondly, would pond 1 volume be counted for part of the SWQV? Please clarify. Also, the required SWQV is 0.04 ac-ft, not 0.40 ac-ft. This might be a typo.  
**The narrative was updated to provide a clearer picture of the drainage and calculations**
4. On the same sheet: The next sentence states that "The pond will drain 7.15 cfs. Therefore the total discharge from the site will be 8.09 cfs". – Please provide calculations showing that where these numbers come from.  
**A pond volume table was added to the Drainage Plan showing the calculations.**

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

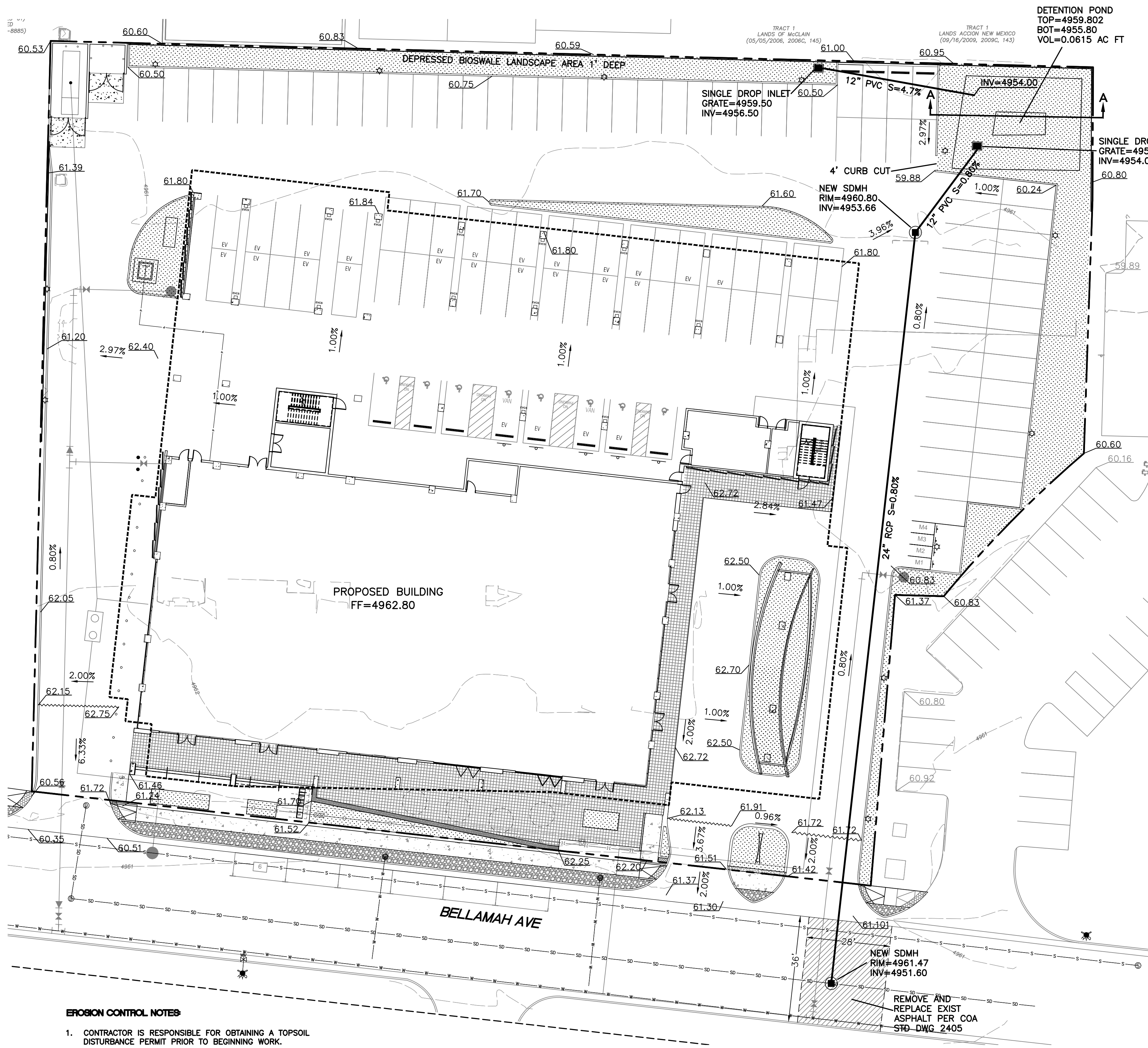
Sincerely,

Ronald R. Bohannon, P.E.

