

GEC Checklist Item ee - Prior to project approval the cover sheet and all pages will need to be stamped/signed.

ABBREVIATION LEGEND

ASPH	ASPHALT
CONC	CONCRETE
C & G	CURB & GUTTER
DET.	DETAIL
ESMT	EASEMENT
ME	MATCH EXISTING
P.B., PG.	PLAT BOOK, PAGE
PVMT	PAVEMENT
RET. WALL	RETAINING WALL
REC. NO.	RECEPTION NUMBER
R.O.W.	RIGHT-OF-WAY
SF	SQUARE FOOT
STBK	SETBACK
SW	SIDEWALK
UTIL	UTILITY

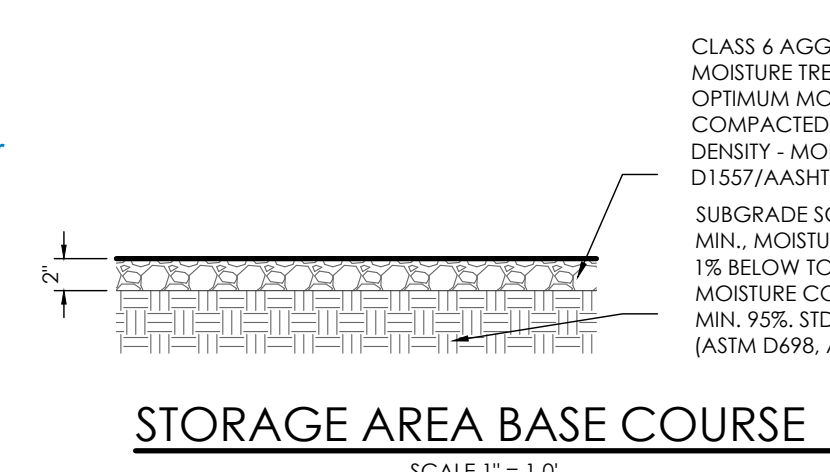
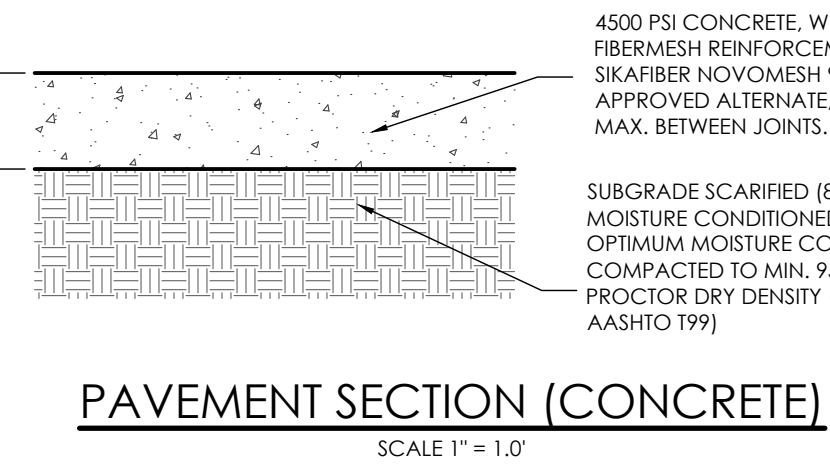
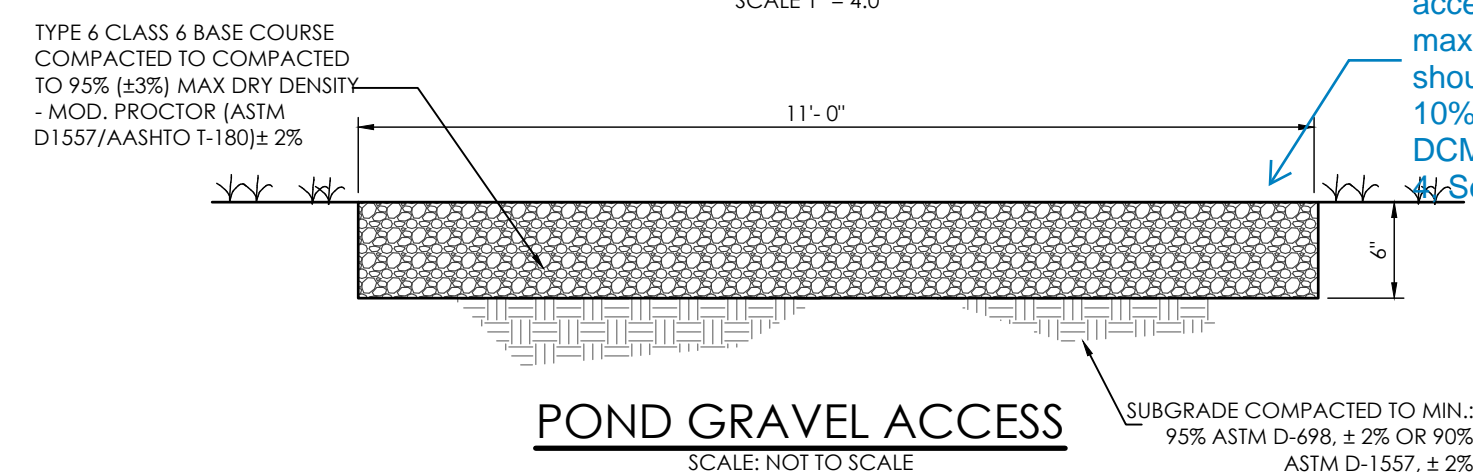
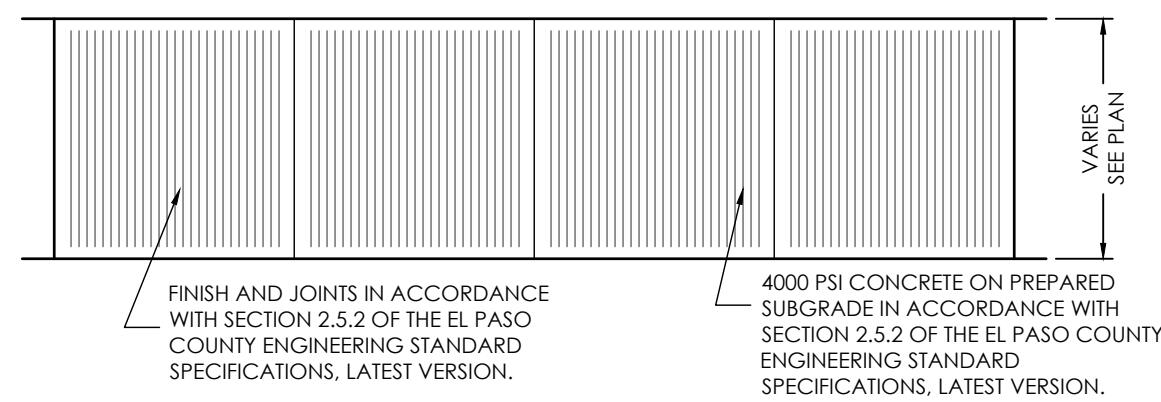
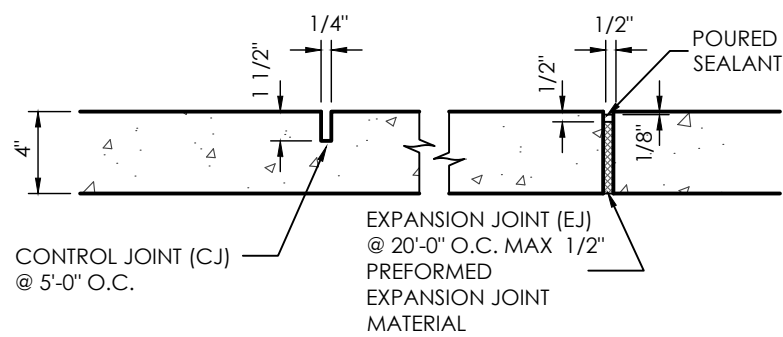
GRADATION TABLE			
RIPRAP DESIGNATION	% SMALLER THAN GIVEN SIZE BY WEIGHT	ROCK DIMENSION (INCHES)	50" (INCHES)
TYPE L	70-100	15	9
	50-70	12	
	35-50	9	
TYPE VL	70-100	12	6
	50-70	9	
	35-50	6	
CLASS 6 BASE COURSE	100	1	#200
	95-100	3/4	
	30-65	#4	
	25-55	#8	
	3-12	#200	

SITE PLAN SPECIFIC NOTES

- 1 REMOVE EXISTING FENCING
- 2 INSTALL 6' HIGH CHAIN LINK FENCING W/ OPAQUE PRIMARY SLATS (BEIGE) (SEE SITE DEVELOPMENT PLAN)
- 3 INSTALL 16' WIDE CHAIN LINK GATE
- 4 INSTALL 30' WIDE MOTORIZED ACCESS GATE
- 5 INSTALL MASONRY BRICK WALL (SEE DETAIL)
- 6 INSTALL CONCRETE PAVEMENT
- 7 INSTALL CONCRETE SIDEWALK
- 8 INSTALL PARKING BOLLARDS (SEE SITE DEVELOPMENT PLAN)
- 9 INSTALL PARKING STRIPING
- 10 INSTALL EXTENDED DETENTION BASIN (SEE POND PLAN)
- 11 INSTALL OUTLET STRUCTURE (SEE POND PLAN)
- 12 15' WIDE GRAVEL MAINTENANCE DRIVE
- 13 INSTALL CONCRETE SPILLWAY & EMERGENCY OVERFLOW RIP-RAP (SEE POND PLAN)
- 14 INSTALL PRIVATE HDPE STORM PIPE W/ FES AT OUTLET (SEE STORM PLAN) *It appears that storm plan was not included in the first submittal.*
- 15 INSTALL RIPRAP PAD AT STORM PIPE OUTLET
- 16 INSTALL 2" THK GRAVEL SURFACE ON ALL DRIVEABLE AREAS & VEHICLE STORAGE AREAS
- 17 REMOVE EXISTING STOCKPILE

MAP NOTES

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE NORTH PROPERTY LINE BEARING S 88°46'13"E.
2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM)
3. ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM UTILITY MAIN RECORD MAPS AND UTILITY SERVICE LOCATION MAPS. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED.

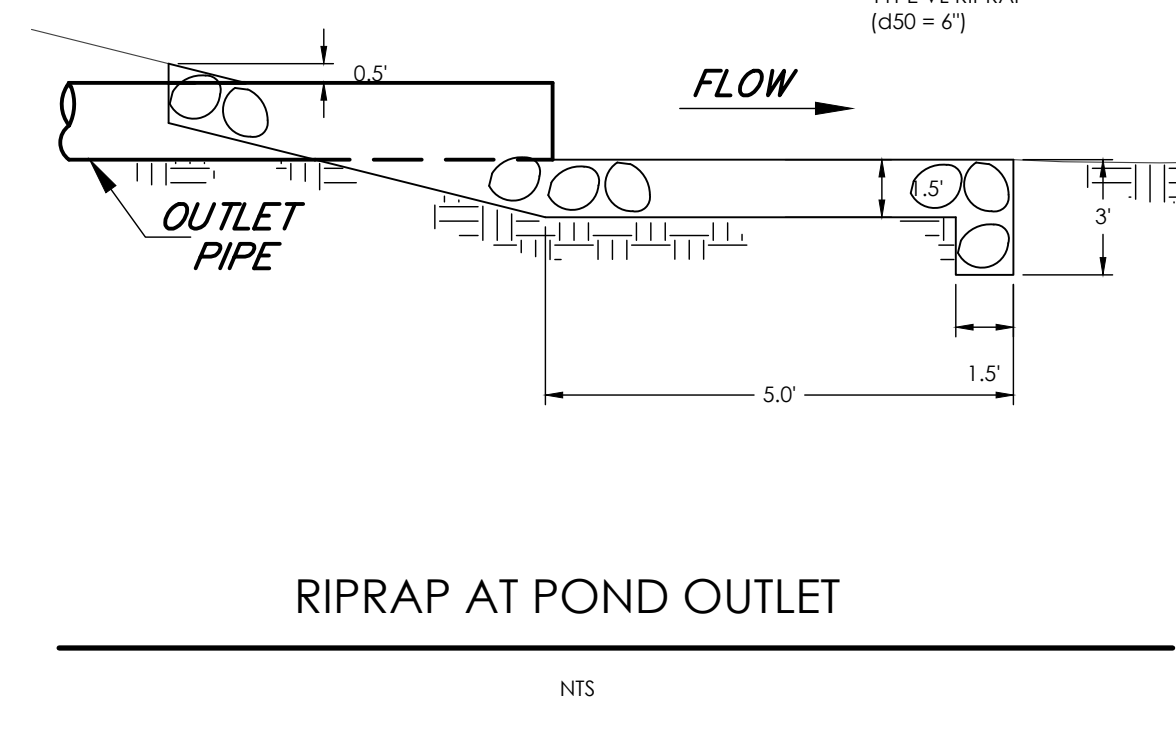
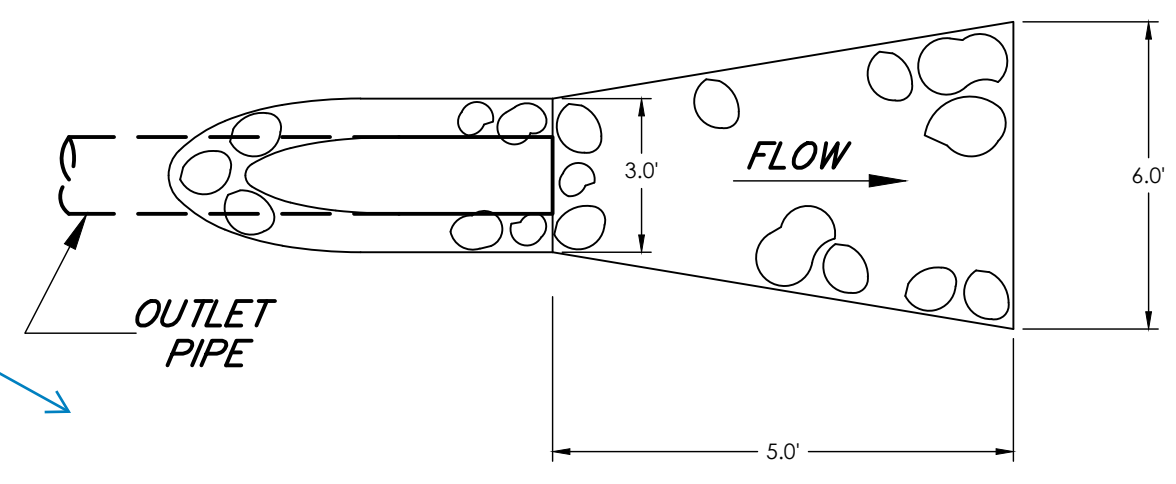


WARNING
THIS AREA IS A STORMWATER FACILITY AND IS SUBJECT TO PERIODIC FLOODING

24"x18"

1. TYPOGRAPHY TO BE HELVETICA MEDIUM
2. SIGNS TO BE MOUNTED ON METAL SIGN POST; 7'-0" ABOVE FINISH GRADE TO BOTTOM OF SIGN-TYP. ADDITIONAL PLACARD SIGNS SHALL BE MOUNTED AT LEAST 6'-0" ABOVE FINISH GRADE TO BOTTOM OF SIGN-TYP.
3. THE SIGNS SHALL BE FABRICATED OF DURABLE MATERIALS, SUCH AS METAL OR PLASTIC, USING RED LETTERING ON A WHITE BACKGROUND

POND SIGNAGE
SCALE: 1" = 1'-0"



L=335.01'
Δ=3°24'33"
R=5630.33'
CB=N19°03'59"W,
CL=334.96'

Please show and label all curb and gutter (type). This comment is applied to both drainage maps.

