

User: stanpw11cs03\$ W02229_FF_00-LU-501.dgn 3/28/2023

ESCP GENERAL NOTES

1. THE CONTRACTOR WILL MAINTAIN A LIST OF ALL PERSONNEL (BY NAME AND POSITION) THAT ARE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF STORMWATER CONTROL MEASURES), AS WELL AS THEIR INDIVIDUAL RESPONSIBILITIES.

2. VISUAL MONITORING INSPECTION REPORTS WILL BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS TO INSPECT ON THE INITIAL DATE THAT LAND DISTURBING ACTIVITIES COMMENCE, WITHIN 24 HOURS OF ANY STORM EVENT, AND AT LEAST ONCE EVERY 14 DAYS REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.

3. INSPECTION LOGS WILL BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS USING DEQ FORM 1 AND 2. CONSTRUCTION SITE BUMP INSPECTION REPORT & CHECKLIST FOR COMPLIANCE WITH OREGON NPDES 1200-C GENERAL PERMIT. INSPECTION FORMS WILL DOCUMENT OBSERVATIONS, THE IMPLEMENTATION AND PRESENCE OF EROSION AND SEDIMENT CONTROLS, APPARENT DISCHARGES, AND CONSTRUCTION ACTIVITIES PERTINENT TO EROSION AND SEDIMENT CONTROL INCLUDING BUT NOT LIMITED TO INGRESS, EGRESS, AND STOCKPILING.

4. A COPY OF THE ESCP AND ALL REVISIONS WILL BE RETAINED ON SITE AND AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY.

5. CLEARING AND GRADING WILL BE SEQUENCED TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION TO THE MAXIMUM EXTENT POSSIBLE BY PROVIDING TEMPORARY STABILIZATION AS DESCRIBED BELOW AND PER EROSION AND SEDIMENT CONTROL CONSTRUCTION DETAILS ON SHEETS 00-LU-509 AND 00-LU-510.

6. CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING PROTECTED TREES AND ASSOCIATED ROOTING ZONATION AREAS TO BE PRESERVED ARE IDENTIFIED, MARKED, AND PROTECTED (BY CONSTRUCTION FENCING) AS SHOWN ON SHEETS 00-LU-502 THROUGH 00-LU-508 PER DETAIL ON 00-LU-510. VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS, AND OTHER AREAS TO BE PRESERVED ARE SHOWN ON SHEETS 00-LU-502 THROUGH 00-LU-508.

7. PRESERVE EXISTING VEGETATION OUTSIDE OF PROJECT LIMITS AS DELINEATED BY TREE PROTECTION FENCING AND SEDIMENT FENCING AND RE-VEGETATE ALL UNPAVED AREAS WITHIN THE PROJECT LIMITS. TEMPORARY RE-VEGETATION IS REQUIRED DURING CONSTRUCTION AS INDICATED BELOW AND PERMANENT RE-VEGETATION IS REQUIRED FOLLOWING COMPLETION OF CONSTRUCTION. PROPOSED VEGETATIVE SEED MIX OF SERILE WHEAT GRASS-REGREEN, QUICKGUARD, OR AN APPROVED EQUAL AT A RATE OF 50 POUNDS PER ACRE, OR HORDEUM VULGARE VAR. POCO-POCO BARLEY AT A RATE OF 60 POUNDS PER ACRE.

8. A NATURAL BUFFER OF 100 FEET WILL BE MAINTAINED AROUND JOHNSON CREEK AS SHOWN ON SHEET 00-LU-504.

9. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AND, SEDIMENT AND BARRIERS PER THE DETAILS ON SHEETS 00-LU-509 AND 00-LU-510 PRIOR TO LAND DISTURBANCE.

10. CONTROL OF STORMWATER RUNOFF DURING CONSTRUCTION WILL BE COLLECTED THROUGH DITCHES WITH STRAW WATTLES ADJACENT TO CONSTRUCTION ACTIVITIES. THE STORMWATER IS HELD IN DETENTION PONDS UNTIL CLEAN THEN DISCHARGED AT PREDEVELOPMENT RATES TO JOHNSON CREEK. EROSION AT OUTLETS AND CHANNELS WILL BE MINIMIZED THROUGH FILTER SOCKS OR WATTLES. REFER TO DETAILS ON SHEETS 00-LU-509 AND 00-LU-510 AND TO THE STORMWATER REPORT INCLUDED SEPARATELY IN THIS APPLICATION.

11. SEDIMENT ALONG THE PERIMETER OF THE PROJECT LIMITS AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS WILL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION WITH SEDIMENT BARRIER INSTALLED ALONG THE COMPLETE UNPAVED PERIMETER OF THE PROJECT LIMITS.

12. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK AS SHOWN ON SHEET 00-LU-505.

13. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES, PER DETAILS ON 00-LU-509 AND 00-LU-510.

14. MATERIAL AND WASTE STORAGE AREAS OUTSIDE OF RIGHTS-OF-WAY WILL BE ESTABLISHED BY THE CONTRACTOR AND EROSION CONTROL MEASURES TO PROTECT MATERIAL AND WASTE STORAGE AREAS WILL COMPLY WITH THE EROSION CONTROL CONSTRUCTION DETAILS ON 00-LU-509 AND 00-LU-510. MATERIAL WILL NOT BE STOCKPILED WITHIN THE RIGHT-OF-WAY.

15. WASTE CONTAINER LIDS WILL BE KEPT CLOSED OR COVERED TO PREVENT EXPOSURE TO PRECIPITATION WHEN NOT IN USE.CONTRACTOR WILL TRANSPORT WASTE MATERIALS OFFSITE TO STAGING YARDS FOR COLLECTION PRIOR TO DISPOSAL. WASTE MATERIALS WILL NOT BE STORED WITHIN THE RIGHT-OF-WAY.

16. TIRE WASHES WILL BE PROVIDED AT THE CONSTRUCTION ENTRANCE OFF SE CARPENTER LANE AT THE FACILITY ENTRANCE (SEE SHEET 00-LU-505) AND AT THE CONSTRUCTION ENTRANCE ON THE SE EXIT ROAD (SEE SHEET 00-LU-505) TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC ROADS. PUBLIC ROADS WILL BE SWEEP DAILY. PRIVATE FARM ROADS UTILIZED DURING CONSTRUCTION WILL BE IMPROVED WITH GRAVEL PRIOR TO LAND DISTURBING ACTIVITIES. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES.

17. CONCRETE WASH-OUTS WILL BE PROVIDED AT THE CONSTRUCTION ENTRANCE OFF SE CARPENTER LANE AT THE FACILITY ENTRANCE (SEE SHEET 00-LU-505) AND AT THE CONSTRUCTION ENTRANCE ON THE SE EXIT ROAD (SEE SHEET 00-LU-505) TO PREVENT CONCRETE DISCHARGES FROM LEAVING THE CONSTRUCTION SITE.

18. STEEP SLOPE AREAS WHERE CONSTRUCTION ACTIVITIES ARE NOT OCCURRING WILL BE DELINEATED BY SEDIMENT FENCE TO PREVENT DISTURBANCE

19. PERMANENT RESTORATION OF UNPAVED AREAS WITHIN RIGHTS-OF-WAY WILL INCLUDE SOIL AMENDMENT FOR FILTER STRIPS FOR STORMWATER DISPERSION, AND PERMANENT RESTORATION OF AGRICULTURAL SOILS ON PRIVATE PROPERTY WILL BE REQUIRED TO MEET SPECIFIC COMPACTION REQUIREMENTS. POST-CONSTRUCTION TESTING AND INSPECTION WILL BE PERFORMED TO IDENTIFY RESTORATION AREAS WHICH HAVE BEEN DISTURBED AND A CORRECTION NOTICE WILL BE ISSUED TO THE CONTRACTOR.

20. CONTRACTOR BEST MANAGEMENT PRACTICES INCLUDING SECONDARY CONTAINMENT WILL BE USED TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. A WRITTEN SPILL PREVENTION PLAN WILL BE PREPARED AND SUBMITTED BY THE CONTRACTOR ADDRESSING RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES.

21. ENGINEERED SOILS USING AMENDMENTS SUCH AS FLY-ASH OR PORTLAND CEMENT WILL NOT BE USED.

22. A DEWATERING PLAN WILL BE PREPARED AND SUBMITTED BY THE CONTRACTOR FOR ACCUMULATED WATER FROM PRECIPITATION AND UNCONTAMINATED GROUNDWATER SEEPAGE IN EXCAVATIONS. DEWATERING SYSTEMS WILL BE REQUIRED TO FILTER THE DISCHARGE THROUGH AT LEAST TWO SEDIMENT BARRIERS INCLUDING A FILTER BAG AND SEDIMENT FENCE. DEWATERING SYSTEMS WILL BE REQUIRED TO LIMIT DISCHARGE QUANTITY TO MEET STORMWATER PREDEVELOPMENT RATES.

23. DUST CONTROL WILL BE ADDRESSED BY WATER SPRAYING AND COVERING OF SOIL PILES TO MITIGATE WIND-BLOWN SOIL.

24. THE APPLICATION RATE OF ORGANIC FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW PROJECT SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. ABIDE BY ANY SETBACKS ON PRODUCT LABELS AND USE IN SUCH A WAY THAT THE PRODUCT DOES NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF APPLICABLE WATER QUALITY STANDARDS.

25. TEMPORARILY STABILIZE SOILS WITH BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR.

26. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES WILL BE STABILIZED OR COVERED, OR OTHER BMPS WILL BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS.

27. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. REMOVE SEDIMENT TO APPROVED DISPOSAL SITE. SEDIMENT FENCES ARE SHOWN ON SHEETS 00-LU-502 AND 00-LU-505, DETAILS ON SHEET 00-LU-509.

28. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS); REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. REMOVE SEDIMENT TO APPROVED DISPOSAL SITE. OTHER SEDIMENT BARRIERS ARE SHOWN ON DETAILS ON SHEET 00-LU-509 AND 00-LU-510.

29. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. REMOVE SEDIMENT TO APPROVED DISPOSAL SITE. CATCH BASINS, SEDIMENT BASINS AND SEDIMENT TRAPS ARE SHOWN ON DETAILS ON SHEET 00-LU-509 AND 00-LU-510.

30. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIMEFRAME.

31. NO INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS IS PROPOSED. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP WILL BE USED TO CLEANUP RELEASED SEDIMENTS.

32. IDENTIFY ON EROSION CONTROL INSPECTION FORMS ANY PORTION(S) OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR WILL BE TEMPORARILY INACTIVE FOR 14 OR MORE CALENDAR DAYS.

33. PROVIDE TEMPORARY STABILIZATION FOR ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR LONGER WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. APPLY TEMPORARY SEEDING OF SERILE WHEAT GRASS-REGREEN, QUICKGUARD, OR AN APPROVED EQUAL AT A RATE OF 50 POUNDS PER ACRE, OR HORDEUM VULGARE VAR. POCO-POCO BARLEY AT A RATE OF 60 POUNDS PER ACRE.

34. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS WILL BE REMOVED AND DISPOSED OF PROPERLY, UNLESS NEEDED FOR LONG TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE.

35. EROSION AND SEDIMENT MUST NOT ENTER PUBLIC RIGHT-OF-WAY OR BE DEPOSITED INTO ANY WATER BODY. WHEN WORKING IN THE PUBLIC RIGHT-OF-WAY, NO VISIBLE OR MEASURABLE EROSION OR SEDIMENT CAN ENTER THE ROADWAY OR BE DEPOSITED IN WATER BODIES.

36. PERMANENT PLANTINGS AND ANY REQUIRED EROSION CONTROL AND DRAINAGE MEASURE SHALL BE INSTALLED AS SOON AS PRACTICAL IN COMPLIANCE WITH NOTE 38 HEREIN.

37. AN ENERGY DISSIPATER IN THE FORM OF A FLOW SPREADER IS USED TO SPREAD FLOWS, REDUCE RELEASE WATER VELOCITY, AND AVOID POINT DISCHARGE.

38. INITIATE THE INSTALLATION OF TEMPORARY STABILIZATION MEASURES (SEE NOTE 25), FINAL VEGETATION COVER, OR PERMANENT STABILIZATION MEASURES IMMEDIATELY WHENEVER ANY LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR WILL BE TEMPORARILY INACTIVE ON ANY PORTION OF THE SITE FOR 14 OR MORE CALENDAR DAYS. DOCUMENT THE DAY THE ACTIVITIES CEASE AND THE LOCATION ON SITE IN THE VISUAL MONITORING REPORT. COMPLETE THE INSTALLATION OF STABILIZATION MEASURES AS SOON AS PRACTICABLE, BUT NO LATER THAN SEVEN CALENDAR DAYS AFTER STABILIZATION HAS BEEN INITIATED.

SITE INFORMATION

1. TYPE OF DEVELOPMENT:
CAPITAL IMPROVEMENT

2. CONSTRUCTION ACTIVITY WILL CONSIST OF:
A) CLEARING SEPTEMBER 2023
B) MASS GRADING APRIL 2024
C) UTILITY CONSTRUCTION JUNE 2024
D) VERTICAL CONSTRUCTION JUNE 2025
E) OFFSITE PUBLIC ROADWAY IMPROVEMENTS JUNE 2026
F) FINAL STABILIZATION JUNE 2027

3. PROJECT TIMELINE:
BEGINNING DATE: JUNE 2023
COMPLETION DATE: SEPTEMBER 2027

4. PROJECT SITE AREAS:
-TOTAL AREA: 3,963,960 SF /91 AC
-DISTURBED AREA: 3,462,259 SF /79 AC
-PERCENT OF SITE DISTURBED: 87%

5. OFFSITE PUBLIC IMPROVEMENT AREA:
-IMPROVEMENT LENGTH: 2607 FT

6. ONSITE SOIL TYPES:
A) BORGES SILTY CLAY LOAM, 0-8% SLOPES
B) CAZADERO SILTY CLAY LOAM, 0-7% SLOPES
C) CAZADERO SILTY CLAY LOAM, 0-8% SLOPES
D) CAZADERO SILTY CLAY LOAM, 8-15% SLOPES
E) HAPLUMBREPTS, VERY STEEP
F) WOLLENT SILT LOAM

7. CUT AND FILL DATA:
-CUT: 328,653 CY
-FILL: 85,791 CY
-NET ADJUSTED: 242,862 CY

BMP MATRIX FOR CONSTRUCTION PHASE

1200-C PHASES	PHASE 1		PHASE 2	PHASE 3	PHASE 4
PHASE/BMP	CLEARING	MASS GRADING	UTILITY CONSTRUCTION	VERTICAL CONSTRUCTION	FINAL STABILIZATION
EROSION PREVENTION					
GROUND COVER	X	X	X		
PLASTIC SHEETING	X	X	X		
DUST CONTROL	X	X	X		
TEMPORARY STABILIZATION (STRAW MULCH/HYDROSEED)		X	X	X	
PERMANENT STABILIZATION					X
BUFFER ZONE (FROM RAVINE)	X	X	X	X	
SEDIMENT CONTROL					
SEDIMENT FENCE (PERIMETER)	X	X	X	X	X
SEDIMENT FENCE (INTERIOR)	X				
STRAW WATTLES	X	X	X	X	
INLET PROTECTION			X	X	
DEWATERING		X	X		
RUN OFF CONTROL					
CONSTRUCTION ENTRANCE	X	X	X		
EXISTING OUTLET PROTECTION					
NEW OUTLET PROTECTION		X	X	X	X
EXISTING CURB INLET CHECK DAMS					
POLLUTION PREVENTION					
HAZARD WASTE MANAGEMENT				X	
SPILL KIT ONSITE				X	
CONCRETE WASHOUT AREA	X	X	X	X	

OWNER/DEVELOPER SURVEYOR SITE CONTRACTOR

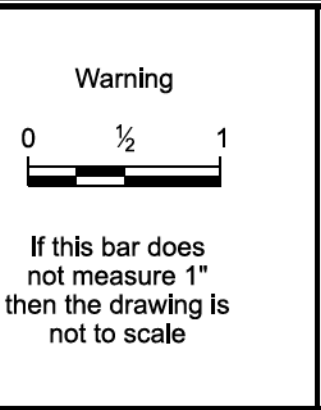
DESIGN ENGINEER BMP INSTALLER/MAINTAINER: CESCL:

BMP INSTALLER/MAINTAINER: ESCP PREPARER: RAIN GUAGE:

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Revision					
Survey					



Designed By	JSJ	Design Mgr	LSH
Drawn By	BYS	Const Mgr	TO
Checked By	LCS	Const Supvr	RM
Project Mgr	MFG	Date	