JN: 2022047  
RRB/jn/ca

5571 Midway Park Pl. NE  
Albuquerque, NM 87109  
(505) 858-3100 fax (505) 858-1118 1-800-245-3102  
tierrawestllc.com





### LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- RIGHT-OF-WAY
- BUILDING
- PROPOSED SIDEWALK
- EXISTING CURB & GUTTER
- WATER BLOCK
- LANDSCAPING
- EXISTING INDEX CONTOUR
- EXISTING CONTOUR
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED DROP INLET
- PROPOSED SDMH

### 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 HERON, 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, 765-1234, 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.

### EXISTING DRAINAGE:

THIS SITE IS CURRENTLY A WAREHOUSE WITH PAVED PARKING IN FRONT AND GRAVEL PARKING IN THE BACK. THE SITE IS BOUNDED BY COMMERCIAL BUILDINGS TO THE WEST, NORTH AND EAST AND BELLAMAH AVENUE TO THE SOUTH CONTAINING APPROXIMATELY 2.03 ACRES. THE SITE IS DIVIDED INTO 5 BASINS WITH BASIN A DISCHARGING 0.98 CFS TO BELLAMAH AVENUE. BASIN B DRAINS TO A STORM SEWER INLET THAT DRAINS TO THE EXISTING STORM SEWER IN BELLAMAH AVENUE. BASINS C, D AND E DRAIN TO THE GRAVEL PARKING AREA WHERE INFILTRATES THE GROUND AND EVAPORATES. THERE ARE NO OFFSITE FLOWS THAT ENTER THE SITE. THE SITE IS LOCATED ON FIRM MAP 35001C0331H AS SHOWN ABOVE. THE MAP SHOWS THAT THE SITE DOES NOT LIE WITHIN ANY 100 YEAR FLOOD PLAIN. THE SITE GENERATES A TOTAL OF 8.13 CFS WITH A 100YR, 6-HR VOLUME OF 0.337 AC-FT.