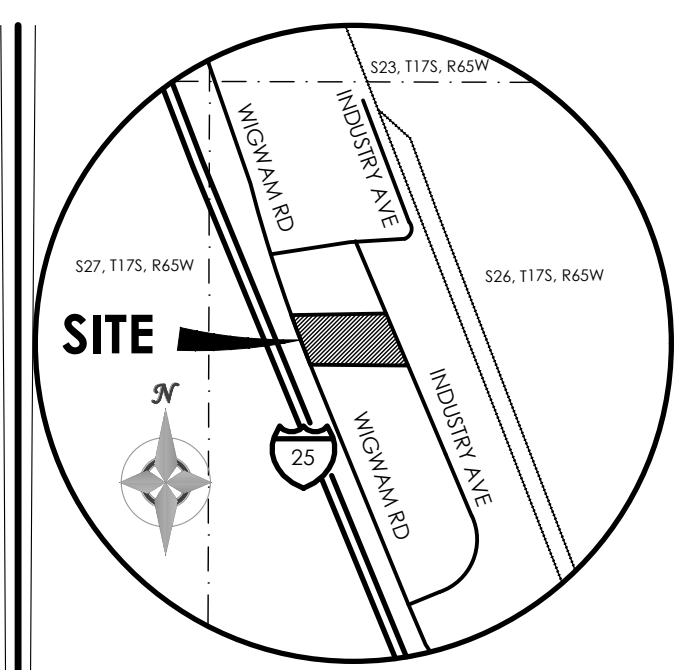
Please show and label drainage easement for proposed swales, pond, storm sewers.

Plan and profile of storm pipe is required.

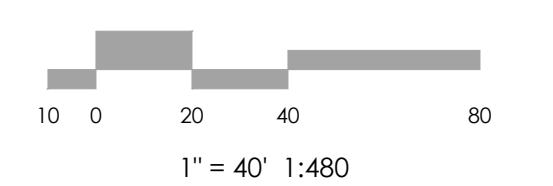
How can erosion be prevented at the highlighted gap areas.

Mountable curbs are recommended at any section that maintenance access crosses the trickle channel.

Please label spillway riprap (ownership, condition, type, size), and spillway flow direction.



BENCHMARK
THE BENCHMARK FOR THESE PLANS IS A NAIL W/ ALUM WASHER FOUND AT THE SW CORNER OF SITE. TOP OF NW RAILROAD TIE WALL ELEV. = 5232.19' (COLORADO CENTRAL, NAVD 88)



MVE, INC.
ENGINEERS & SURVEYORS

1903 Leary Street, Suite 200 Colorado Springs, CO 80909 719.635.5736

REVISIONS

DESIGNED BY _____
DRAWN BY JO
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

1995 WIGWAM RD
EL PASO COUNTY, CO

**GRADING & EROSION CONTROL PLAN
GRADING PLAN**

C1.2 MVE PROJECT 61180
MVE DRAWING GEC-GP

MARCH 31, 2023
SHEET 2 OF 6

Include callout for pet waste station(s) around the pond, with signage stating that pet waste must be picked up.

These do not match the FDR values - verify and update so both match.

Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").

Specify well screen type. Trash rack to be Johnson stainless steel well screen with #93 VEE wire (Figure 6-a), or equivalent (per EPC DCMv2, Chap 4.3 and MHFD Detail T-12).

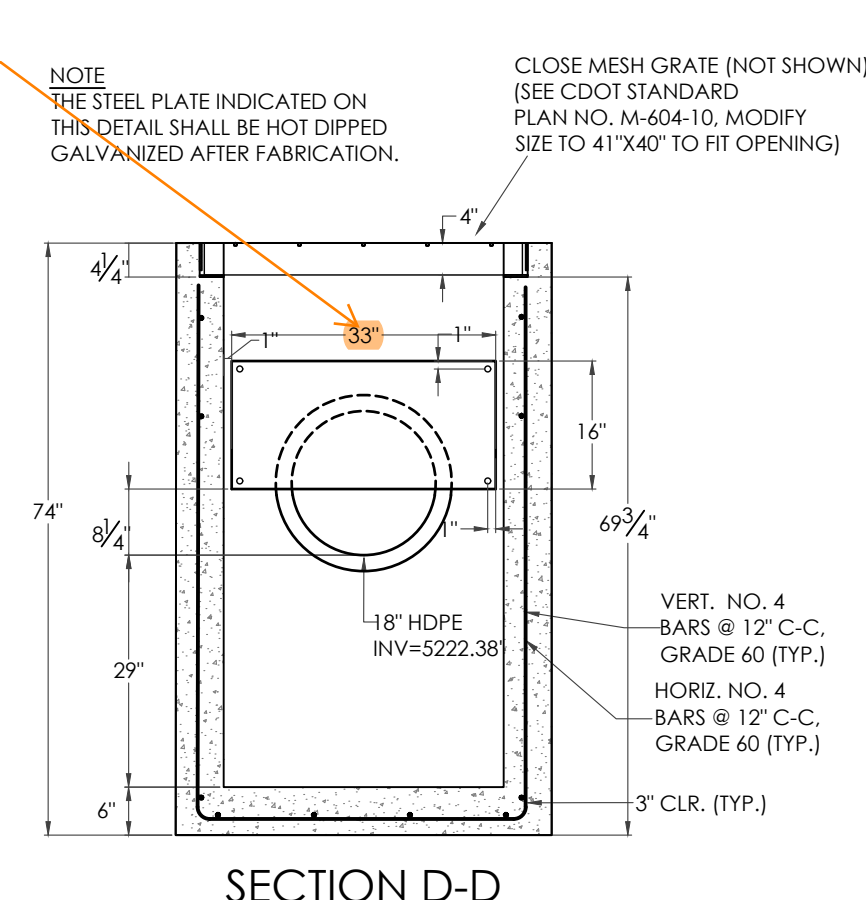
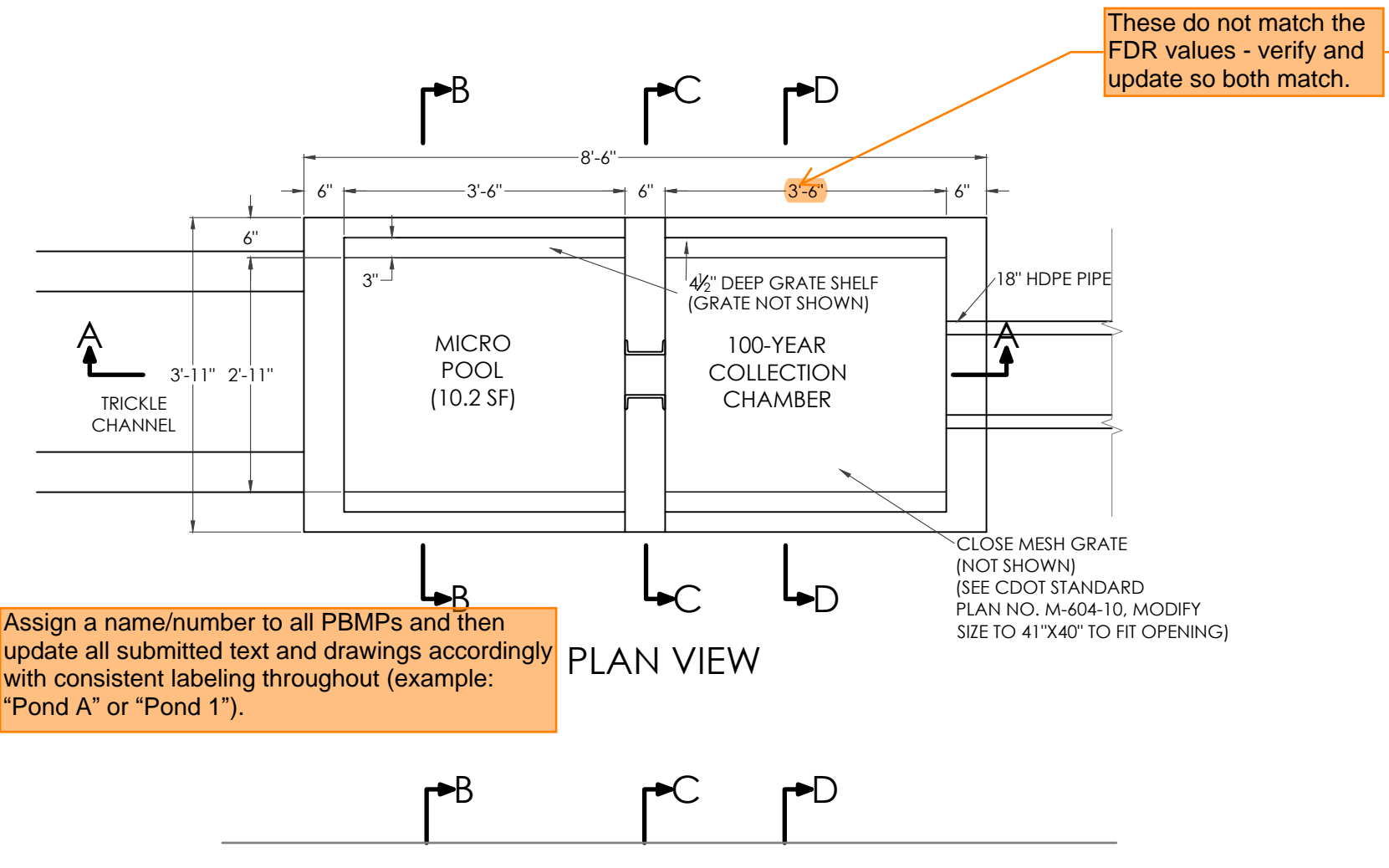
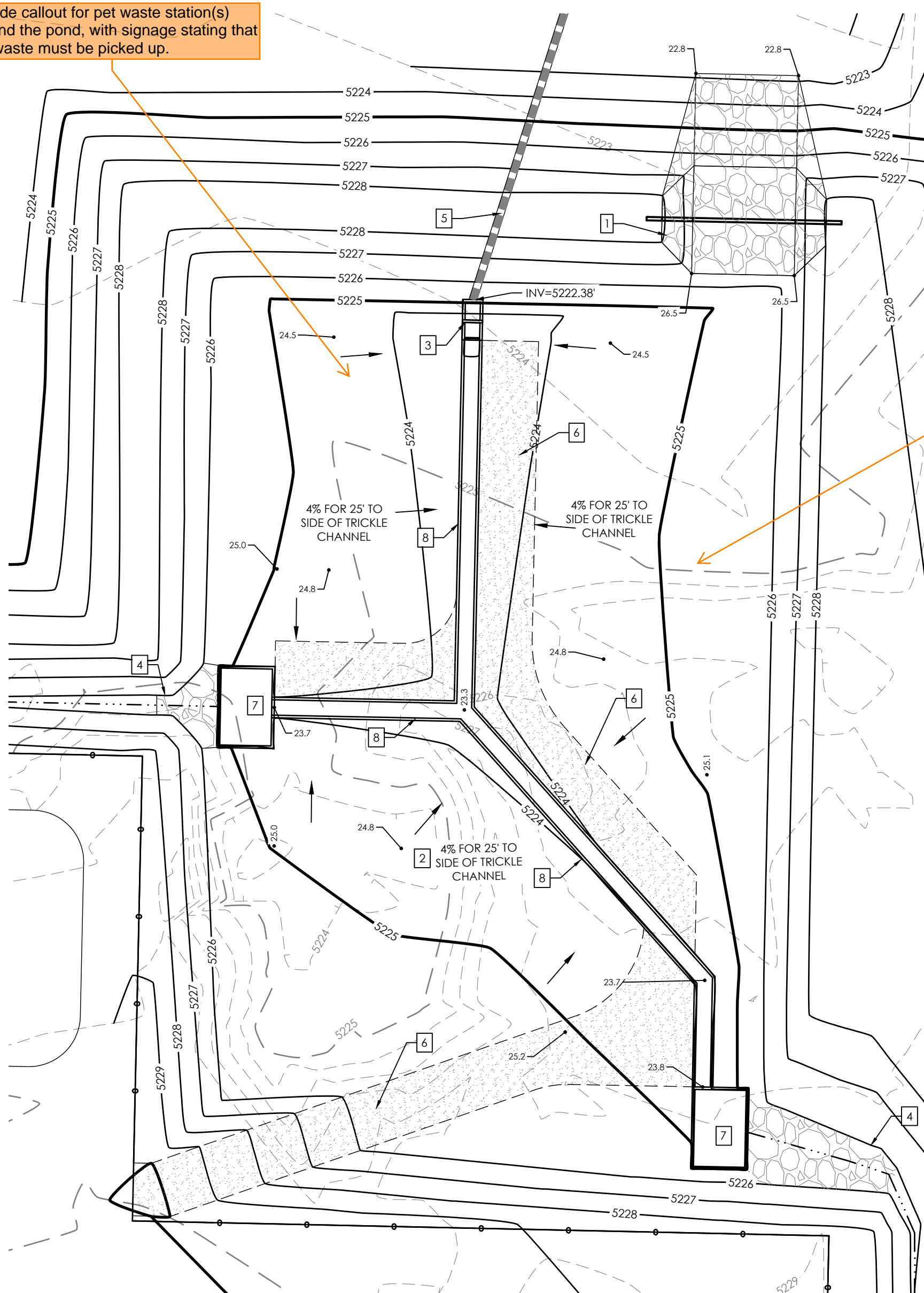
show interface between riprap rundown and forebays so it is clear how the two are designed to meet

Number 9 was not shown on the plan. Warning sign location for the pond needs to be shown on the map.