David W. Peters, Engineering Manager, PE No 16683



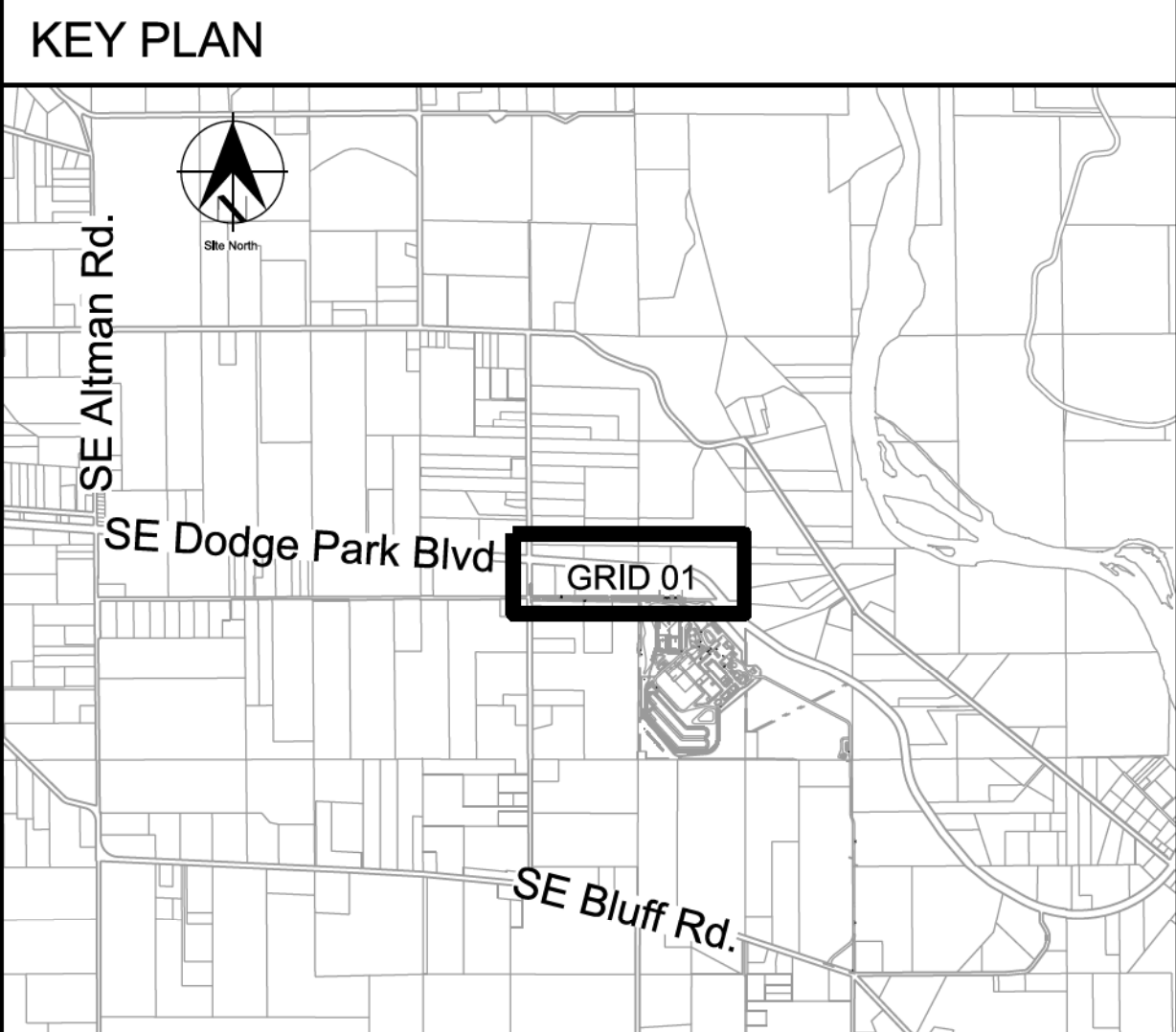
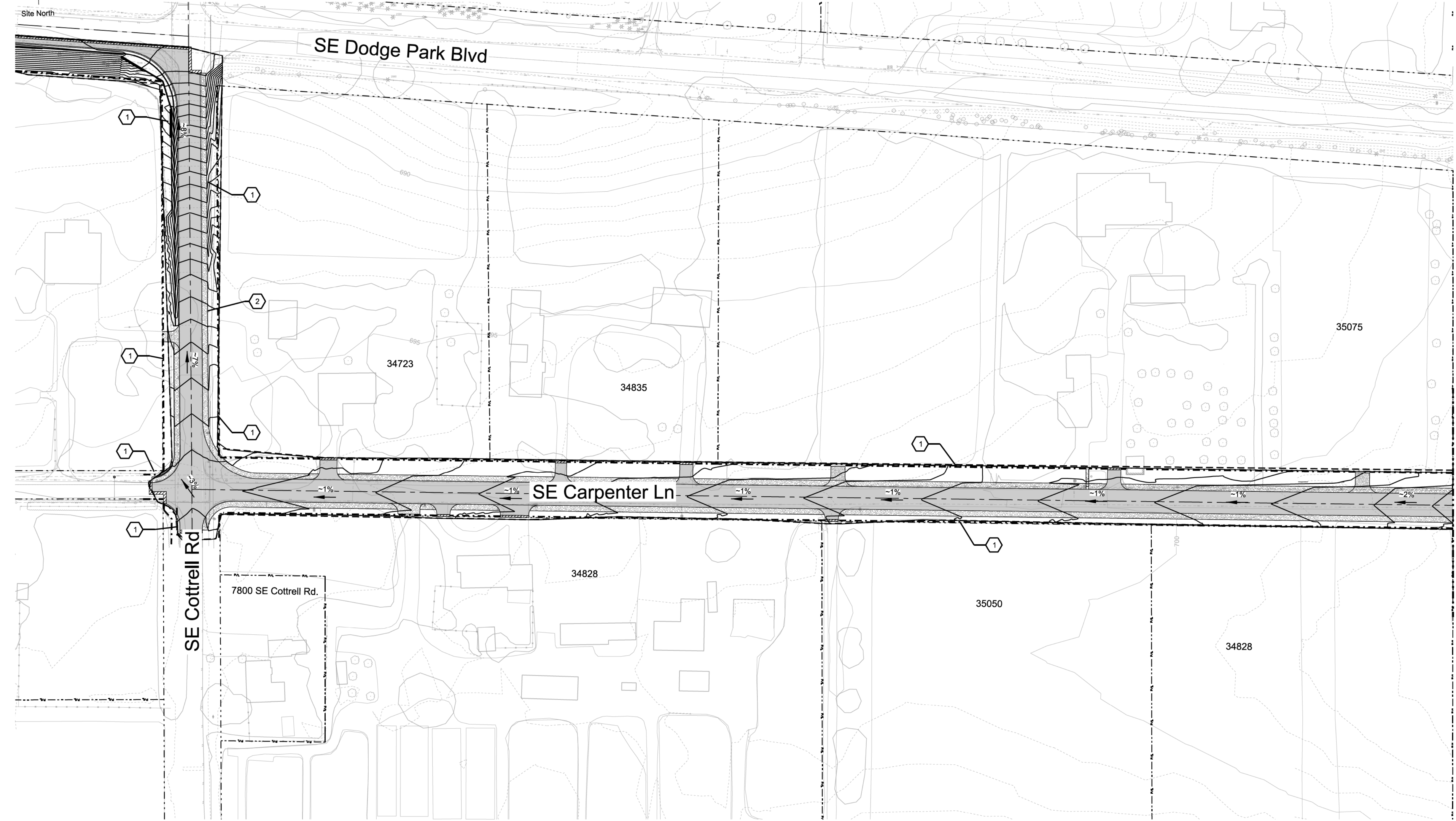
Bull Run Filtration Facility

Civil

Erosion Control
General Notes

Exhibit I.100

SAP Project No W02229
1/4 Section 3765 / 3766
Sheet No 00-LU-501
of



Sheet Keynotes

- 1. Temporary Silt Fence, See Detail 2 on Sheet 00-LU-509

Legend

- Silt Fence
- - - Limits of Grading
- Flow Arrow

General Sheet Notes

- 1. No unsupported finish slopes.



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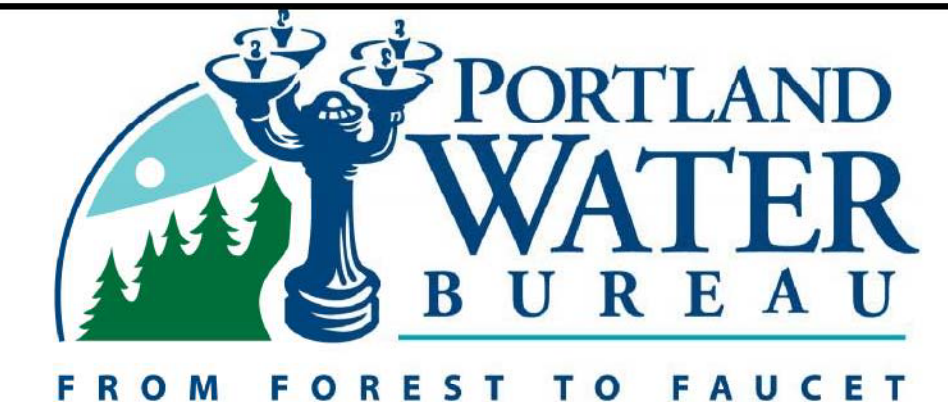
1/10/2023

1	12/30/22	Building Permit		MRG
No	Date	Description		Appd
Revision				
Survey				



Designed By	USL	Design Mgr
Drawn By	BS	Const Mgr
Checked By	RG	Const Supvr
Project Mgr	MRG	Date
		12/30/22

Warning
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If this bar does not measure 1" then the drawing is not to scale



David W. Peters, Engineering Manager, PE No 16683



Bull Run Filtration Facility

Civil

Erosion Control
Proposed Conditions
Carpenter Lane

SAP Project No
W02229

1/4 Section
3765 / 3766

Sheet No
00-LU-503

of



Top of Berm - 720'
Bottom of Berm - 705'

Matching - See 00-LU-204 for continuation

Dedicated Right
of Way

Right of Way

Top - 720'
Bottom - 715'

Reserve
Drainfield

Primary
Drainfield

Site Boundary

Right of Way

Right of Way

SE Dodge Park Blvd

Geohazard

Top - 710'
Bottom - 690'

Limit of Disturbance at
edge of easement

703.25'
Clearwell

705.25'
CT Basin

Top - 699'
Bottom - 693'

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KEY PLAN



SE Altman Rd.

SE Dodge Park Blvd

GRID 02

SE Bluff Rd.

General Sheet Notes

- Refer to Filtration Facility Stormwater Report (Appendix H.1) for stormwater calculations and sizing.
- See 00-LU-506 (Grading Plan) for ground disturbance limits.
- See 00-LU-508 (Landscape Plan) for proposed vegetation.

Sheet Keynotes

- Drainage Ditch per detail B/00-LU-513
- Storm Pipes
- Detention Pond
- Underdrain Storm Pipe
- Water Quality Swale per detail C/00-LU-513
- Stormwater Planter per detail E/00-LU-513
- Flow Control Maintenance Hole
- Stormwater Basin per detail D/00-LU-513
- Outfall Flow Spreader per detail A/00-LU-513
- Septic Tank
- Sillling Basin per detail A/00-LU-514

Legend

- Major Contour
- SEC Zone
- Geohazard
- Deciduous Tree
- Evergreen Tree
- Existing Water Line
- Existing Fence
- Existing Gas Line
- Existing Overhead line
- Existing Structure
- Property Line
- Right-of-Way
- Easement
- Ditch
- Detention Pond
- Storm Planter
- Swale/Ditch
- Flow Spreader
- Site Boundary

0 120 240
SCALE IN FEET

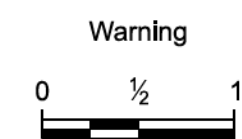
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1/10/2023

No	Date	Description	MRG
1	12/30/22	Building Permit	MRG
Revision		Description	Appd
Survey			



Designed By	Design Mgr
Drawn By	Const Mgr
Checked By	Const Supvr
Project Mgr	Date