### PROPOSED DRAINAGE:

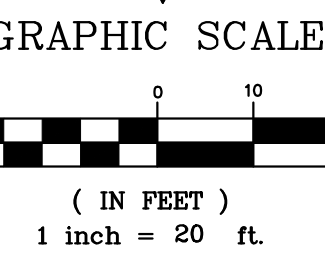
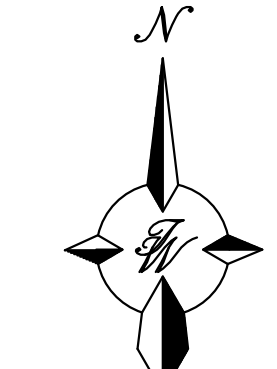
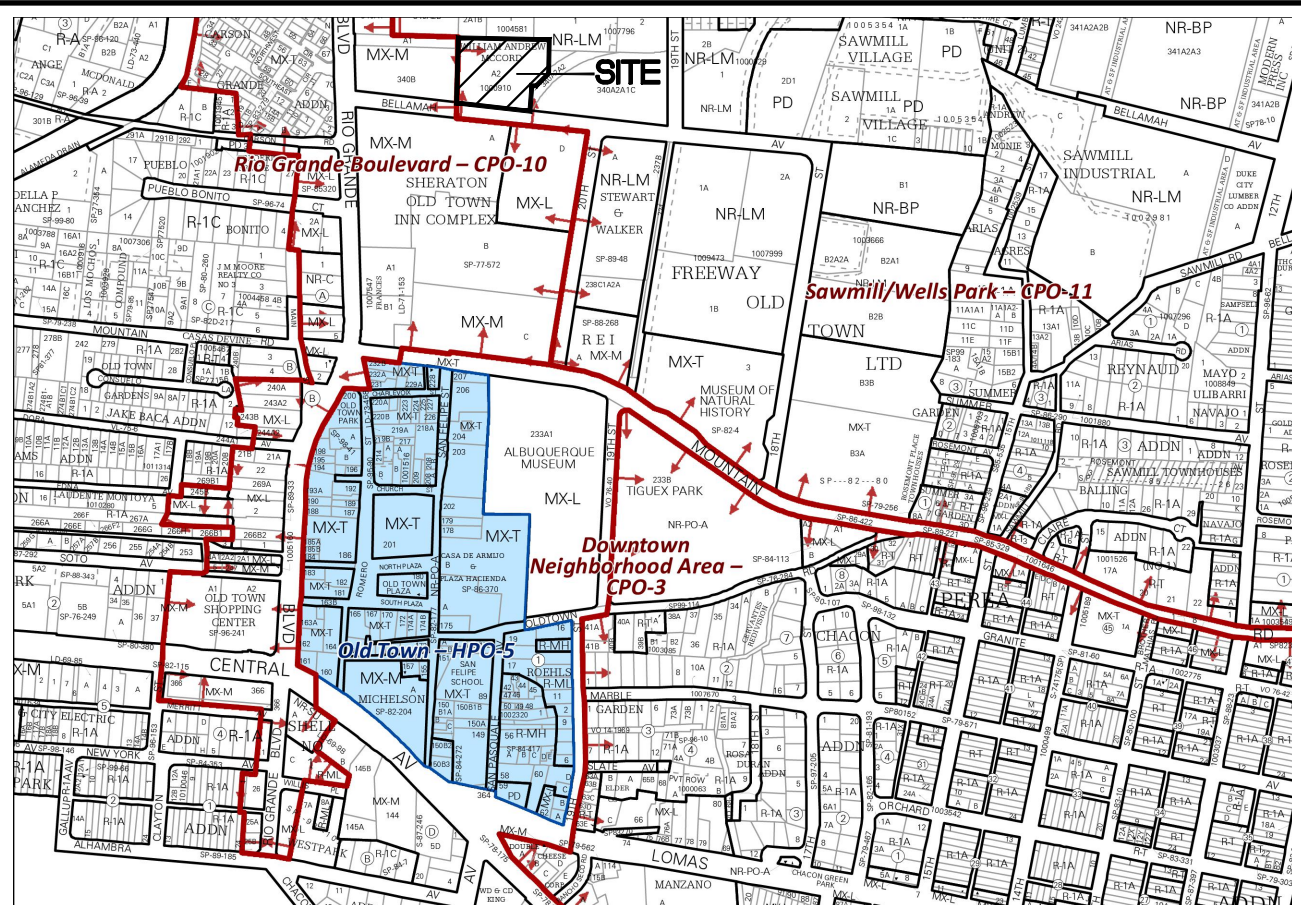
THE SITE IS NOW DIVIDED INTO TWO BASINS. BASIN 1 WILL DRAIN TO THE NORTH INTO A BIOSWALE AND A DETENTION POND OVER THE SURFACE. THE BIOSWALE WILL DRAIN TO THE POND SO THE WATER QUALITY VOLUME IS CAPTURED AND RETAINED WHICH IS 0.04 AC-FT. THE POND IS SIZED TO HOLD 0.0615 AC-FT. THE POND WILL DRAIN VIA A DROP INLET TO A STORM SEWER THAT WILL CONNECT TO THE STORM SEWER IN BELLAMAH DISCHARGING AT A RATE OF 7.07 CFS. BASIN 2 IS THE FRONT PART OF THE BUILDING AND HARDSCAPE ALONG THE STREET. THIS BASIN WILL DISCHARGE 0.94 CFS TO BELLAMAH WHICH IS 0.04 CFS LESS THAN WAS PREVIOUSLY DRAINED TO THE STREET. FROM THERE THE RUNOFF IS CAPTURED IN EXISTING DROP INLETS ALONG BELLAMAH AVE. THE TOTAL DISCHARGE FROM THE SITE WILL BE 8.01 CFS WHICH IS LESS THAN THE EXISTING 8.13 CFS.

### PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SPECIAL ORDER 10 - 80-10)

- BUILD SIDEWALK CULVERT PER COA STD DWG 2236.
- CONTACT STORM MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
- 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 STORM MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTIONS, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.