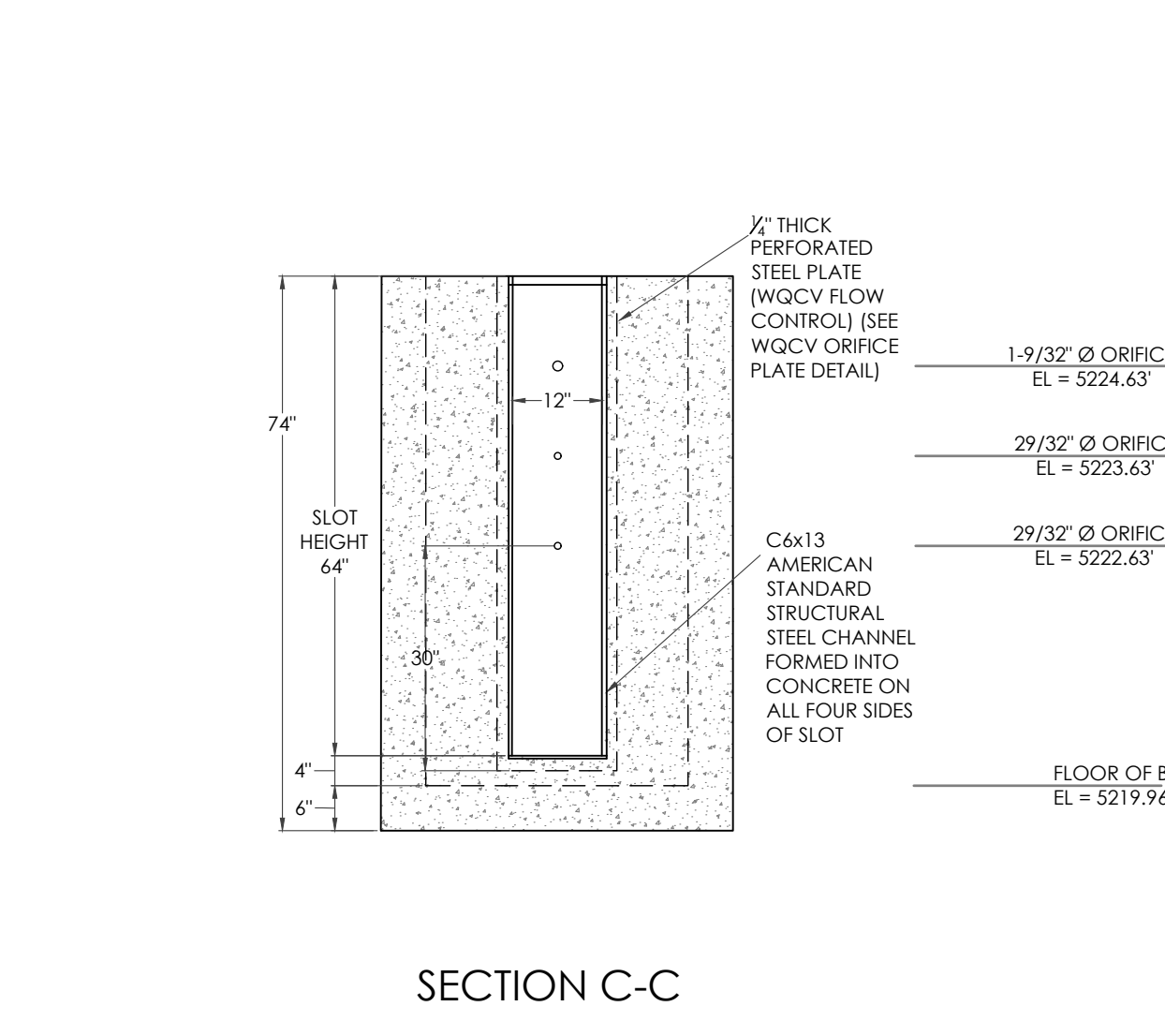
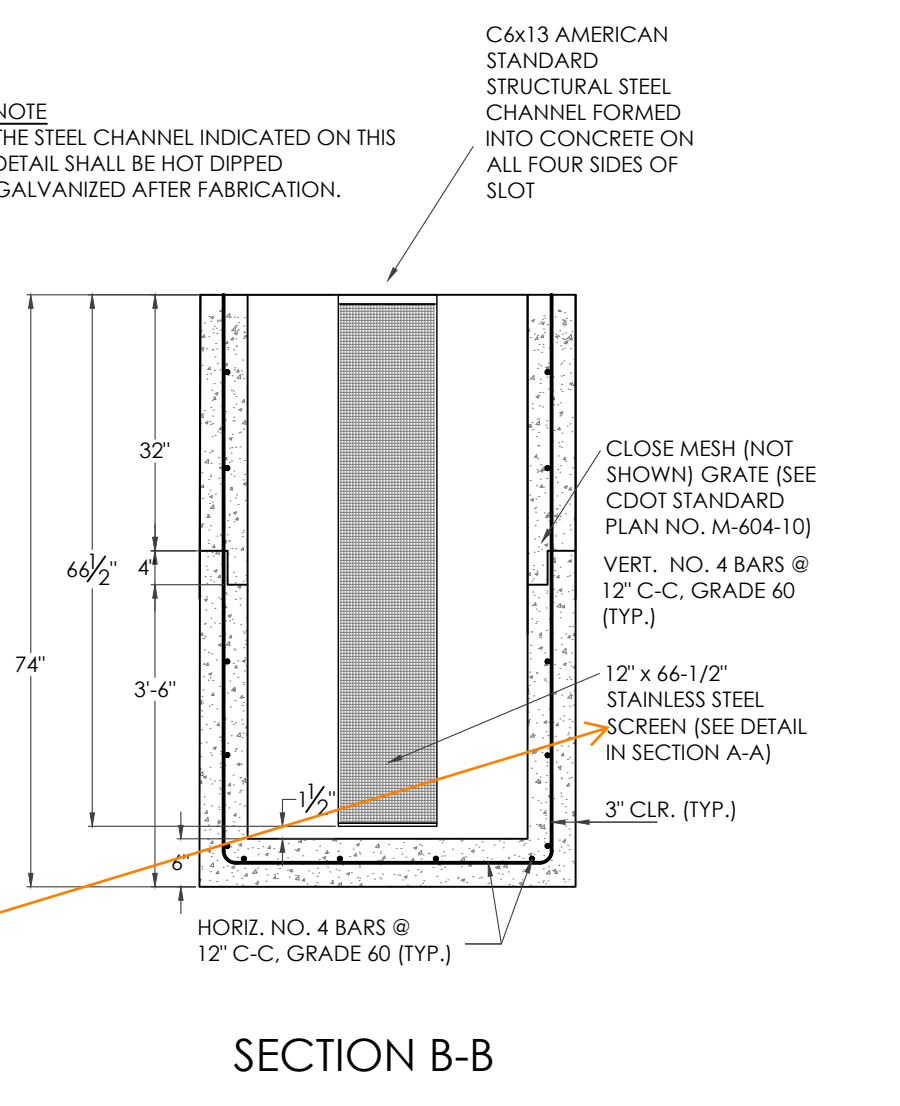
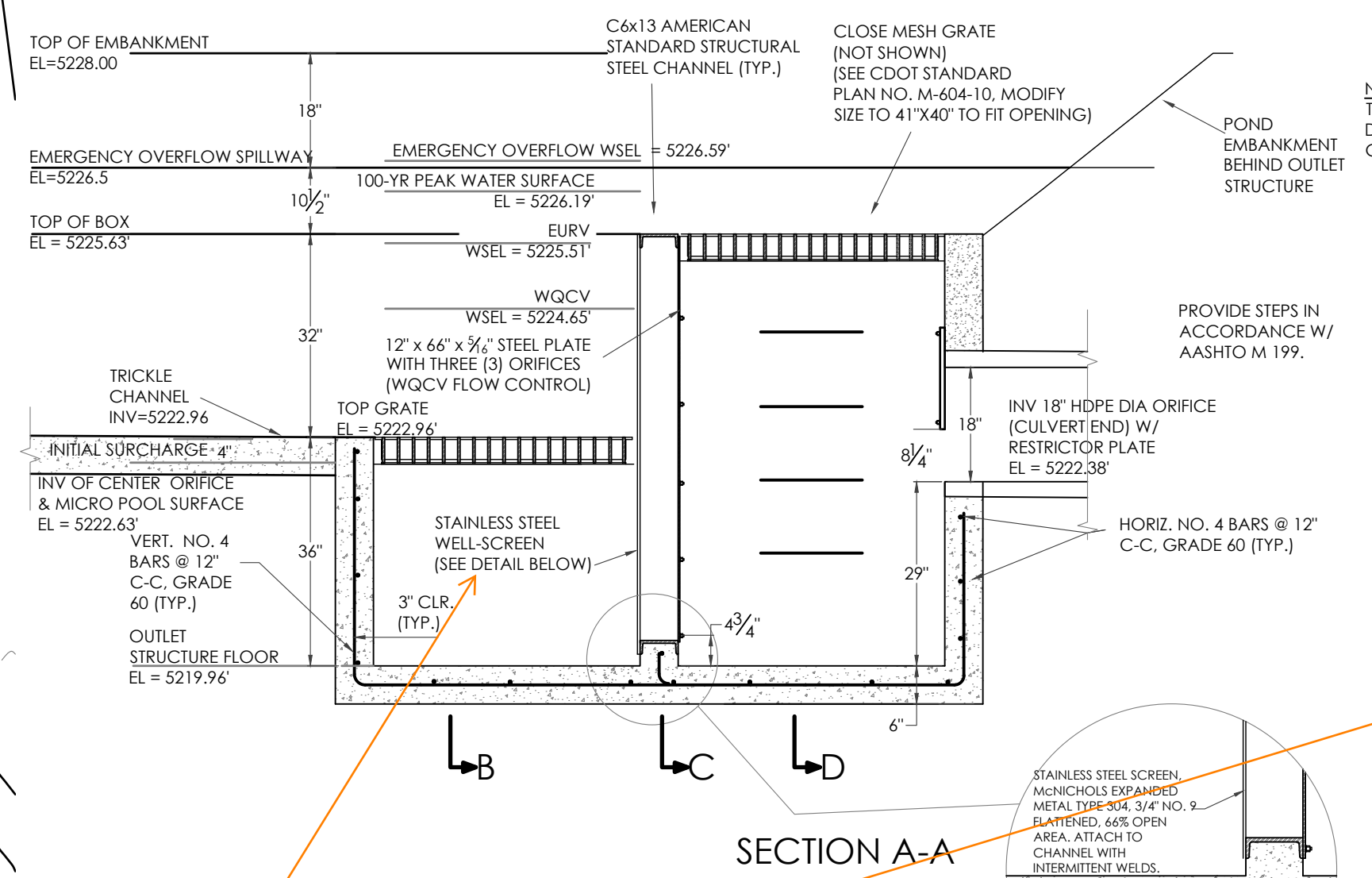
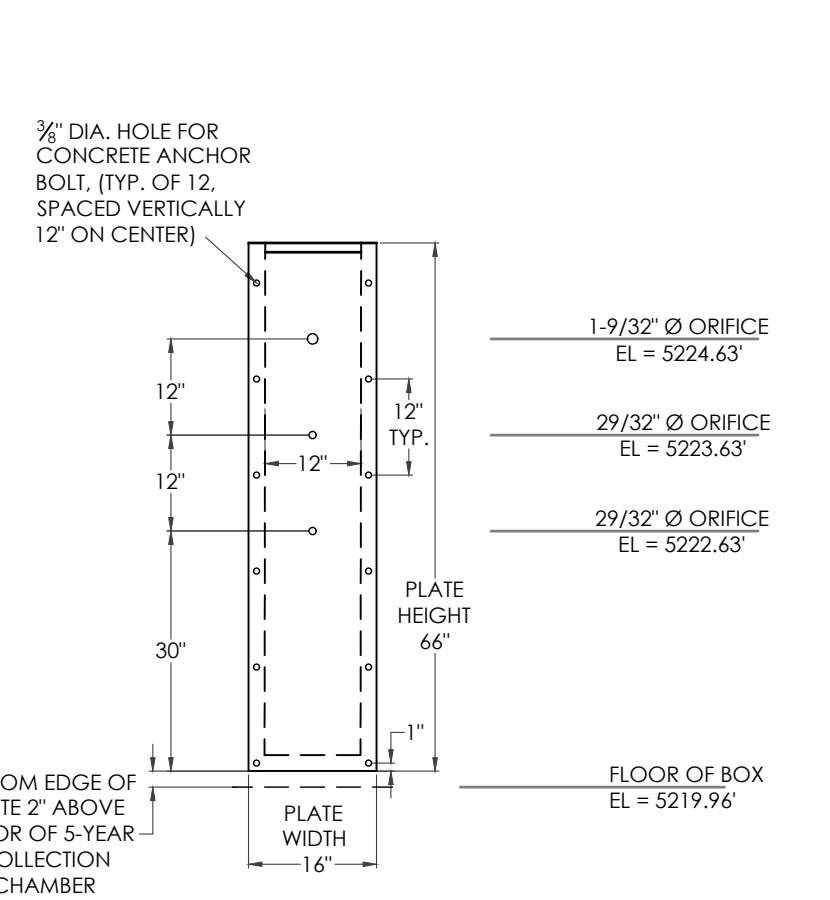
Details of trickle channel, and forebays cannot be fully reviewed without calculations.

Consider having control joints every ~10ft.

show forebay notch view and dimensions.