If this bar does not measure 1" then the drawing is not to scale



David W. Peters, Engineering Manager, PE No 16683



Bull Run Filtration Facility

Civil

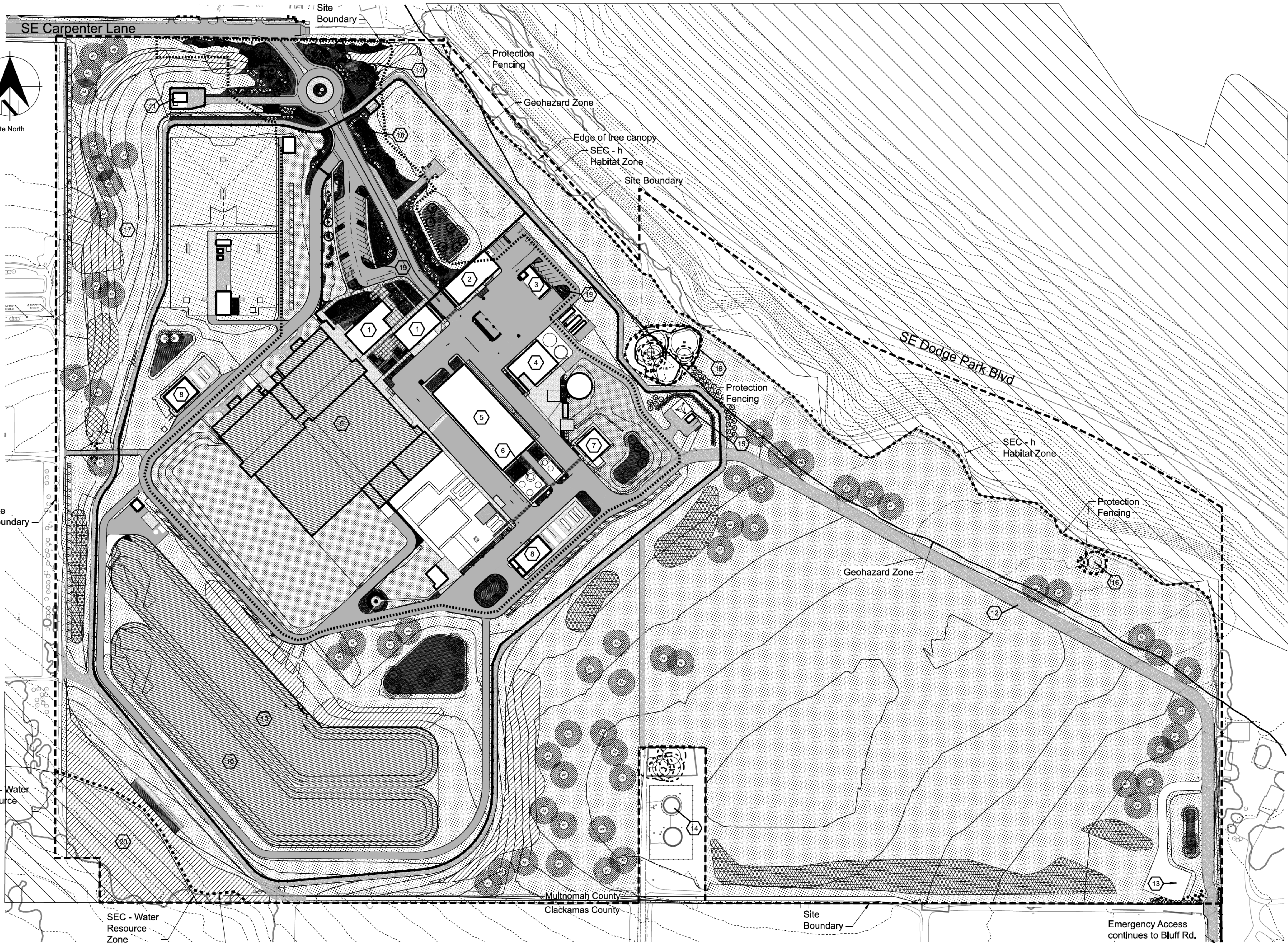
Erosion Control
Stormwater Plan
Filtration Facility

SAP Project No
W02229

1/4 Section
3765 / 3766

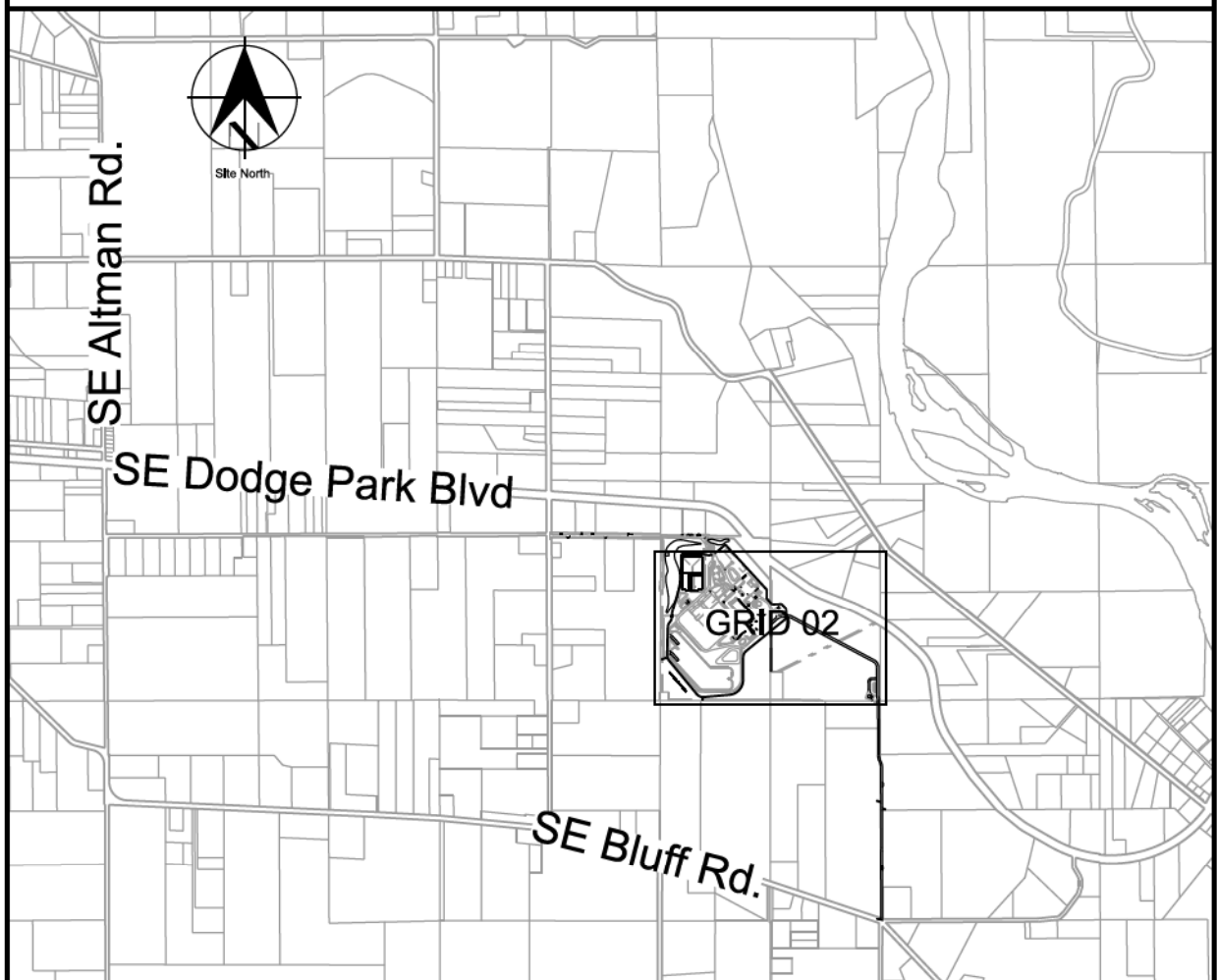
Sheet No
00-LU-507

of



PLAN
SCALE: 1" = 120'-0"

KEY PLAN



Sheet Keynotes

- | | |
|--------------------------------|---|
| 1. Administration Building | 12. Emergency Access Route |
| 2. Maintenance Building | 13. Raw Water Pipeline Cover (At-Grade) |
| 3. General Storage Building | 14. Pleasant Home Water Towers (Off-Site) |
| 4. Mechanical Dewatering Bldg. | 15. Communication Tower Area (See Planting Note 1) |
| 5. Chemical Building | 16. Existing Trees to Remain |
| 6. Chemical Storage Tanks | 17. Planted Berm for Screening |
| 7. Washwater Clarification | 18. Plantings at Facility Entry (See Planting Note 2) |
| 8. Electric Building | 19. Parking Area plantings (See Planting Note 3) |
| 9. Filtration Basins | 20. SEC Water Resource Area (See Planting Note 4) |
| 10. Overflow Basins | |
| 11. Pleasant Home Pumpstation | |

Planting Notes

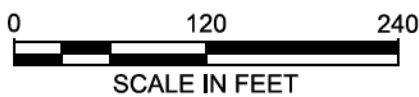
- Communication Tower Area planting is designed to meet screening and parking requirements. See sheet LU-403 for enlargement and more detail on specific requirements.
- Plantings around facility buildings are of a more ornamental nature and are proposed as containerized plants which will have supplemental irrigation. See sheet LU-400,401 and 402 for enlargements to see plant sizes and locations in this area. Additional seeded areas shown within facility also may receive supplemental irrigation as a fire risk mitigation measure. See outlined area.
- Parking Area plantings - See sheets LU-400 and LU-402 for enlargements to see locations of parking islands with plant sizes to meet parking lot planting requirements and listed by Multnomah County.
- SEC Water Resource Area - This area is currently under agricultural use and has bare soil. Proposed plans have no additional disturbance within this zone. Proposed plantings to be all native species installed with hand tools only.

General Sheet Notes

- No development or construction activity proposed within SEC zones on Filtration Site. Native plantings only within these zones.

Legend

	Asphalt Paving		Swale Planting
	Concrete Paving		Stormwater Planting
	Gravel Paving		Screen Mix: Forested Planting
	Basins		Screen Mix: Shrubby Planting
	Facility Fenceline		Tree / Shrub Planting Clusters
	Protection Fencing		Proposed Trees - Deciduous and Evergreen
	Areas to receive supplemental irrigation		Landscape Bed - Shrubs, Groundcover, Mulch
	Native Grass / Forb Mixes		Existing tree to remain
			Significant Environmental Concern (SEC) Zone



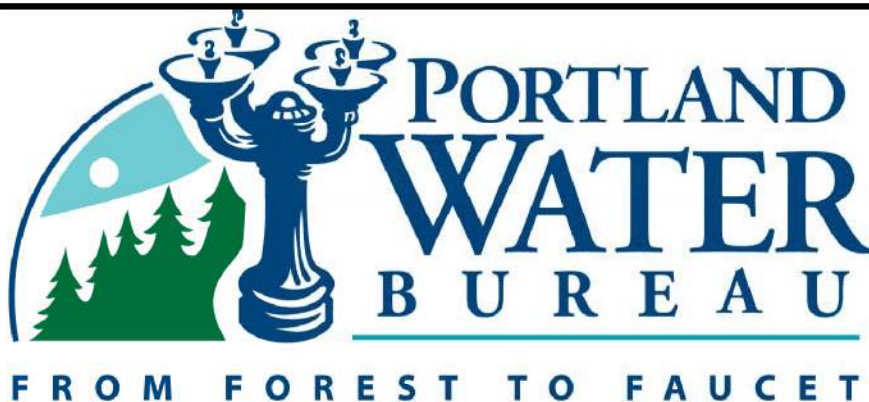
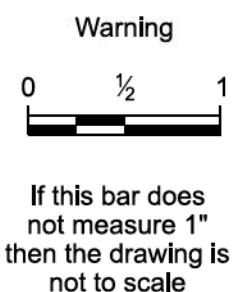
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12/2/2022