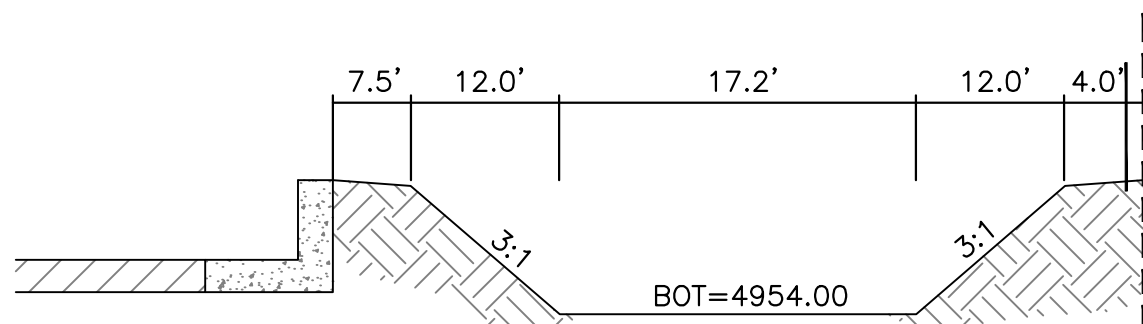
### CAUTION

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, 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.





### EROSION CONTROL NOTES:

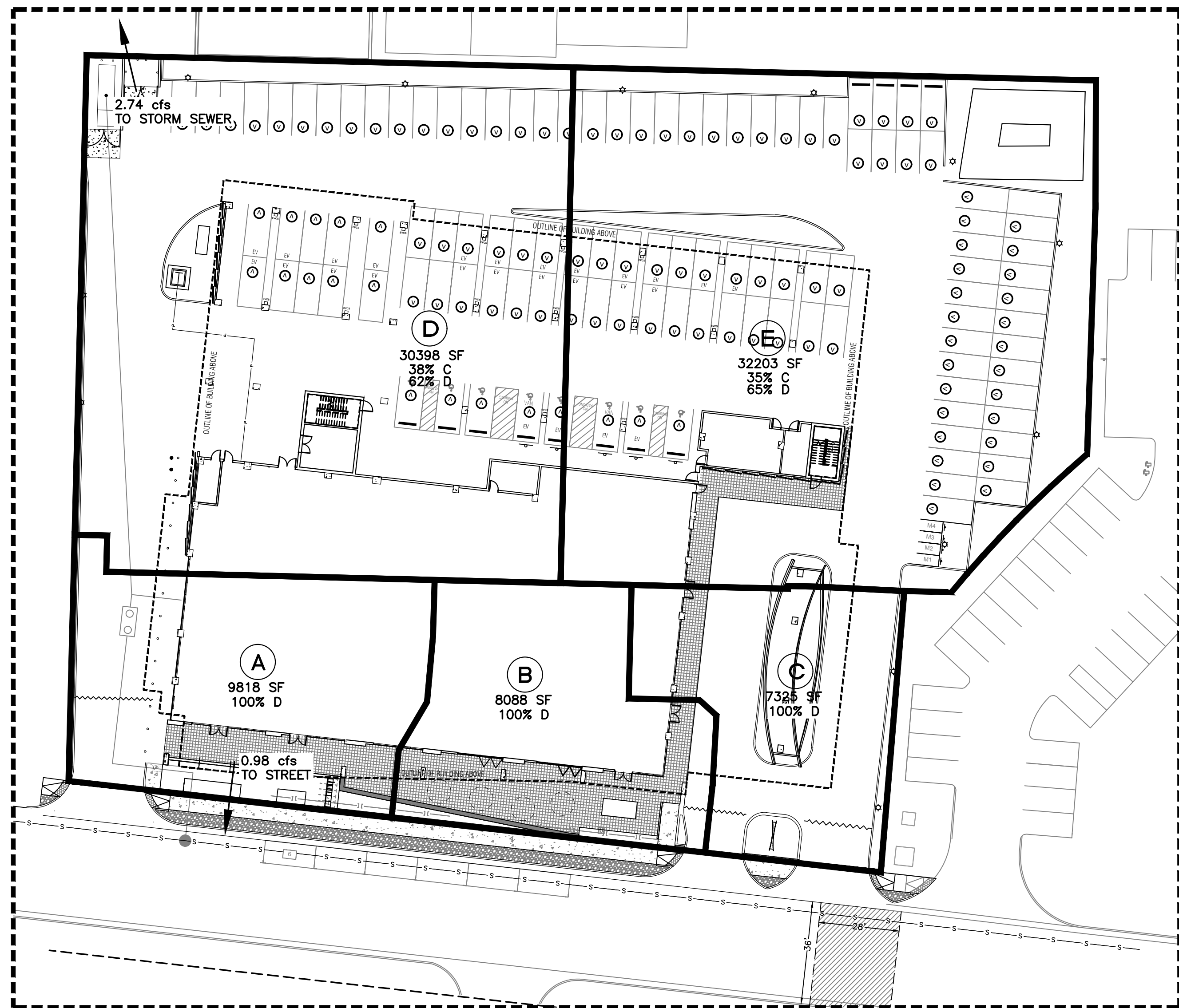
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.
- ALL SLOPES NOT STABILIZED AT THE END OF THE PROJECT SHALL BE STABILIZED IN ACCORDANCE WITH COA SPECS OR 3" GRAVEL.