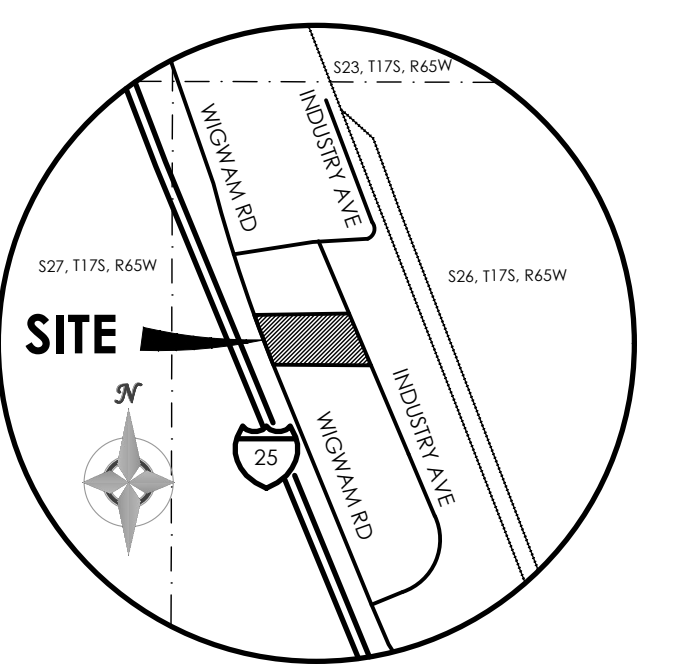
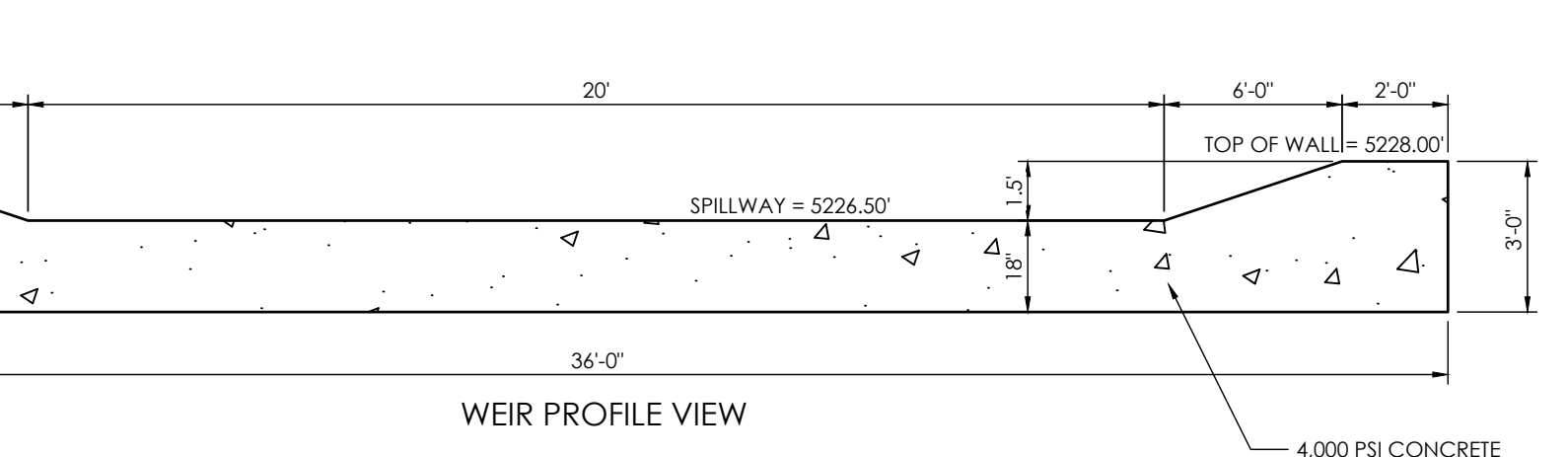
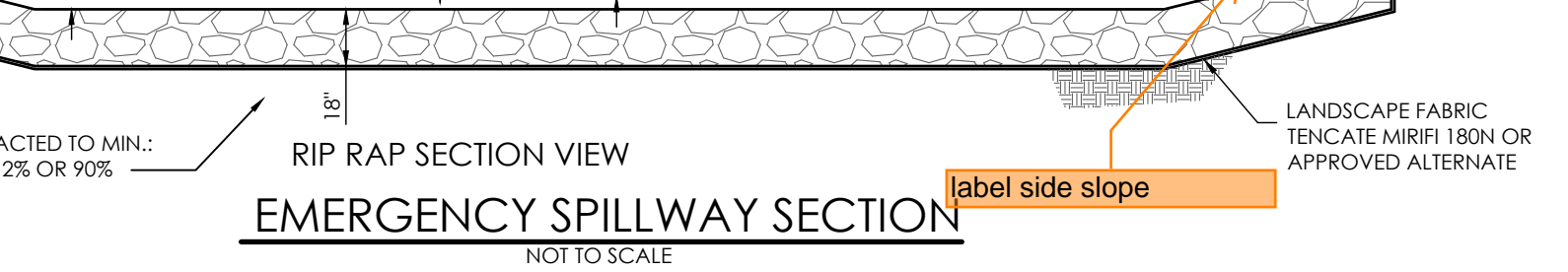
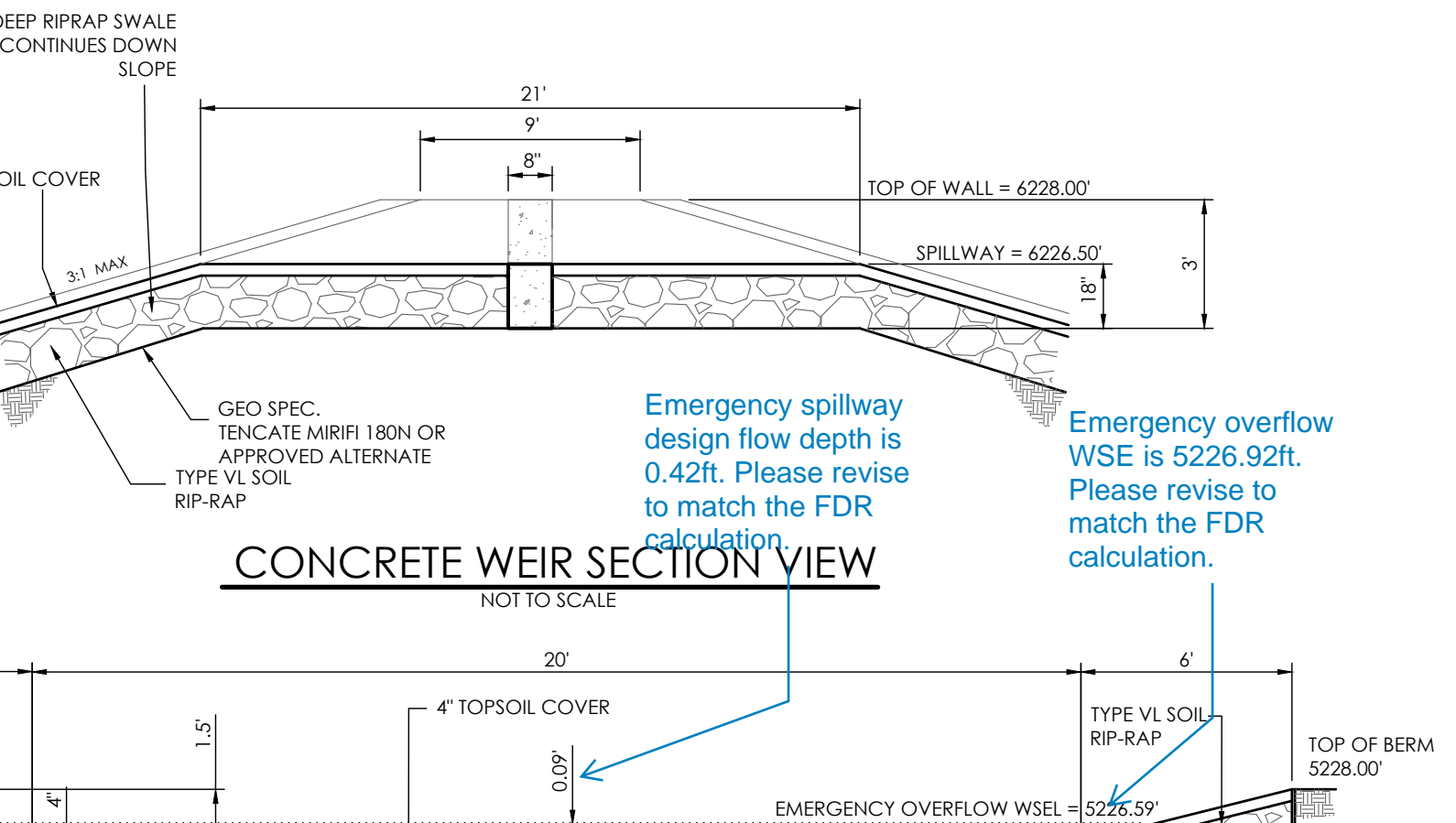
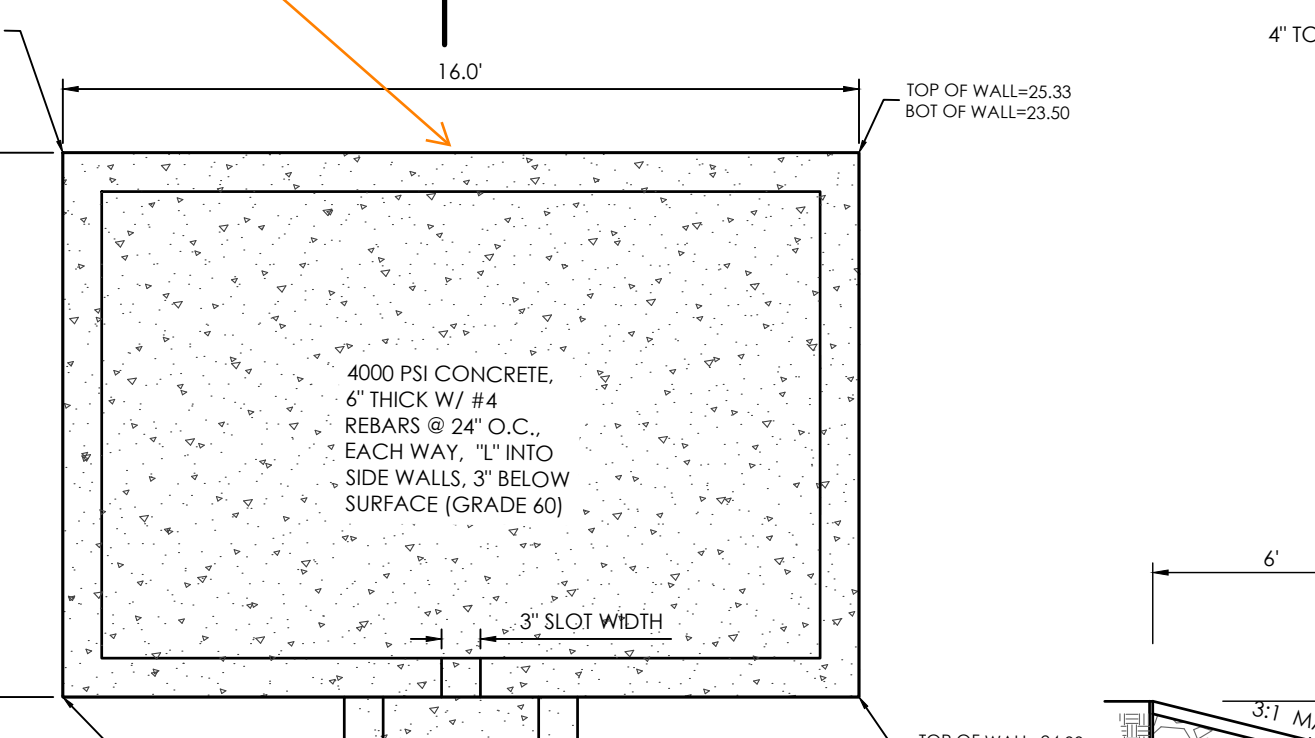
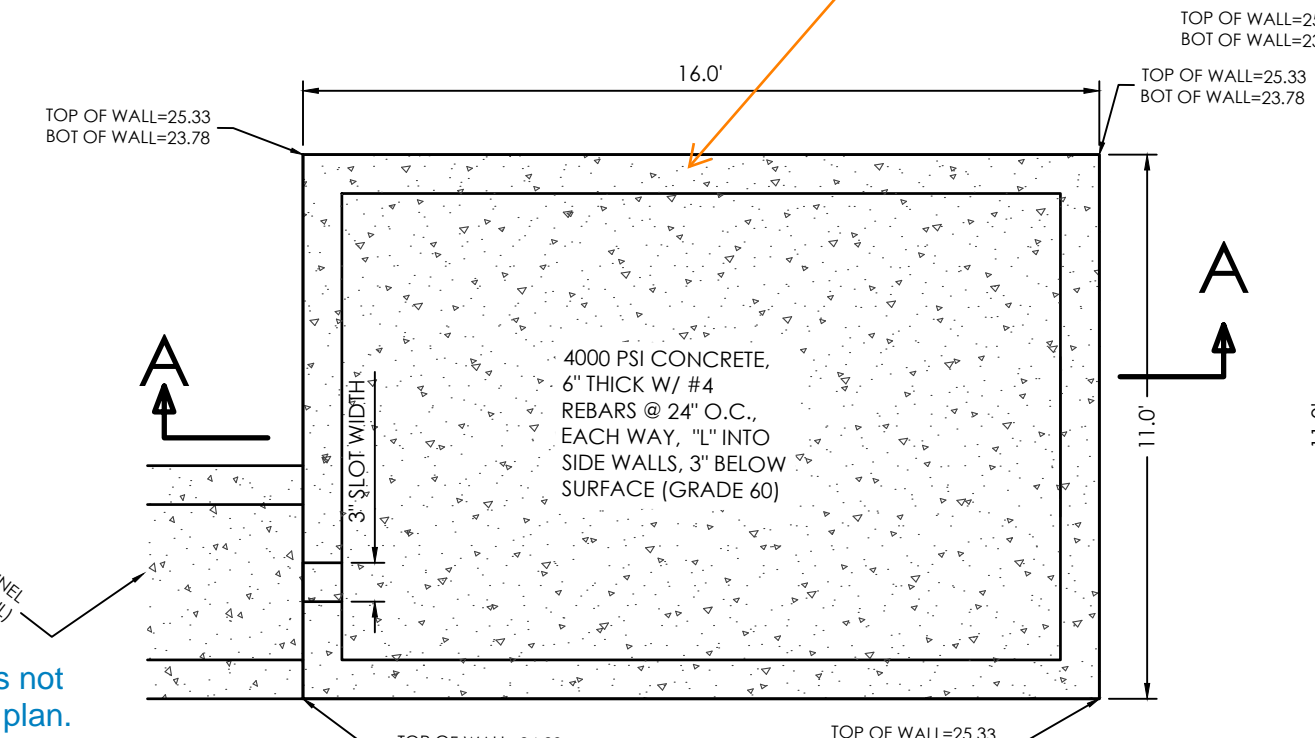
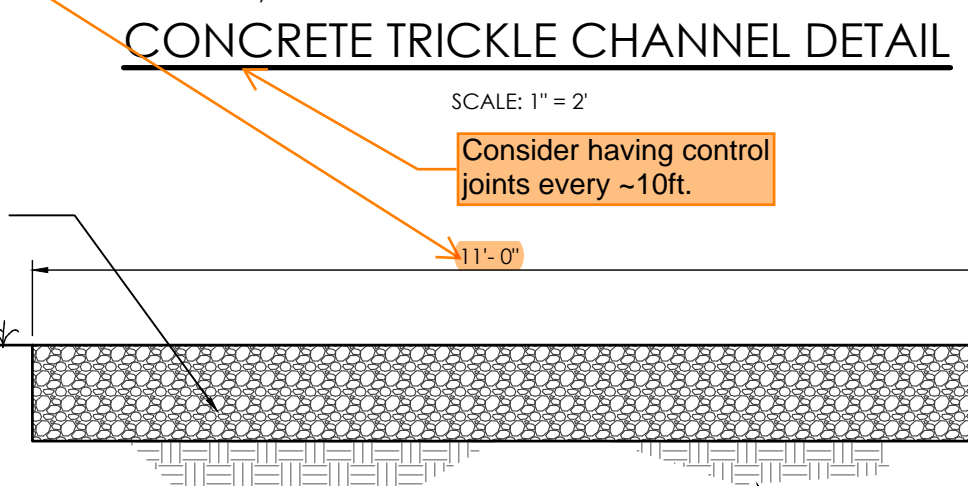
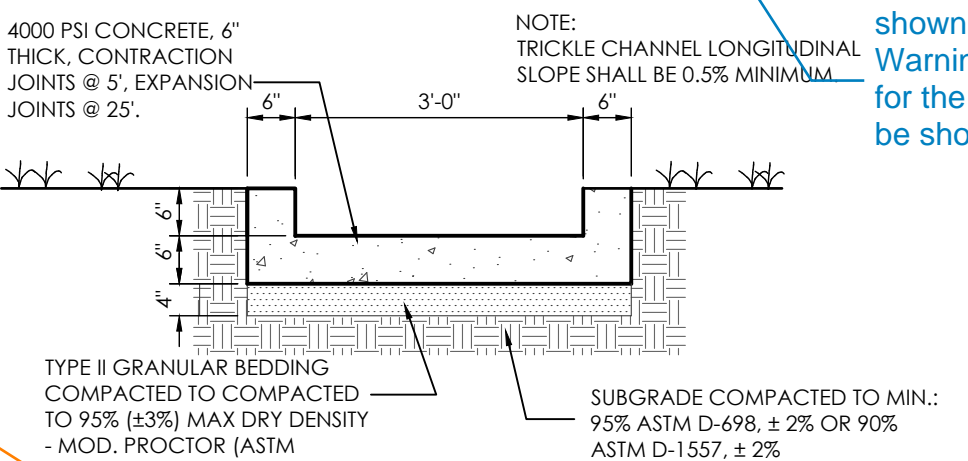
- NOTES:
1. INSTALL NEOPRENE CLOSED CELL MEDIUM GASKETS WITH ADHESIVE ON ONE SIDE, 1/4" THICK x 2" WIDE BETWEEN ORIFICE PLATE AND STRUCTURE.
 2. ALL ORIFICE PLATES, STRUCTURAL STEEL CHANNEL, AND CLOSE MESH GRATES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
 3. ALL ORIFICE PLATES SHALL BE MOUNTED WITH 3" x 1/2" STAINLESS STEEL CONCRETE ANCHOR BOLTS W/ WASHERS, AND NUTS AS SHOWN.