1	12/30/22	Building Permit		MRG	
No	Date	Description		Appd	
Revision					
Survey					



Designed By	USJ	Program Mgr	DWP
Drawn By	BS	Const Mgr	LG
Checked By	RG	Const Supvr	RM
Project Mgr	MRG	Date	12/30/22



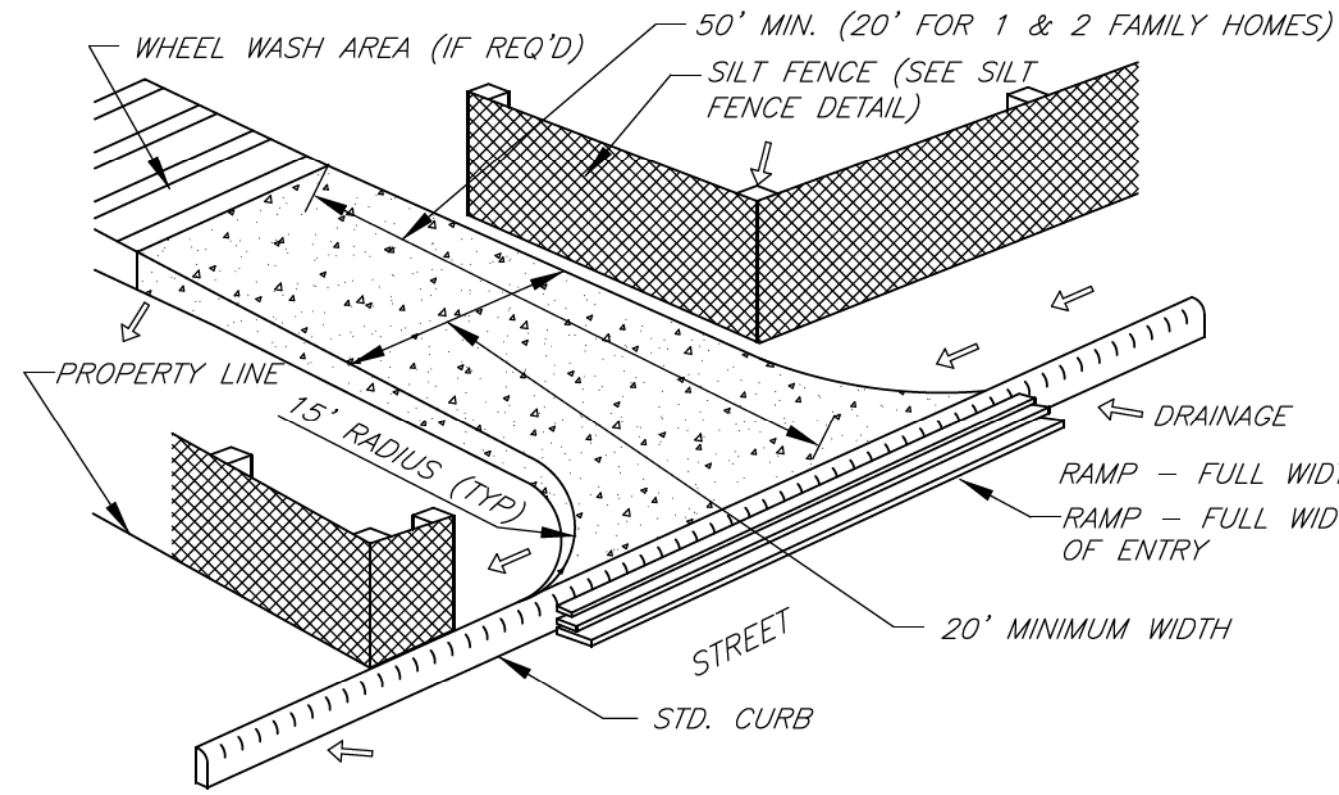
David W. Peters, Engineering Manager, PE No 16683



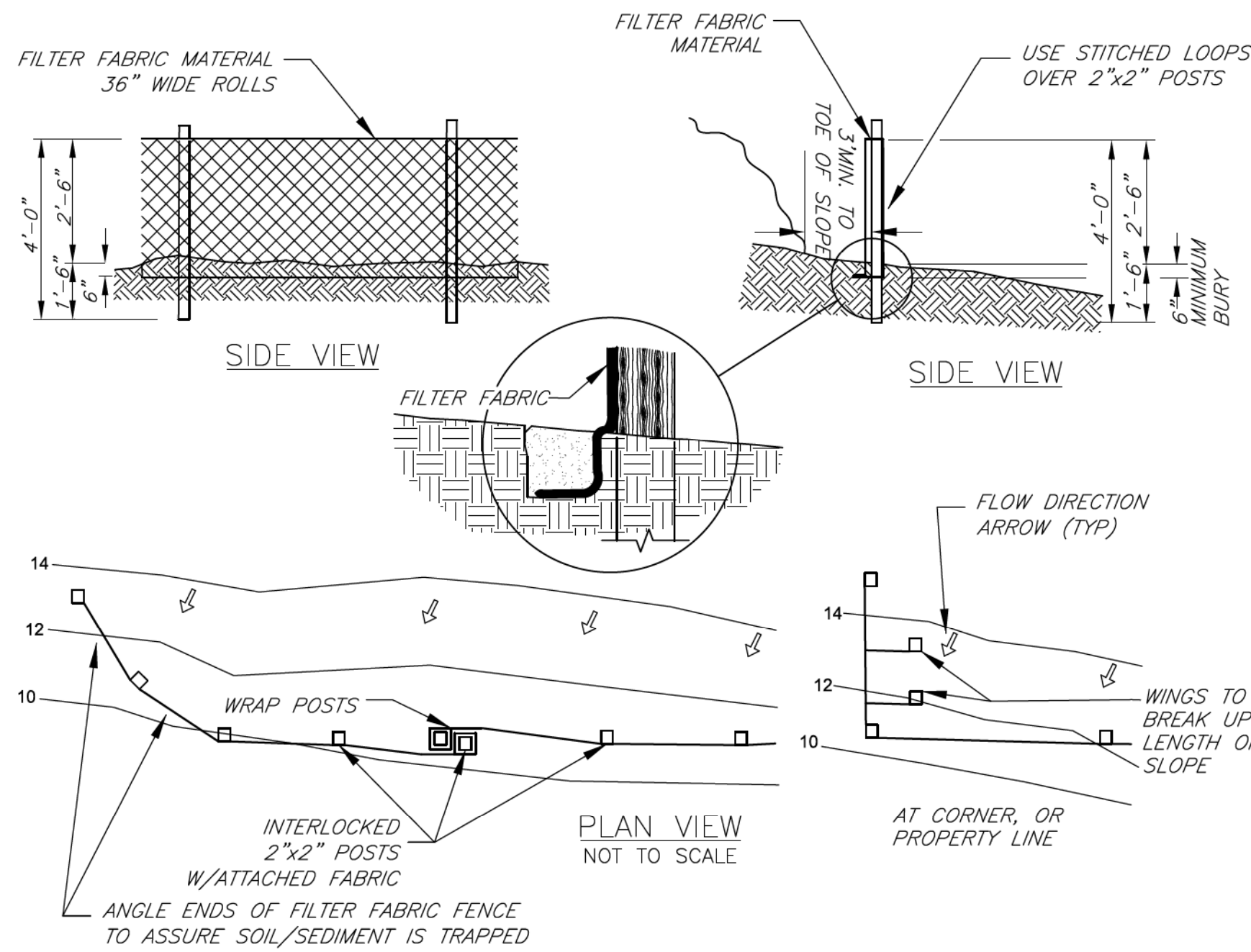
Bull Run Filtration Facility
Land Use Plans
Erosion Control
Landscape Plan
Filtration Facility