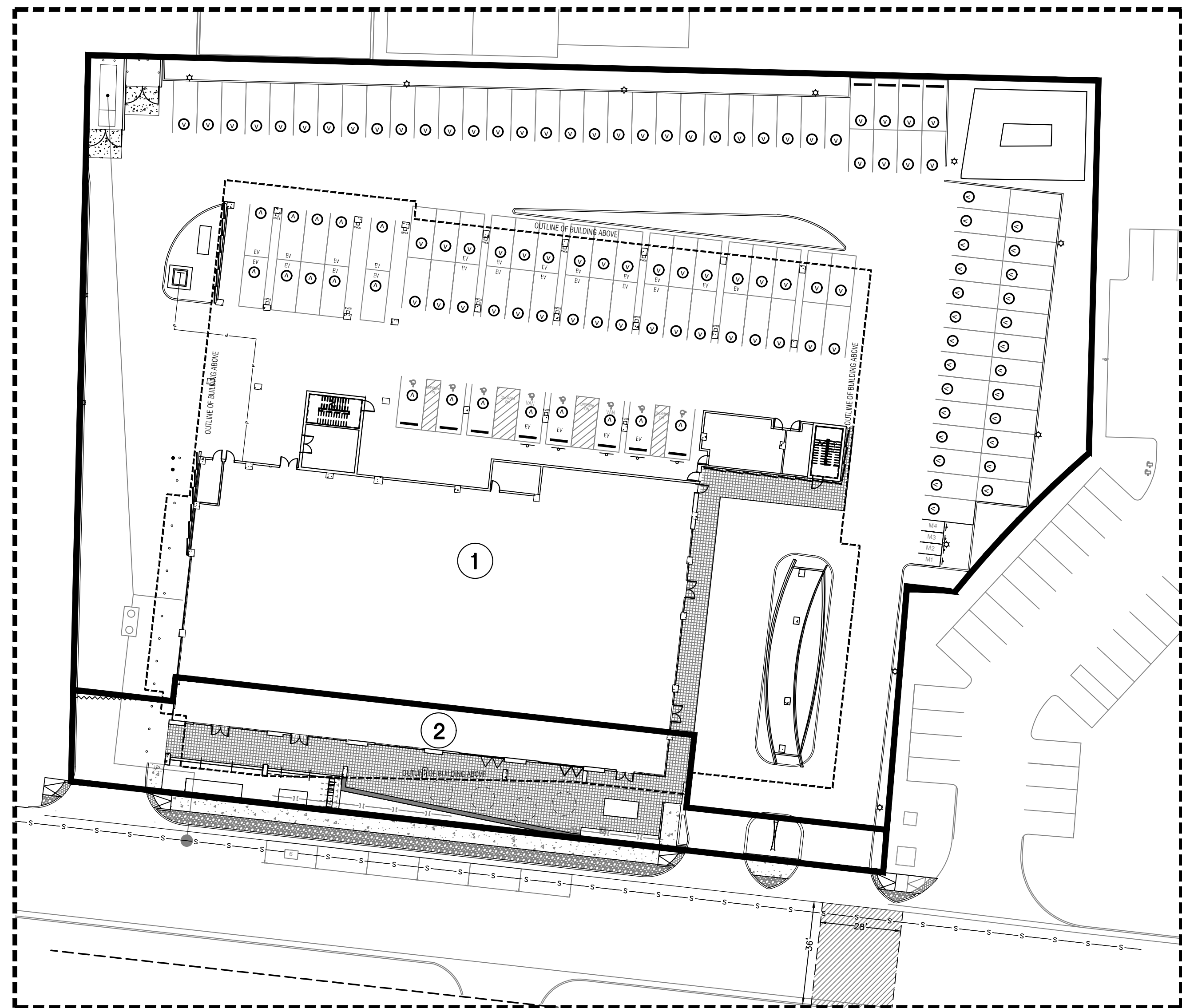
SECTION A-A

	1921 BELLAMAH AVE NW ALBUQUERQUE, NM	DRAWN BY pm
	GRADING PLAN	DATE 3-23-23
	 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrowestllc.com	SHEET # GR-1
		JOB # 2022047