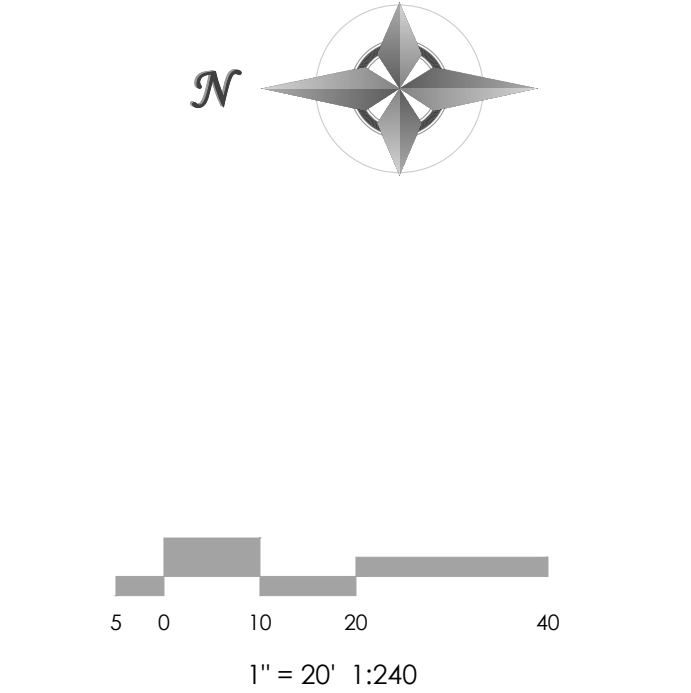
FULL SPECTRUM EXTENDED DETENTION BASIN OUTLET STRUCTURE DETAILS

FULL SPECTRUM EXTENDED DETENTION BASIN DETAIL

- NOTE LEGEND
1. INSTALL CONCRETE SPILLWAY WEIR & EMERGENCY OVERFLOW RIP-RAP (SEE SPILLWAY DETAIL)
 2. INSTALL FULL SPECTRUM EXTENDED DETENTION BASIN
 3. INSTALL OUTLET STRUCTURE (SEE OUTLET DETAIL)
 4. INSTALL RIP-RAP RUN DOWN (SEE RIP-RAP DETAIL)
 5. INSTALL 18" HDPE STORM PIPE AT 0.8% (SEE STORM PLAN)
 6. INSTALL 15" WIDE GRAVEL ACCESS DRIVE
 7. INSTALL CONCRETE FOREBAY (SEE CONCRETE FOREBAY A1-1 DETAIL)
 8. INSTALL 3.0' BTM CONCRETE TRICKLE CHANNEL (SEE DETAIL)
 9. INSTALL POND SIGNAGE (SEE DETAIL ON GRADING PLAN)



BENCHMARK
THE BENCHMARK FOR THESE PLANS IS A NAIL W/ ALUM WASHER FOUND AT THE SW CORNER OF SITE. TOP OF NW RAILROAD TIE WALL ELEV. = 5232.19' (COLORADO CENTRAL, NAVD 88)



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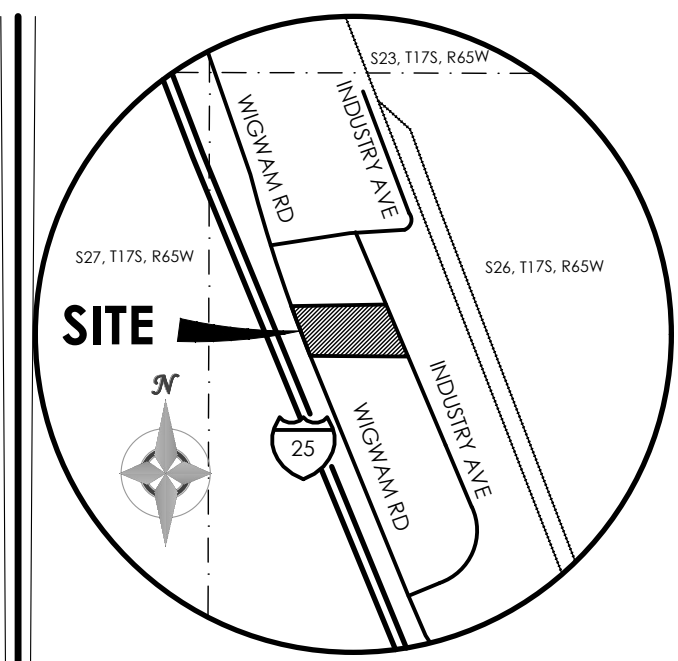
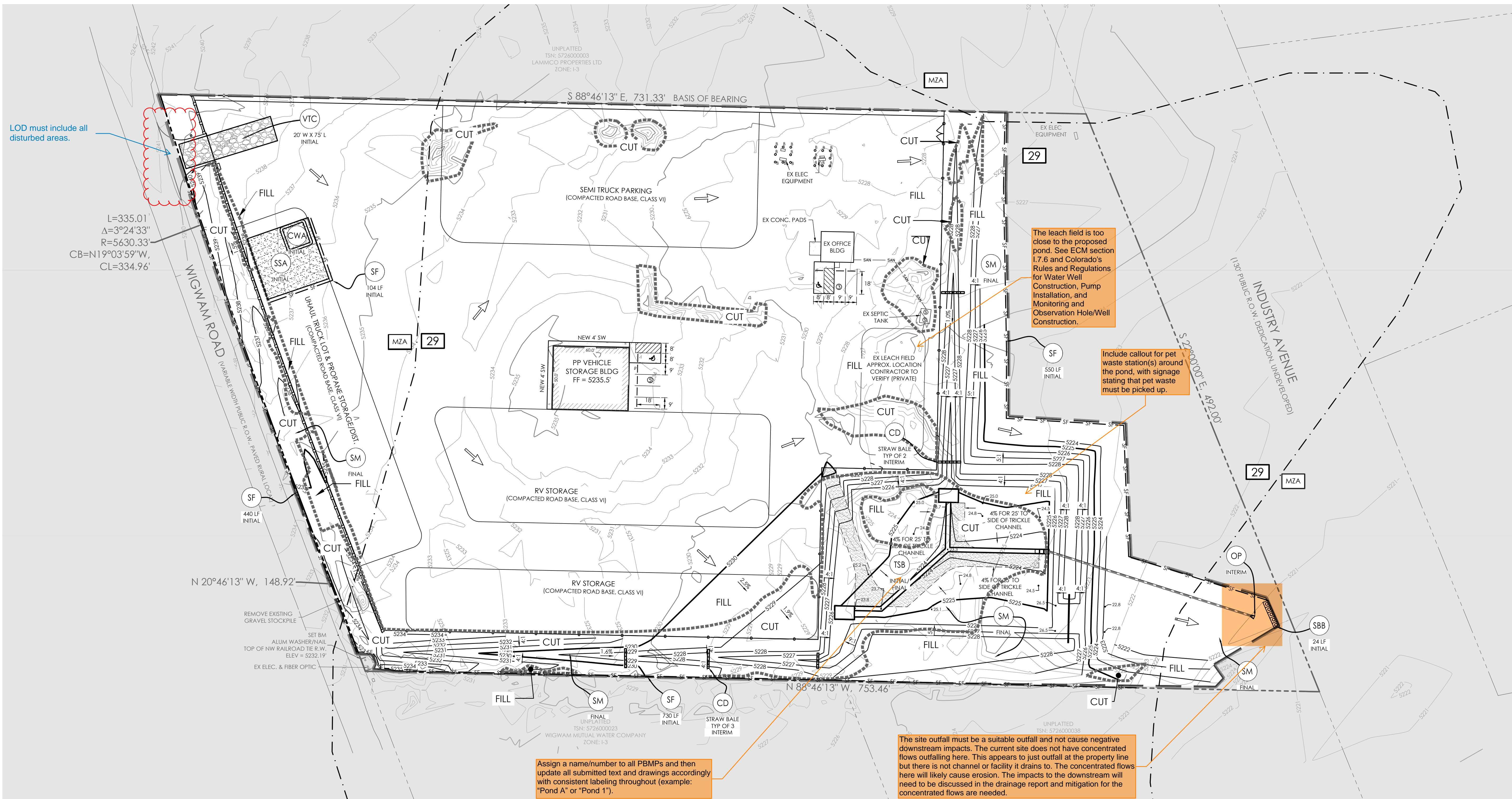
19955 WIGWAM RD
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN
POND PLAN

C1.3 MVE PROJECT 61180
MVE DRAWING GEC-PP

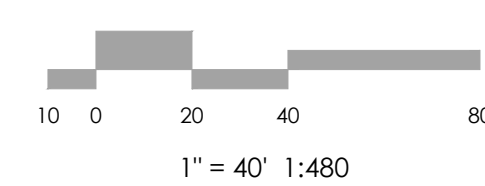
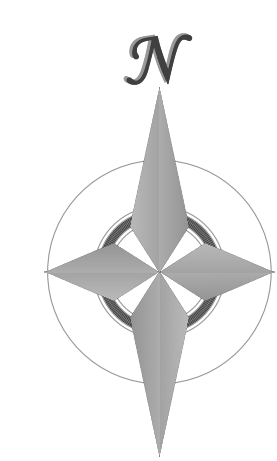
MARCH 31, 2023
SHEET 3 OF 6

PCD FILE NO. _____



VICINITY MAP
NOT TO SCALE

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REVISIONS

LOD must include all disturbed areas.

L=335.01'
Δ=3°24'33"
R=5630.33'
CB=N19°03'59"W,
CL=334.96'

The leach field is too close to the proposed pond. See ECM section 1.7.6 and Colorado's Rules and Regulations for Water Well Construction, Pump Installation, and Monitoring and Observation Hole/Well Construction.

Include callout for pet waste station(s) around the pond, with signage stating that pet waste must be picked up.

Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").

The site outfall must be a suitable outfall and not cause negative downstream impacts. The current site does not have concentrated flows outfalling here. This appears to just outfall at the property line but there is not channel or facility it drains to. The concentrated flows here will likely cause erosion. The impacts to the downstream will need to be discussed in the drainage report and mitigation for the concentrated flows are needed.

CM LEGEND

MAP SYMBOL	KEY	DESCRIPTION
INITIAL CMs		
	SSA	STABILIZED STAGING AREA (Initial CM)
	SCL	SEDIMENT CONTROL LOG (Initial/INTERIM CM)
	VTC	VEHICLE TRACKING CONTROL (Initial CM)
	CD	CHECK DAM (Initial CM)
	SF	SILT FENCE (Initial CM)
	TSB	TEMPORARY SEDIMENT BASIN (INITIAL CM)
	SSB	STRAW BALE BARRIER (INITIAL CM)
	CWA	CONCRETE WASHOUT AREA (INITIAL CM)
INTERIM CMs		
	OP	OUTLET PROTECTION (RIP-RAP) (INTERIM/FINAL CM)
	CIP	CULVERT INLET PROTECTION (INTERIM CM)
	SM	SEEDING & MULCHING (FINAL CM)

Verify, this should be interim because the ditches are proposed and so this could not be an initial CM.

- 1.50% SLOPE DIRECTION AND GRADE
- CUT/FILL BOUNDARY
- DRAINAGE FLOW ARROW
- LIMITS OF DISTURBANCE/ LIMITS OF CONSTRUCTION
- LIMITS OF DISTURBANCE LINE
- SOILTYPE BOUNDARY

HYDROLOGIC SOIL GROUP	
MAP UNIT NUMBER	DESCRIPTION
29	FLUVAQUENTIC HAPLAQUOLLS, NEARLY LEVEL
MZA	MANZANOLA SILTY CLAY LOAM, SALINE, 0 TO 2% SLOPES

This percentage should match what is in the SWMP for reference. The percentage is very low. The coverage should not represent the percent of the site that is vegetated, but the density of the vegetative coverage of the previous area on site. If site was previously graded or land use was such that there is no or minimal vegetation, the % cover required for final stabilization should then be based on neighboring properties to show natural native vegetative cover (ie: an adequate reference site). If surrounding sites are also being developed, use historic aerial photos to make determination.

If this note is intended to represent the % of the site area that has vegetation reword so that it is clear the % is different from what the SWMP % represents.

SOIL DATA			
PRIMARY SOIL DESCRIPTION	FLUVAQUENTIC HAPLAQUOLLS, NEARLY LEVEL	PRIMARY SOIL DESCRIPTION	MANZANOLA SILTY CLAY LOAM, SALINE, 0 TO 2% SLOPES
PERMEABILITY	MODERATE	PERMEABILITY	SLOW
SURFACE RUNOFF	SLOW	SURFACE RUNOFF	SLOW
HAZARD OF EROSION	SLIGHT	HAZARD OF EROSION	MODERATE
HYDROLOGIC SOIL GROUP	D	HYDROLOGIC SOIL GROUP	C

OTHER DATA
LAT/LONG COORDS: 38°32'35" / 104°38'26"

VEGETATION:
EXISTING: NATIVE PRAIRIE GRASSES & WEEDS, 26% COVERAGE
PROPOSED: PLANTINGS & RESEEDING PER LANDSCAPE PLAN

APPROX. EARTHWORK QUANTITIES:
1,759 CY CUT, 2,381 CY FILL

BATCH PLANTS: NONE

DEWATERING: NONE

DISTURBED AREA: 6.807± ACRES

RECEIVING WATERS: FOUNTAIN CREEK

SCHEDULE: SPRING 2024-SUMMER 2024
FINAL STABILIZATION FALL 2024

SYMBOLS SHOWN IN LEGEND SHALL BE USED BY SWMP ADMINISTRATOR TO ANNOTATE ANY CHANGES AND/OR ADDITIONS TO THIS PLAN.

PERMANENT SEEDING AND MULCHING PER LANDSCAPE ARCHITECT DESIGN. SEE APPROVED LANDSCAPING PLANS FOR ADDITIONAL SEEDING AND MULCHING INFORMATION.