SAP Project No	W02229
1/4 Section	-
Sheet No	00-LU-508
of	

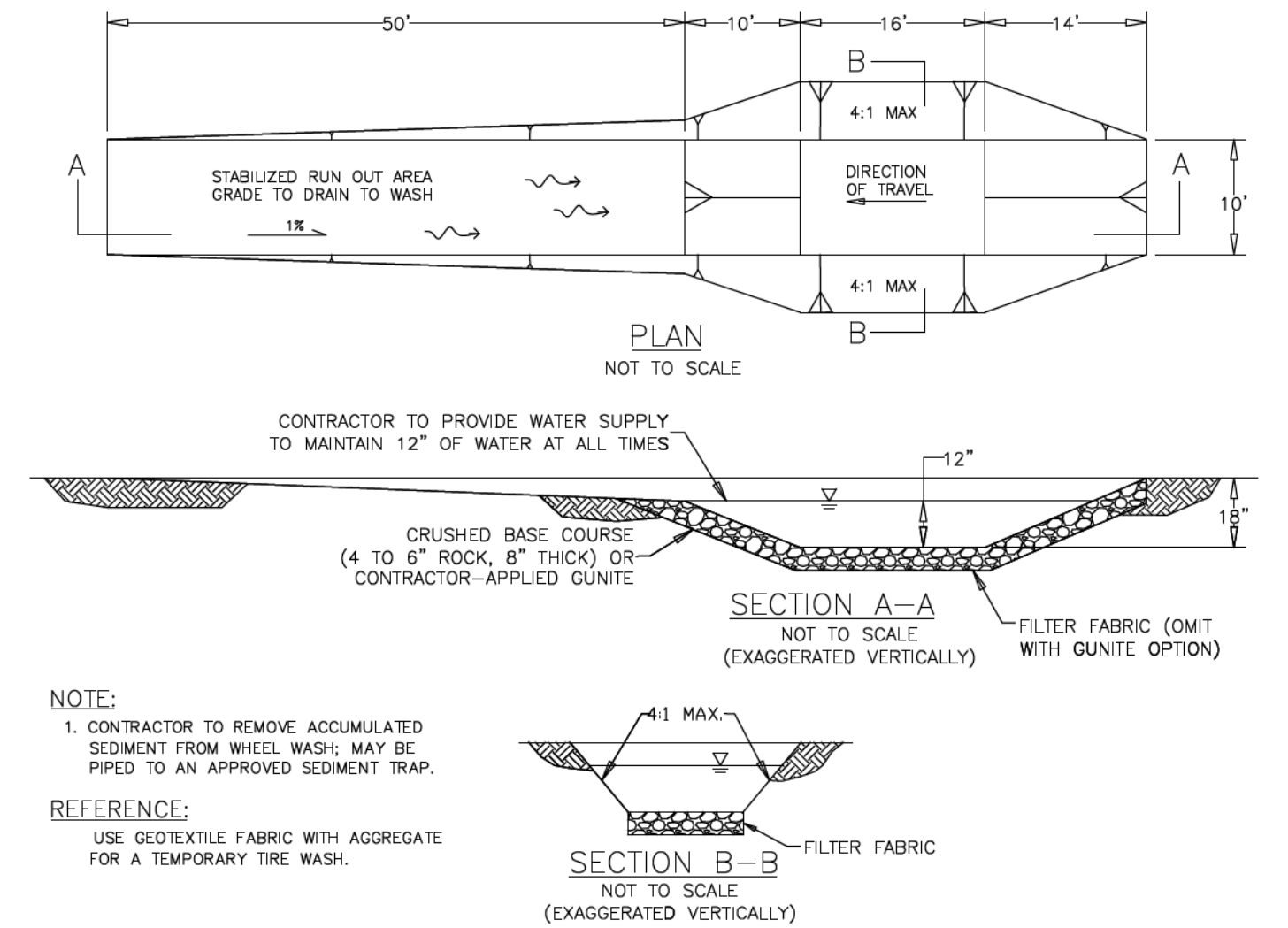
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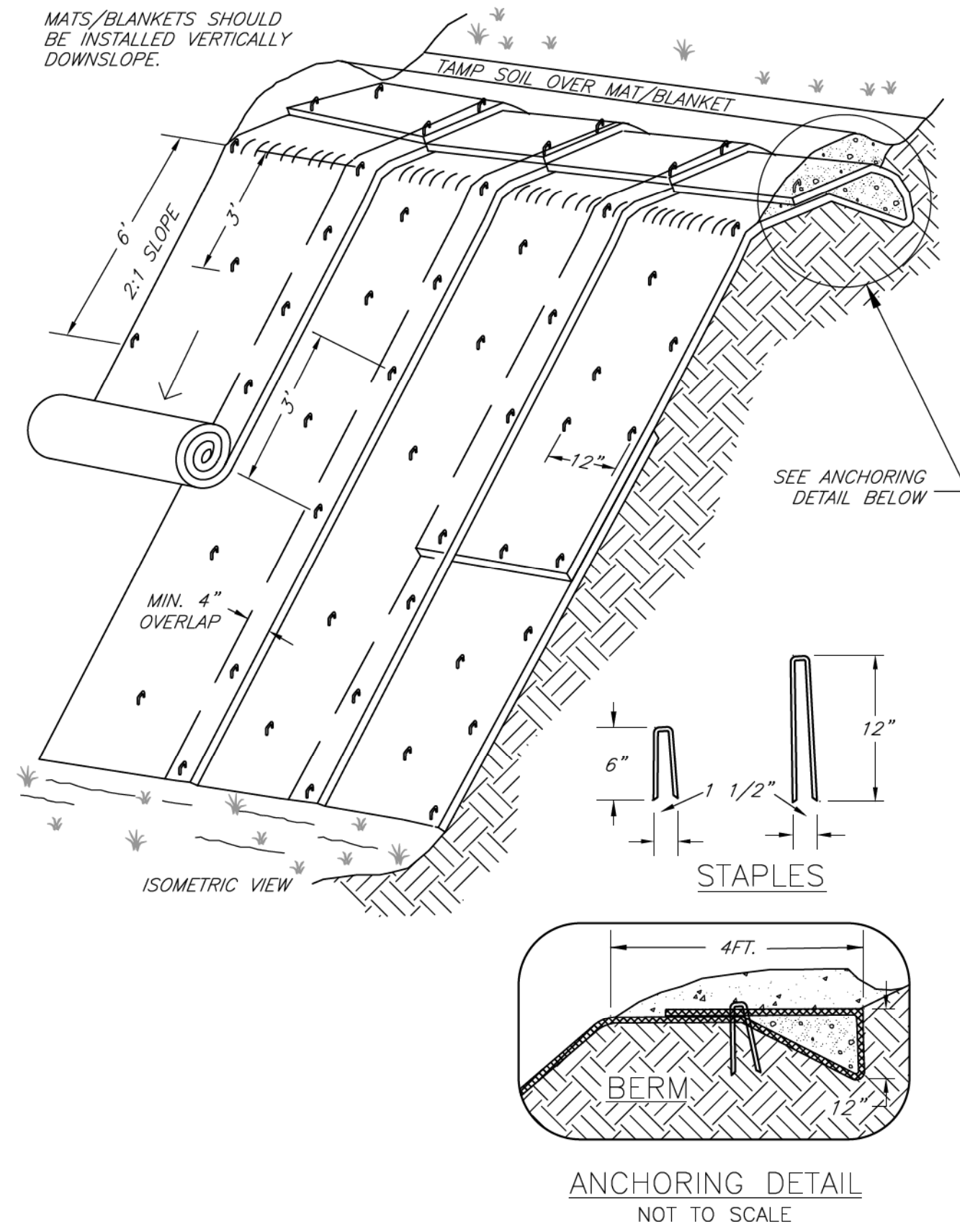
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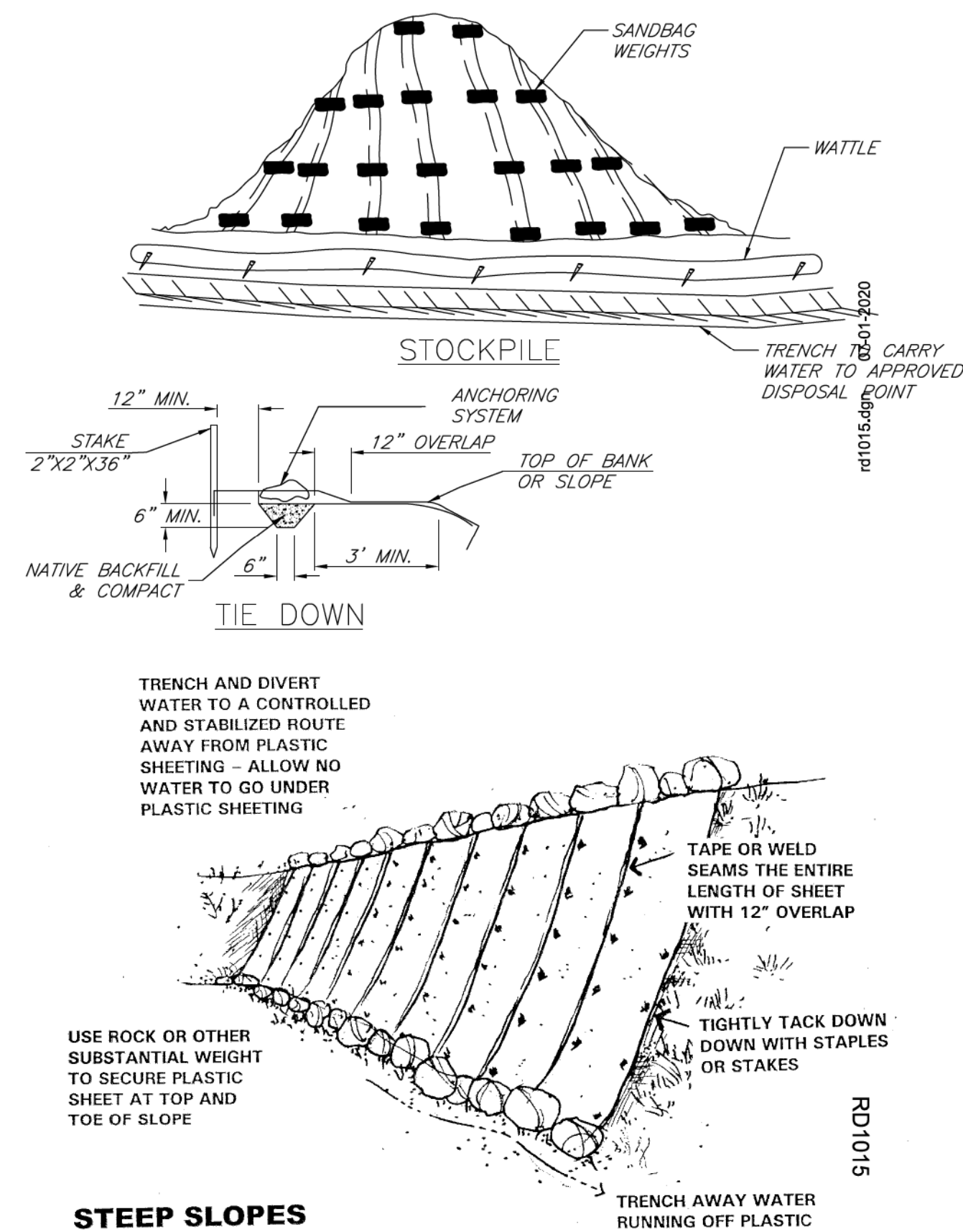
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3 WHEEL WASH
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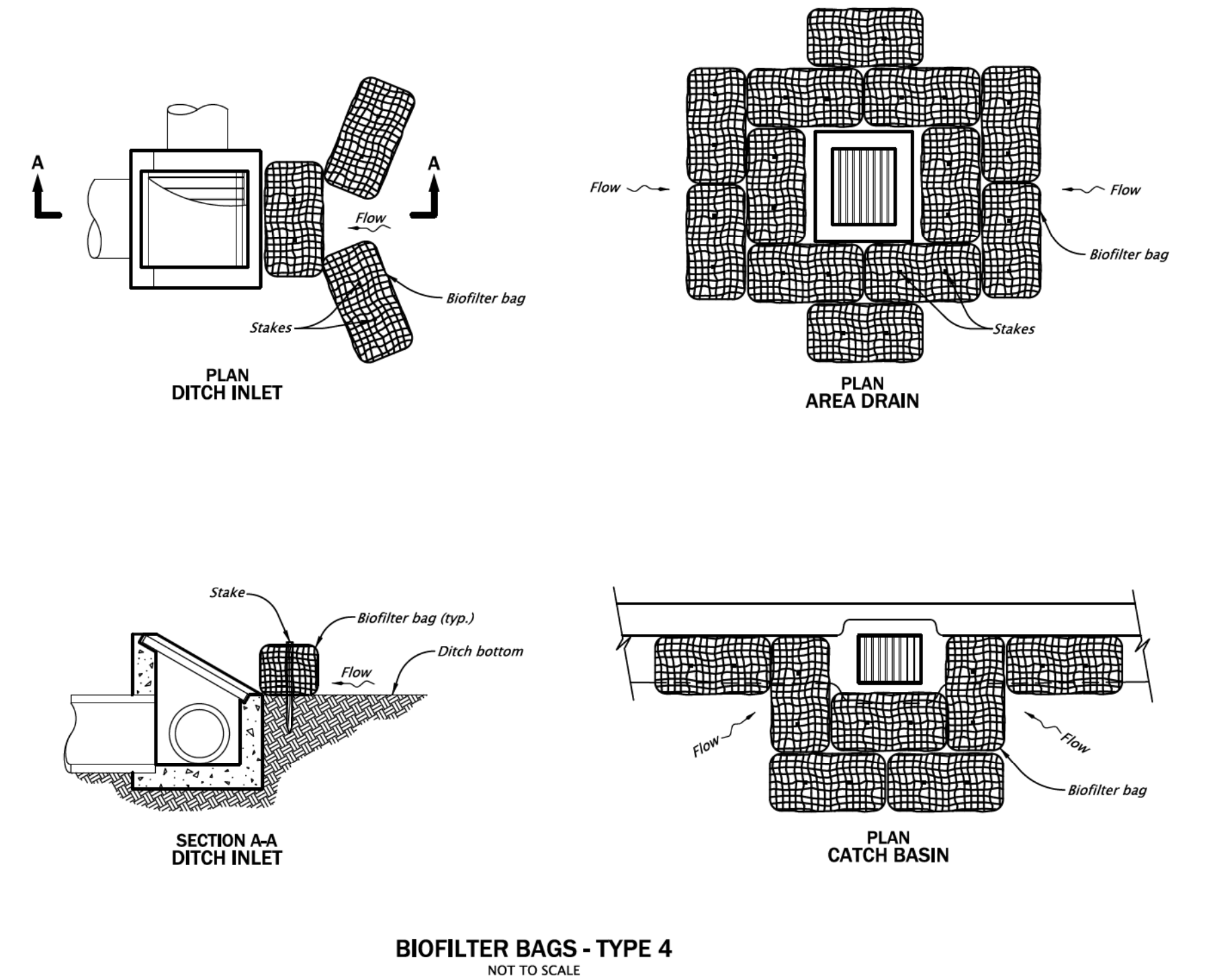