EXISTING BASINS



PROPOSED BASINS

Weighted E Method

Existing Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year			10-Year		
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
A	9,818	0.23	0%	0	0%	0.00	0%	0.00	100%	0.23	2,330	0.044	0.98	1,510	0.028	0.61
B	8,088	0.19	0%	0	0%	0.00	0%	0.00	100%	0.19	2,330	0.036	0.81	1,510	0.023	0.50
C	7,325	0.17	0%	0	0%	0.00	0%	0.00	100%	0.17	2,330	0.033	0.73	1,510	0.021	0.46
D	30,968	0.71	0%	0	0%	0.00	38%	0.27	62%	0.44	1,836	0.109	2.74	1,119	0.066	1.62
E	32,203	0.74	0%	0	0%	0.00	35%	0.26	65%	0.48	1,875	0.116	2.87	1,150	0.071	1.71
											0.337	8.13				

Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year			10-Year		
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
1	78,739	1.81	0%	0	12%	0.22	0%	0.00	90%	1.63	2.193	0.330	7.57	1.395	0.210	4.61
2	9,607	0.22	0%	0	3%	0.01	0%	0.00	97%	0.21	2.284	0.042	0.94	1.474	0.027	0.59
											1.84	0.372	8.52			
											Required Ponding			0.036		

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

Water Quality Calculation:  $0.26'' \times 1.84 \text{ ac} = 1,737 \text{ cubic feet (0.040 ac-ft)}$

Excess Precipitation, E (inches)			
Zone 2	100-Year	10 - Year	
$E_a$	0.62	0.15	
$E_b$	0.8	0.3	
$E_c$	1.03	0.48	
$E_d$	2.33	1.51	

Peak Discharge (cfs/acre)			
Zone 2	100-Year	10 - Year	
$Q_a$	1.71	0.41	
$Q_b$	2.36	0.95	
$Q_c$	3.05	1.59	
$Q_d$	4.34	2.71	

VOLUME CALCULATIONS

Ab - Bottom Of The Pond Surface Area  
At - Top Of The Pond Surface Area  
D - Water Depth  
Dt - Total Pond Depth  
C - Change In Surface Area / Water Depth

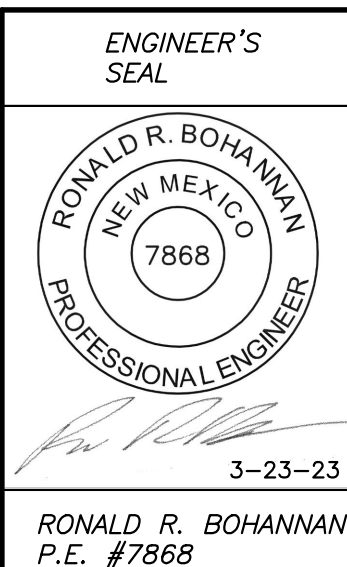
Volume =  $Ab \cdot D + 0.5 \cdot C \cdot D^2$   
C =  $(At - Ab) / Dt$   
Ab = 135.00  
At = 1,319.00  
Dt = 4.00  
C = 296.00

ACTUAL ELEV.	DEPTH (FT)	VOLUME (AC-FT)	Q (CFS)
4955.80	0	0	0.0000
4956.00	0.20	0.0006	0.0010
4957.00	1.20	0.0071	3.1640
4958.00	2.20	0.0204	4.9307
4959.00	3.20	0.0405	6.2139
4959.80	4.00	0.0615	7.0749

Grate elevation

Orifice Equation  
 $Q = CA \sqrt{2gH}$

C = 0.6  
Diameter (in) = 12  
Area ( $\text{ft}^2$ ) = 0.785  
g = 32.2  
H (Ft) = Depth of water above center of orifice  
Q (CFS) = Flow



1921 BELLAMAH AVE NW  
ALBUQUERQUE, NM  
BASIN MAP  
TIERRA WEST, LLC  
5571 MIDWAY PARK PL NE  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 858-3100  
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DATE  
3-23-23  
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SHEET #  
GR-2  
JOB #  
2022047