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DRAWN BY JO
CHECKED BY AS-BUILTS BY
AS-BUILTS BY CHECKED BY

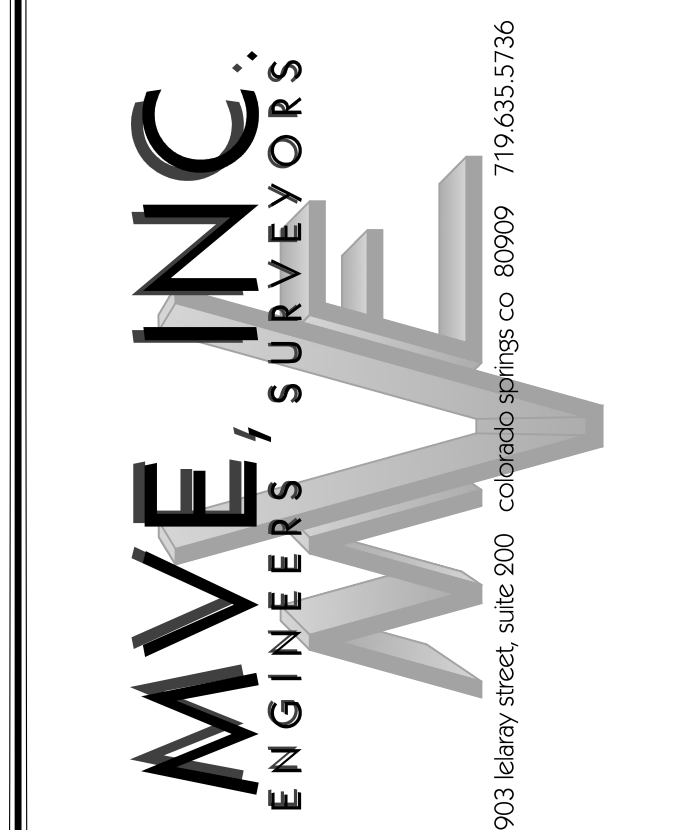
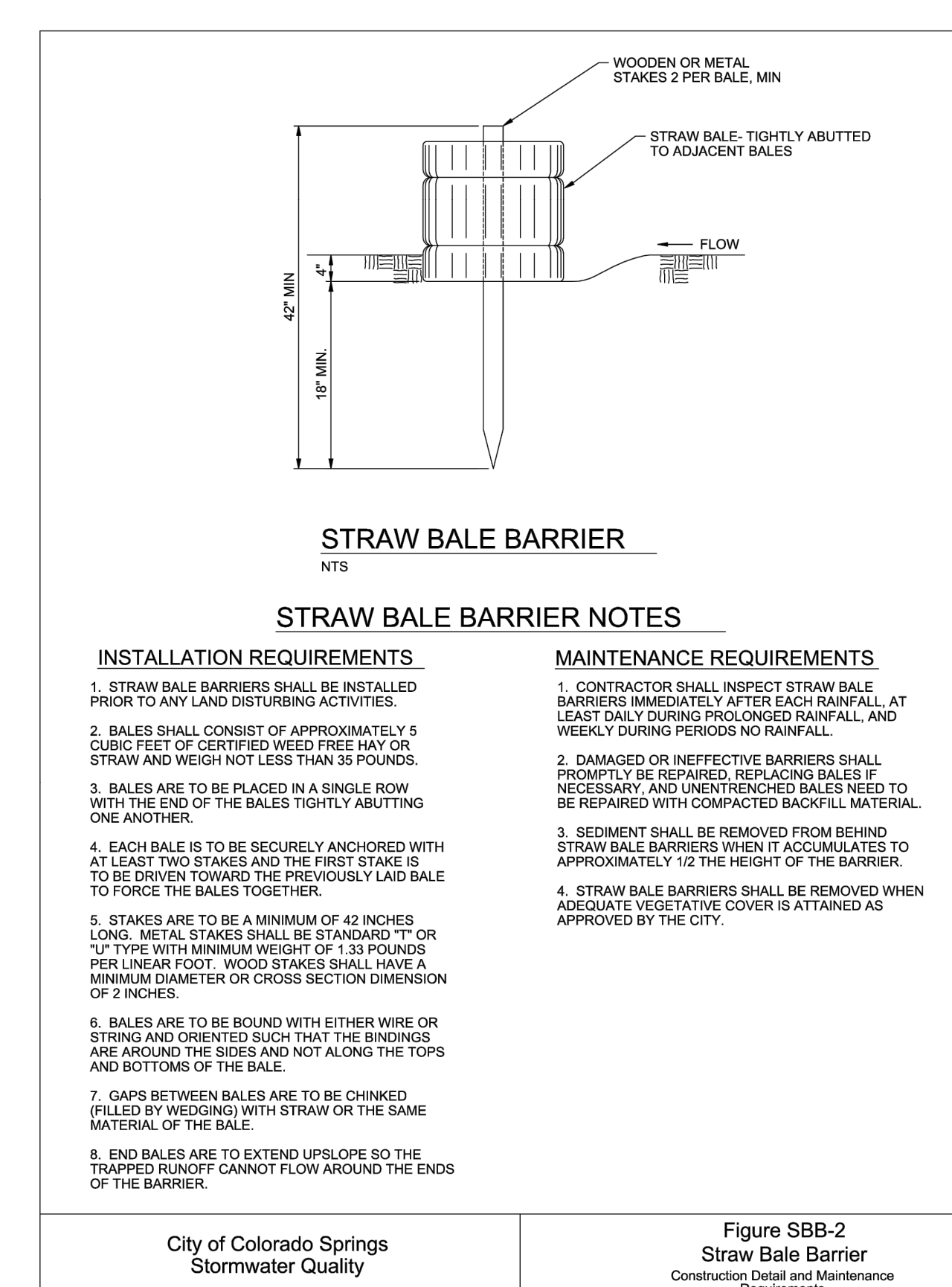
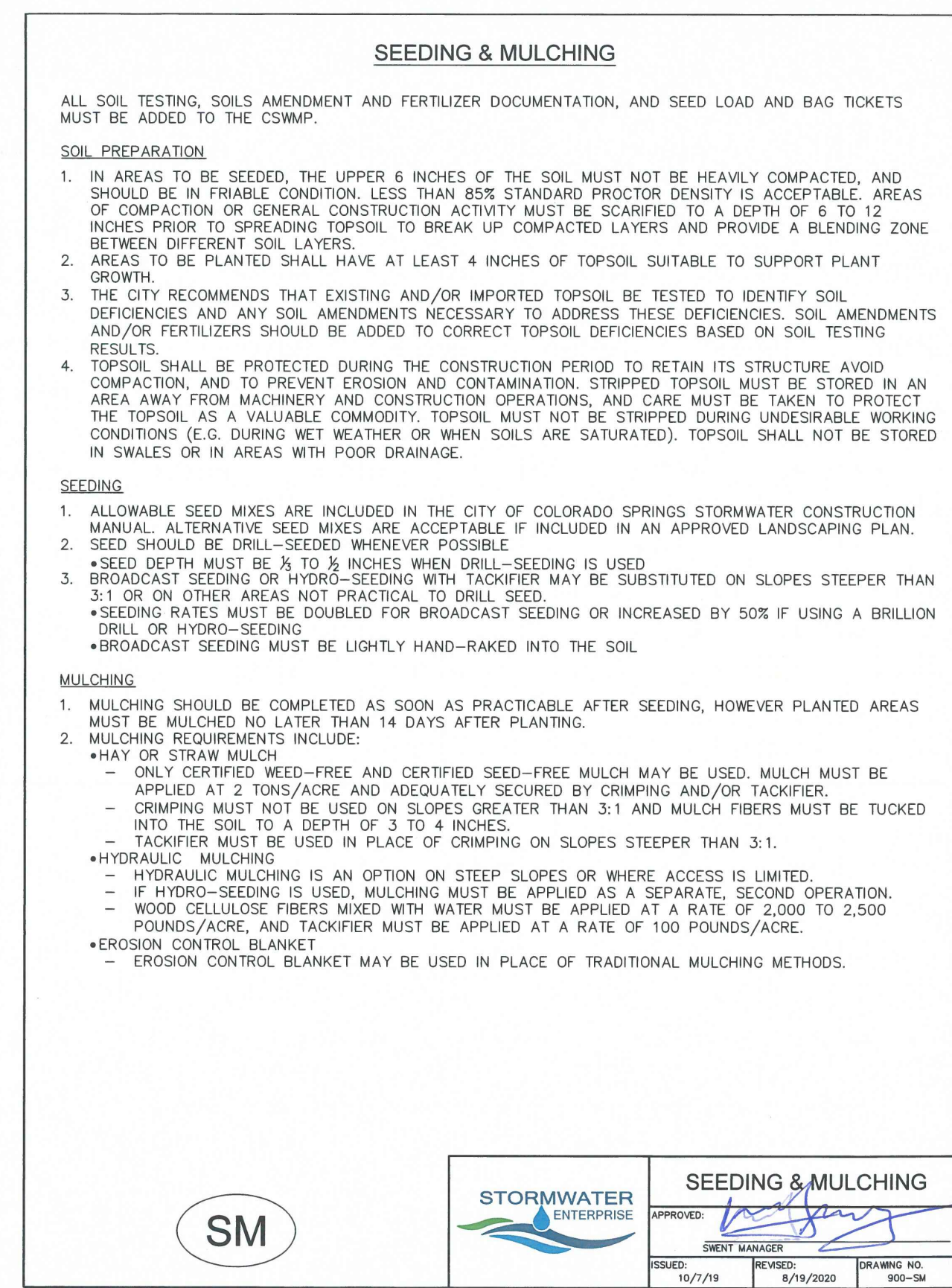
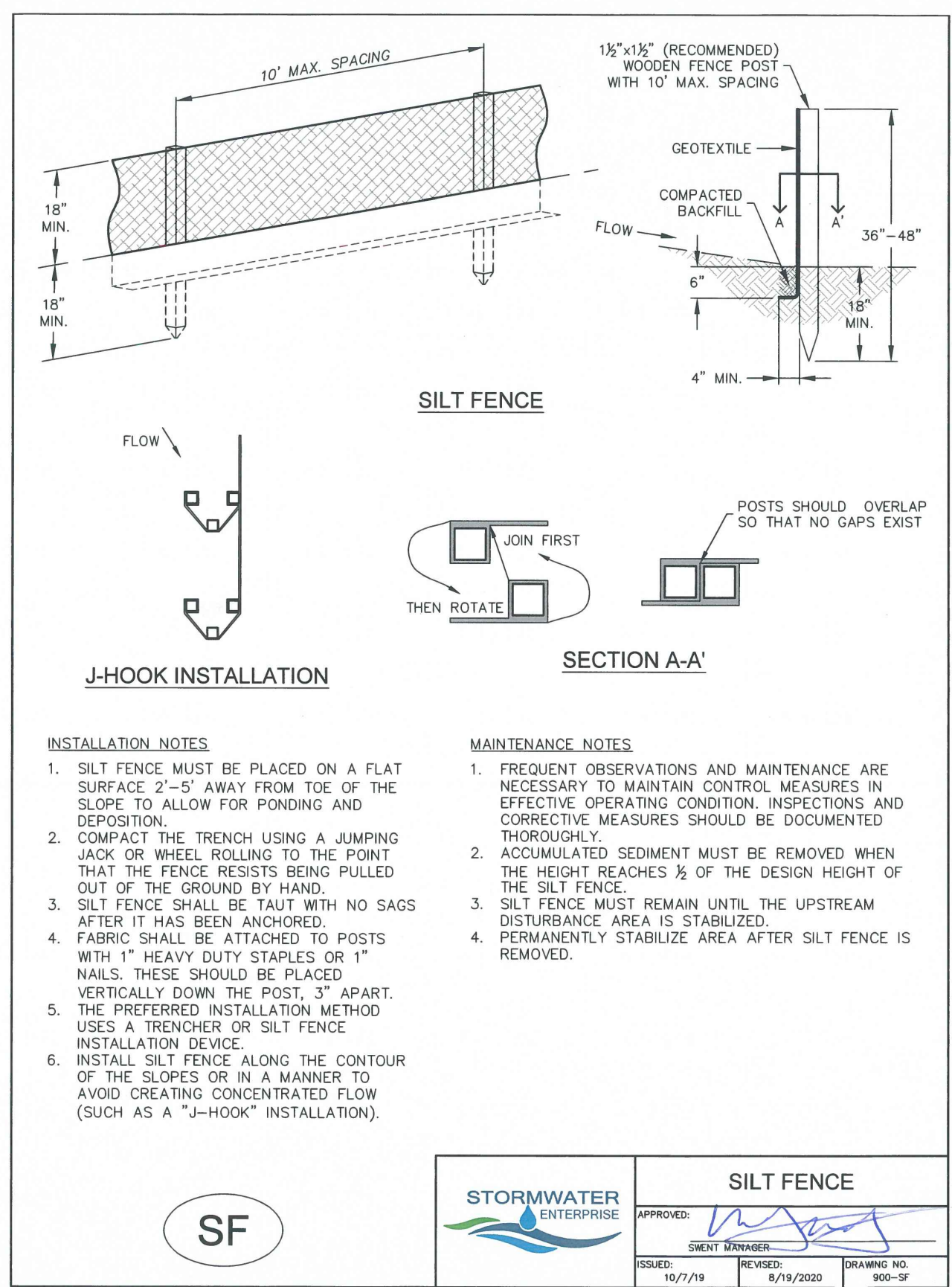