4 SLOPE STABILIZATION
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STEEP SLOPES

5 TEMPORARY SLOPE PROTECTION
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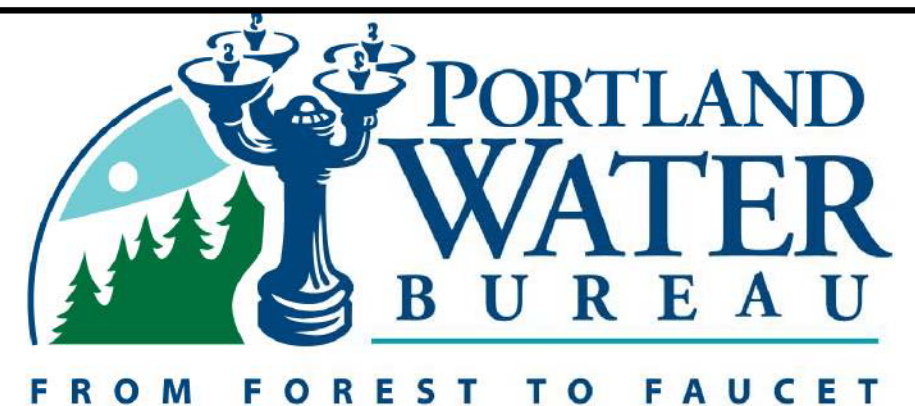
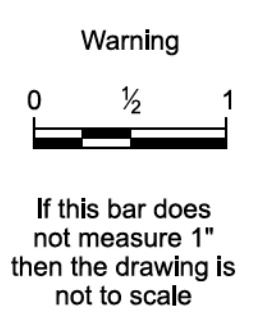


6 TEMPORARY INLET PROTECTION
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X	XXXXXXXX	XXXXXX	XX
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X	XXXXXXXX	XXXXXX	XX
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R	08/28/22	Intermediate Design - 60% Submittal	MRS
K	08/28/22	Initial Design - 30% Submittal	MRS
No	Date	Description	Appd
Revision			
Survey			



Designed By	Program Mgr
Drawn By	Const Mgr
Checked By	Const Supvr
Project Mgr	Date
MRS	01/03/23



David W. Peters, Engineering Manager, PE No 16683



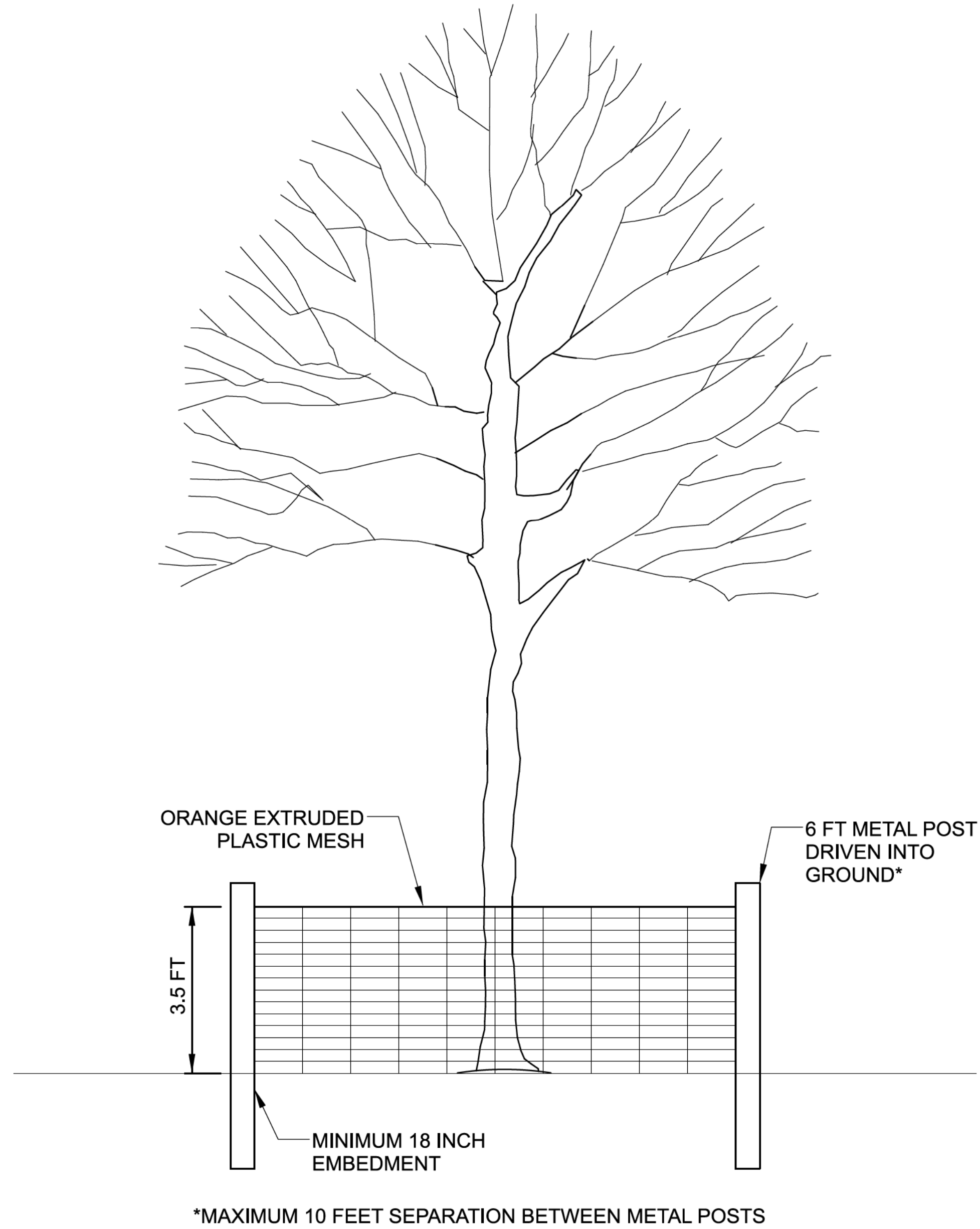
Bull Run Filtration Facility
Civil
Erosion Control
Detail 1