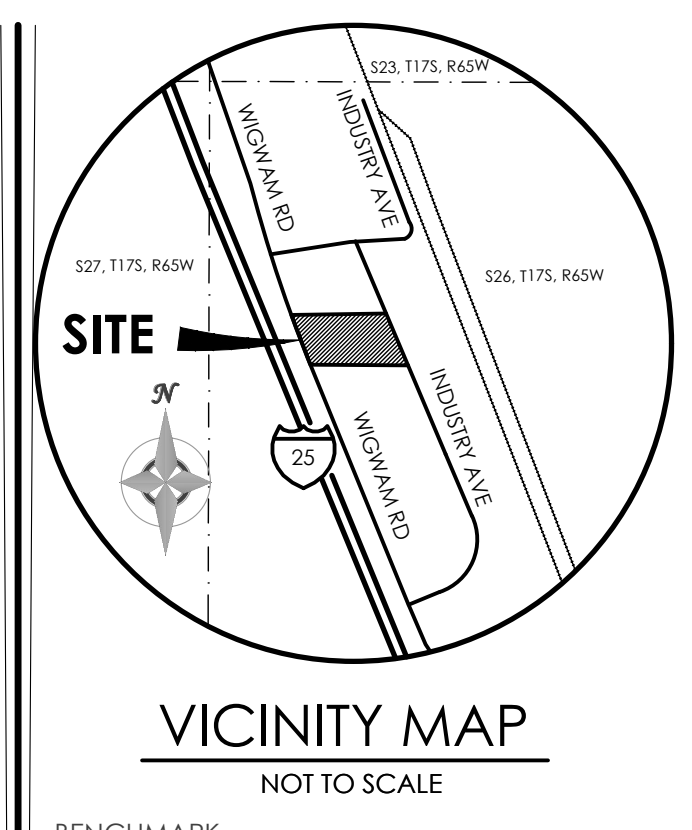
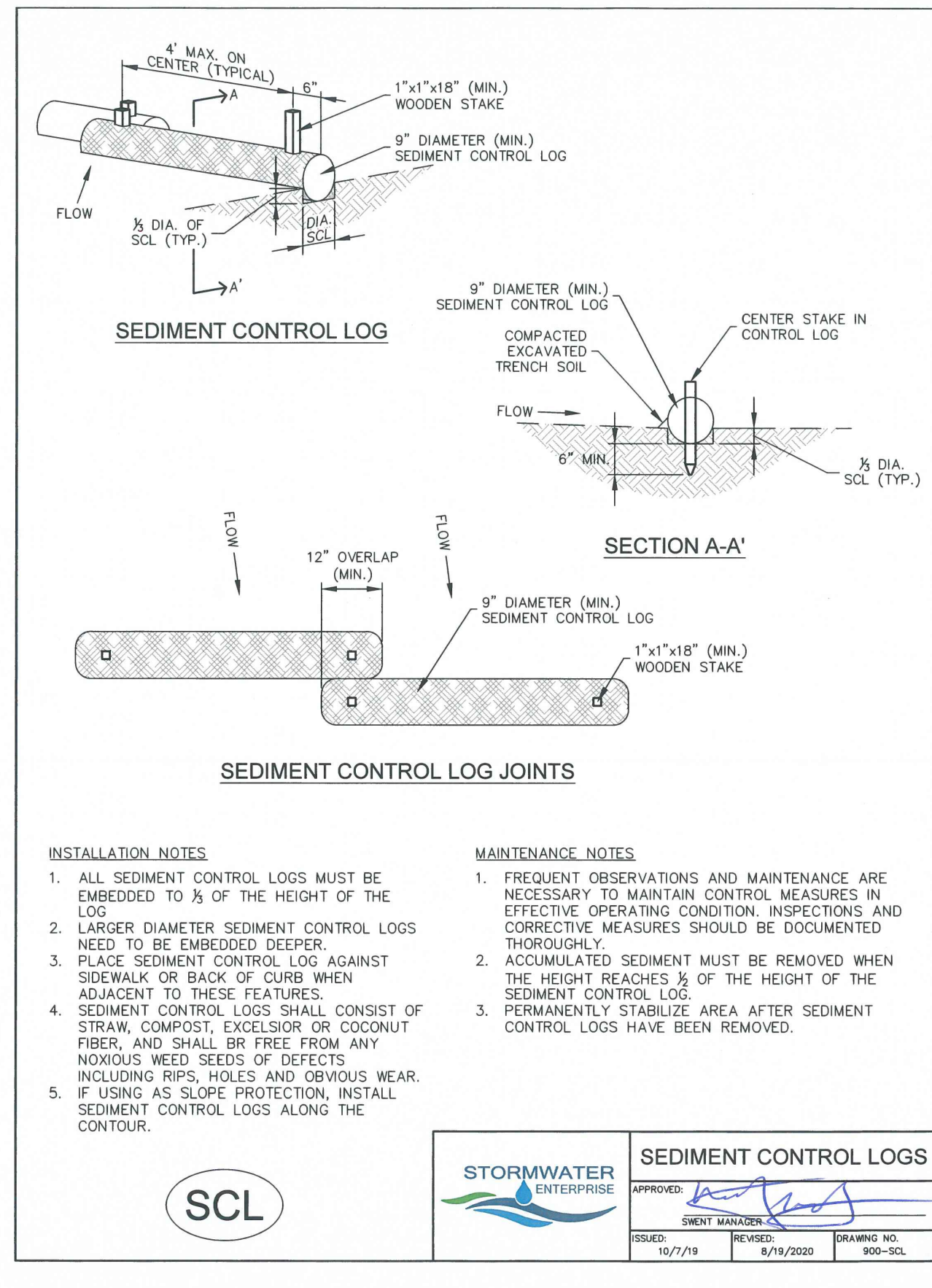
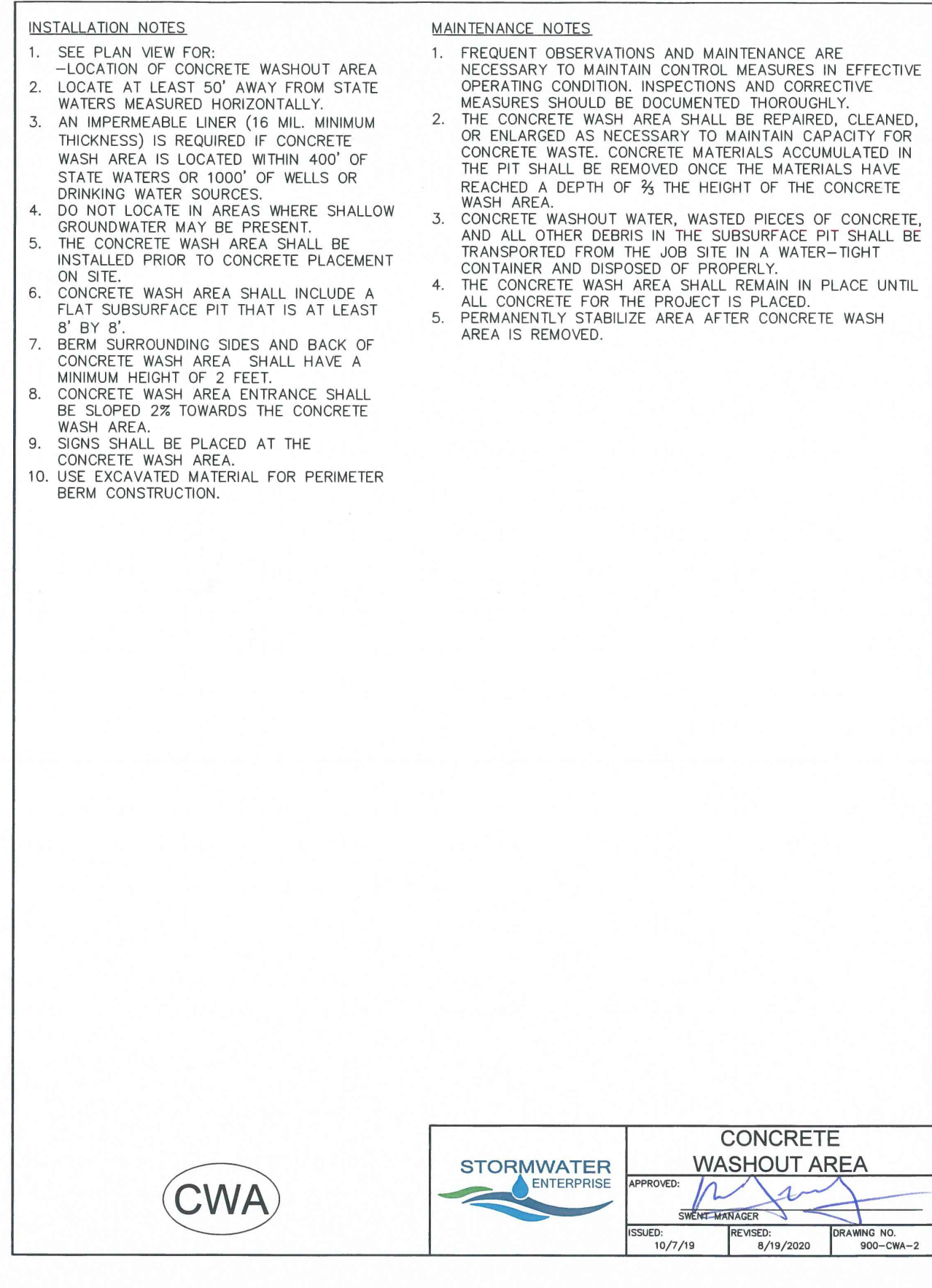
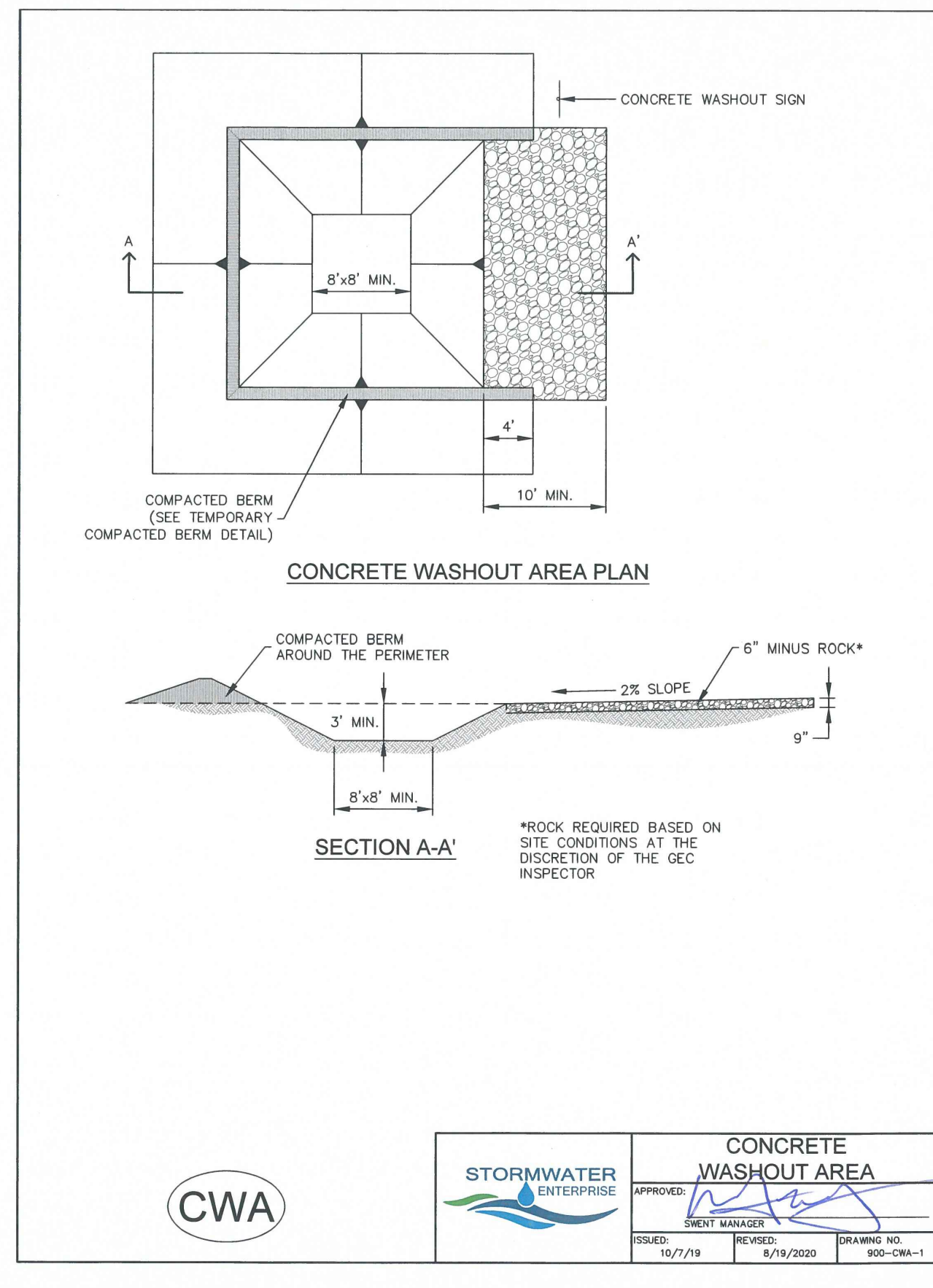
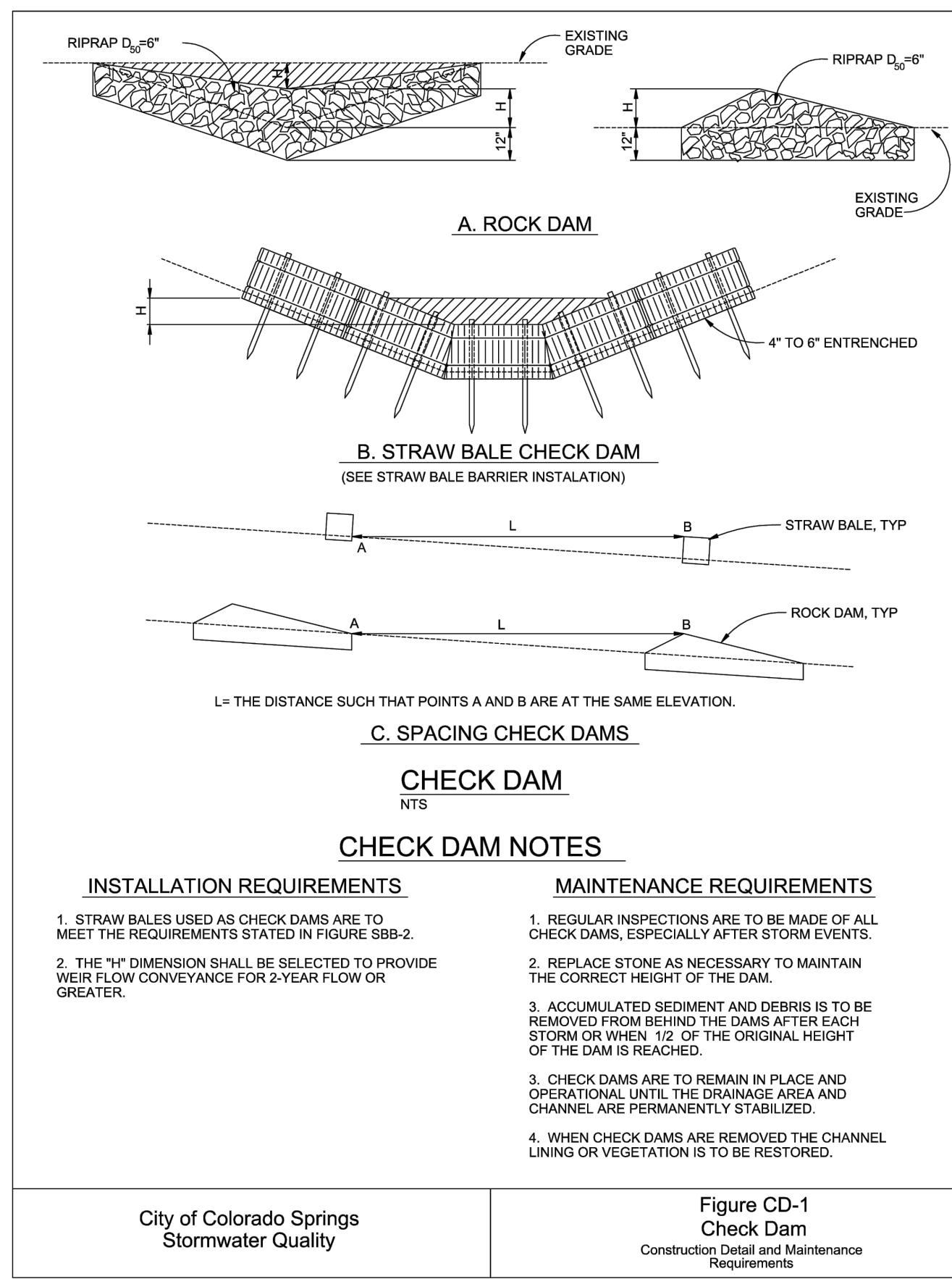
19955 WIGWAM RD
EL PASO COUNTY, CO

GRADING & EROSION CONTROL PLAN

C1.4

MVE PROJECT 61180
MVE DRAWING GEC-EC

MARCH 31, 2023
SHEET 4 OF 6



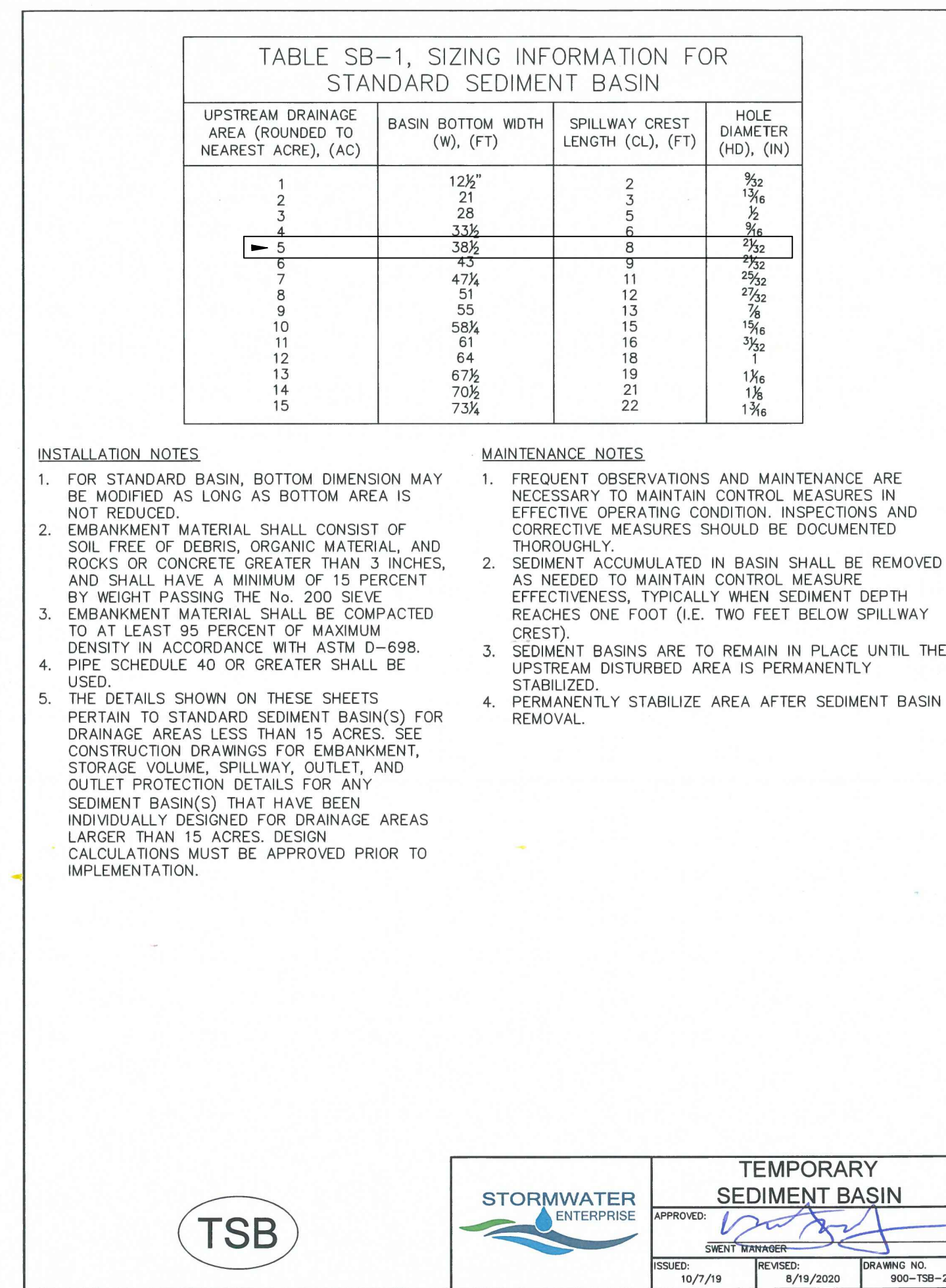
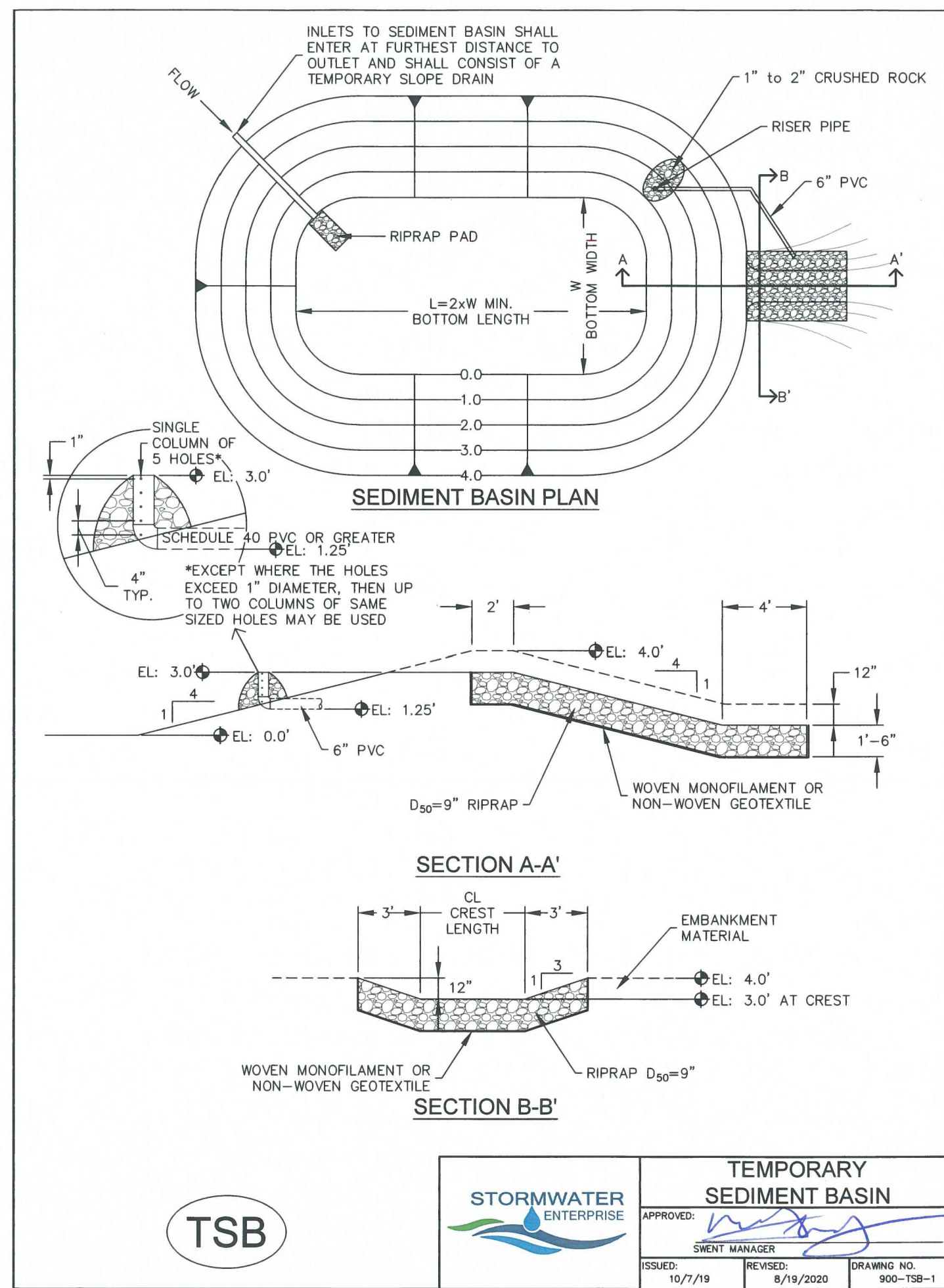
DESIGNED BY: JO
DRAWN BY: JO
CHECKED BY: AS-BUILTS BY: CHECKED BY:

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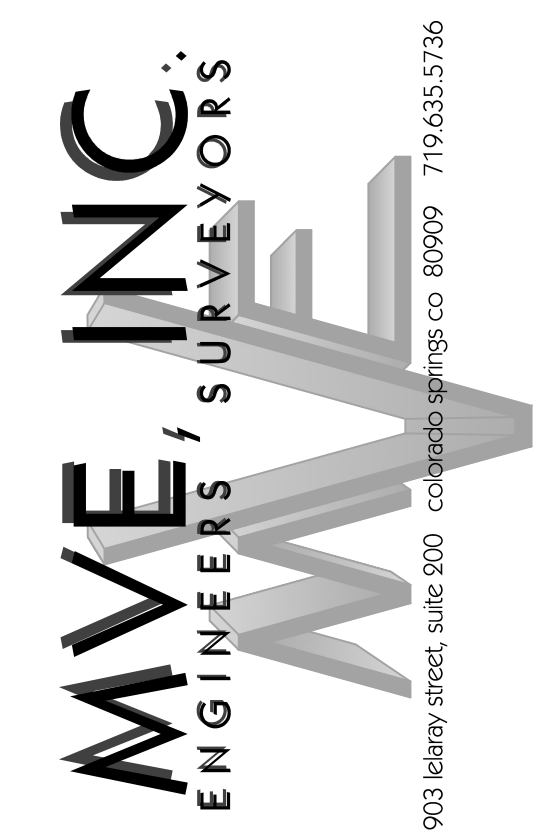
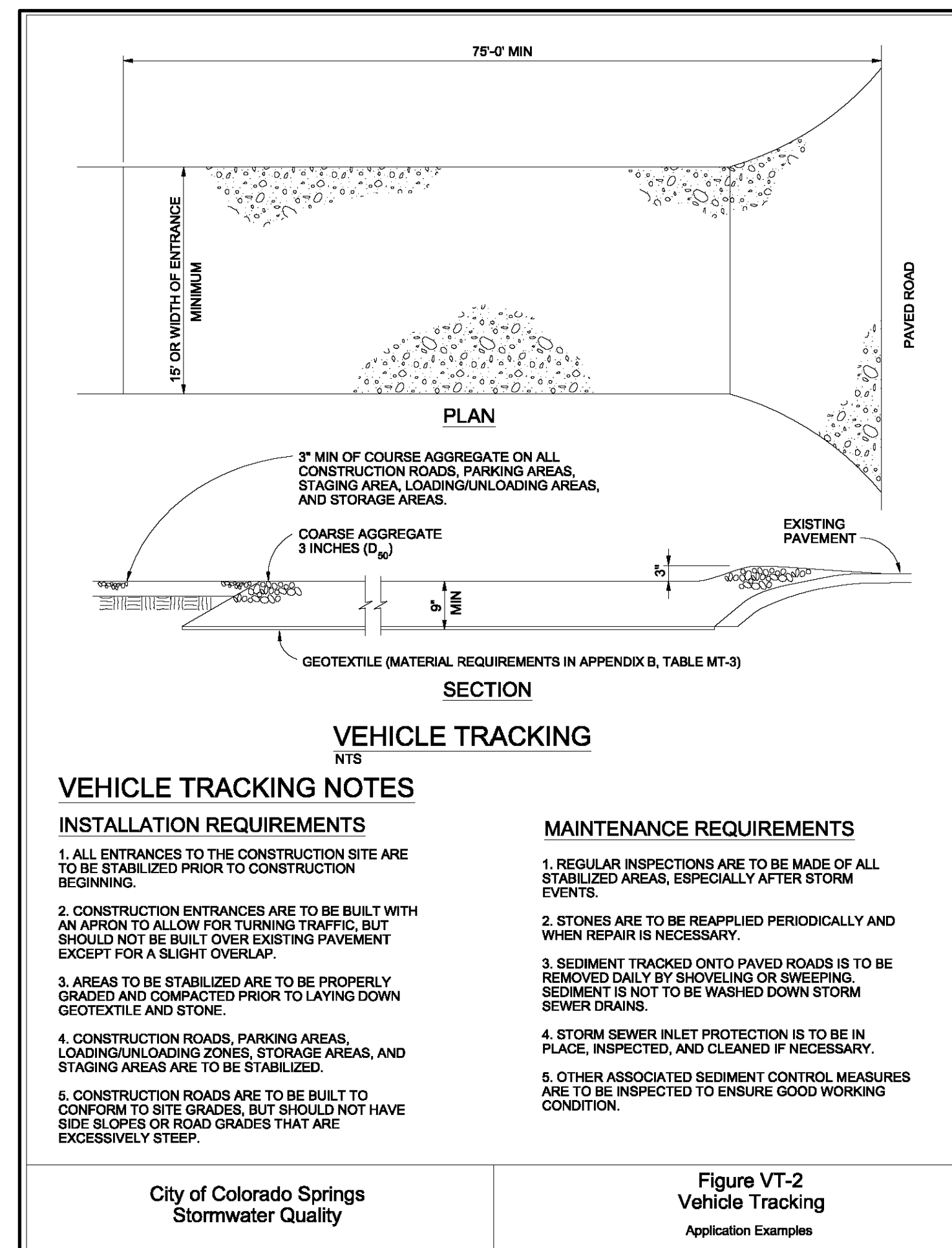
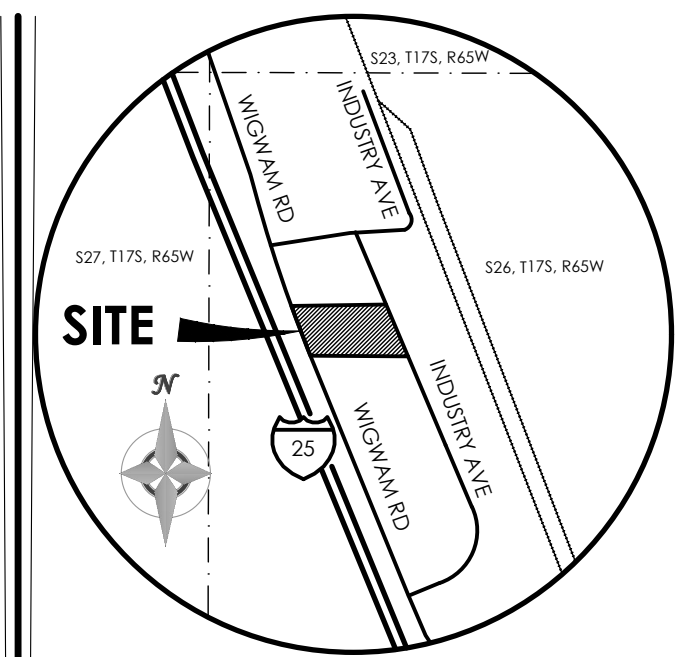
GRADING & EROSION
CONTROL PLAN
EROSION DETAILS

C1.5 MVE PROJECT 61180
MVE DRAWING GEC-ED

MARCH 31, 2023
SHEET 5 OF 6



GEC Checklist Item z - Provide all detail. Provide the details for the permanent outlet protection and the temporary outlet protection.



REVISIONS

DESIGNED BY _____
DRAWN BY JO _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

19955 WIGWAM RD
EL PASO COUNTY, CO

GRADING & EROSION
CONTROL PLAN
EROSION DETAILS

C1.6 MVE PROJECT 61180
MVE DRAWING GEC-ED

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SHEET 6 OF 6