SAP Project No
W02229
1/4 Section
3765 / 3766
Sheet No
00-LU-509
of

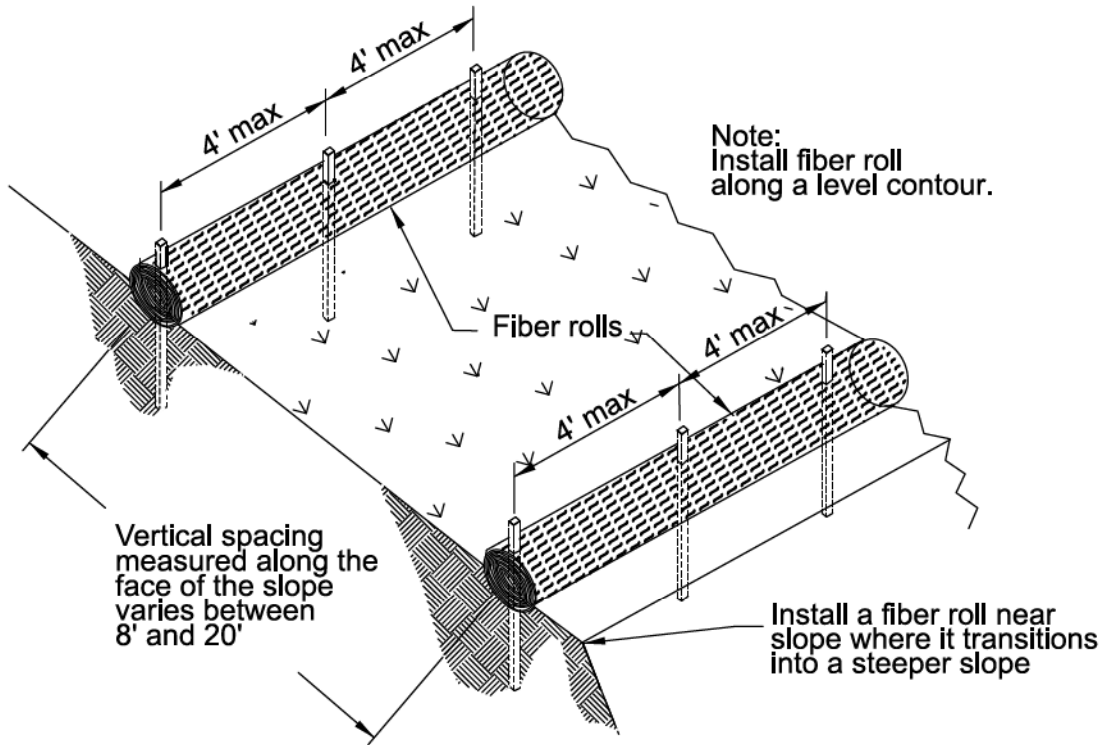
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TREE PROTECTION NOTES

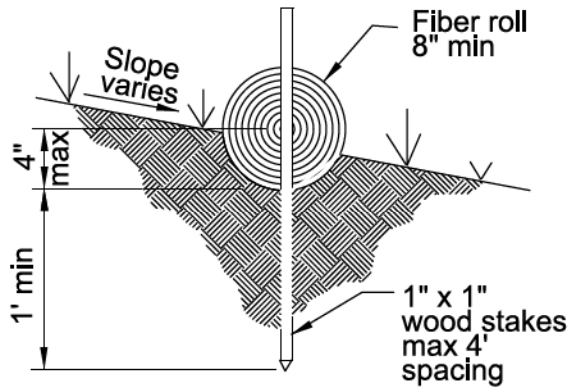
1. INSTALL TREE PROTECTION FENCING (TPF) PRIOR TO ANY GROUND DISTURBING ACTIVITY. INSPECTION AND APPROVAL OF FENCING BY THE URBAN FORESTRY TREE INSPECTOR IS REQUIRED PRIOR TO COMMENCEMENT OF WORK, INCLUDING EQUIPMENT AND MATERIALS STAGING AND MOBILIZATION
2. CALL (503) 823-TREE (8733) TO SCHEDULE THE TREE PROTECTION INSPECTION ONCE TPF IS INSTALLED
3. NO ENTRY IS ALLOWED INTO TREE PROTECTION AREAS FOR THE DURATION OF THE PROJECT UNLESS PERMITTED BY THE CITY FORESTER
4. TREE PROTECTION FENCING SHALL NOT BE MOVED, ALTERED OR REMOVED THROUGHOUT THE DURATION OF THE PROJECT
5. WHERE TREE ROOTS ARE ENCOUNTERED OR ANTICIPATED, EXCAVATION SHALL BE COMPLETED WITH HAND TOOLS CAREFULLY WITHOUT DAMAGE (I.E. VAC TRUCK, AIR SPADE, ETC)
6. TREE ROOTS OVER 2-INCH DIAMETER MAY NOT BE CUT OR DAMAGED WITHOUT A ROOT PRUNNING INSPECTION AND PERMIT ISSUED BY THE URBAN FORESTRY TREE INSPECTOR. CALL THE ASSIGNED TREE INSPECTOR OR 823-TREE (8733) FOR ROOT INSPECTION PERMITTING SPECIFIC TO THIS PROJECT
 - A. INSPECTION AND ISSUANCE OF A PERMIT MAY TAKE UP TO 48 HOURS
 - B. IF APPROVED, ROOTS MUST BE PROPERLY PRUNED USING APPROVED ARBORICULTURAL TECHNIQUES
7. FIELD ADJUSTMENTS OR ALTERNATIVE METHODS MAY BE NEEDED IF LARGE ROOTS ARE ENCOUNTERED. CONTACT THE ASSIGNED TREE INSPECTOR TO DISCUSS
8. TREES WITHIN THE LIMITS OF DISTURBANCE DESIGNATED TO BE PROTECTED WILL NOT BE REMOVED. CONTRACTOR IS DIRECTED TO COMPLETE CUT AND FILL OPERATIONS WITH CARE NEXT TO THESE TREES
9. MAINTAIN FENCING THROUGHOUT THE ENTIRE PROJECT. NO ACCESS IS PERMITTED WITHIN FENCED AREAS THROUGH THE DURATION OF THE PROJECT UNLESS OTHERWISE STATED IN THE TREE PROTECTION PLAN
10. THE ORANGE PLASTIC FENCE CAN BE USED AS CONSTRUCTION FENCE IN LIEU OF SILT FENCE IF GRADE IS MODERATE.



1 ORANGE PLASTIC FENCE
NOT TO SCALE



TYPICAL FIBER ROLL INSTALLATION
NOT TO SCALE



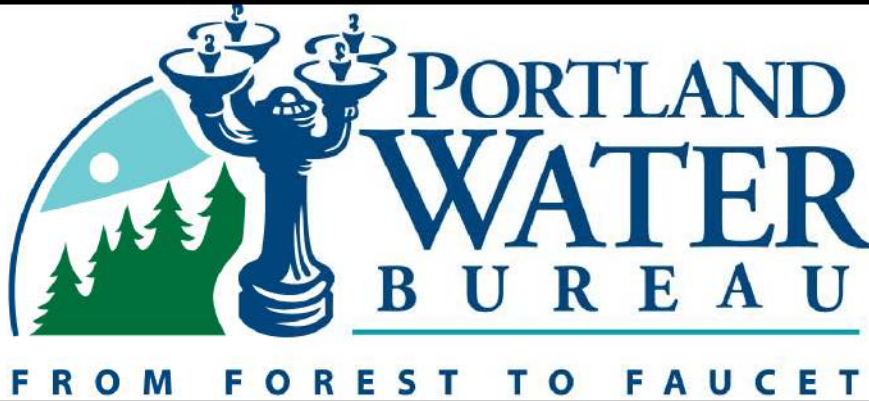
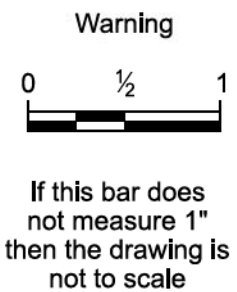
ENTRENCHMENT DETAIL
NOT TO SCALE

2 COMPOST FILTER SOCK OR WATTLE
NOT TO SCALE

C	09/2022	Second Intermediate Design and BCOE Review - 90% Submittal	MRG	
B	01/2022	Intermediate Design - 60% Submittal	MRG	
A	07/2021	Initial Design - 30% Submittal	MRG	
No	Date	Description	Appd	
Revision				
Survey				



Designed By	USL	Program Mgr	DWP
Drawn By	BYS	Const Mgr	TG
Checked By	LCS	Const Supvr	RM
Project Mgr	MRG	Date	01/03/23



David W. Peters, Engineering Manager, PE No 16683

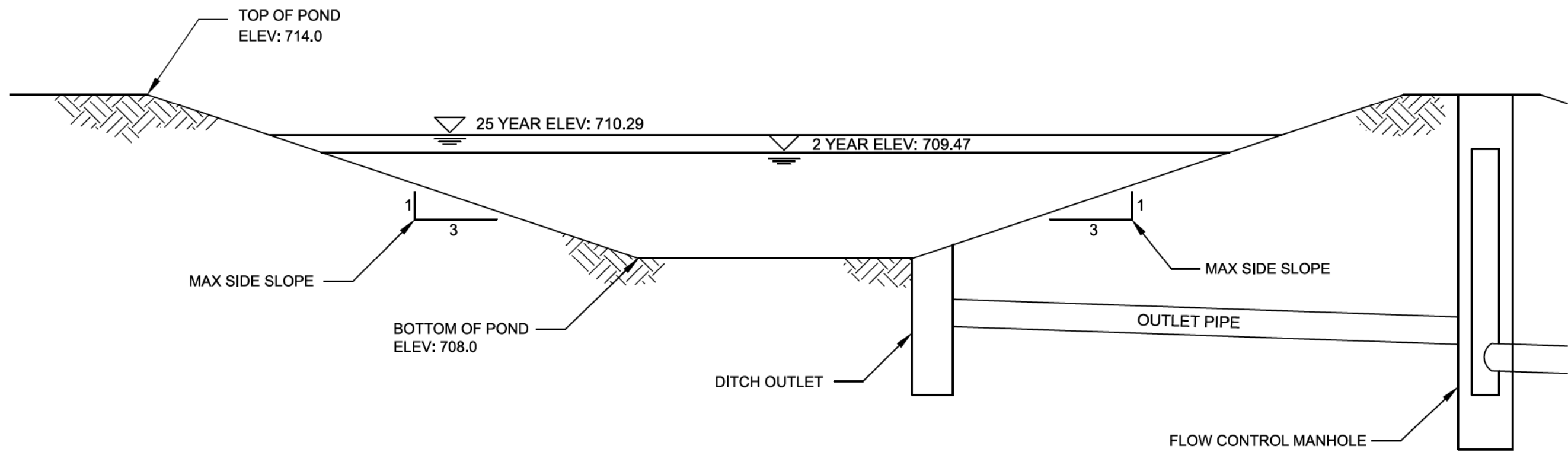
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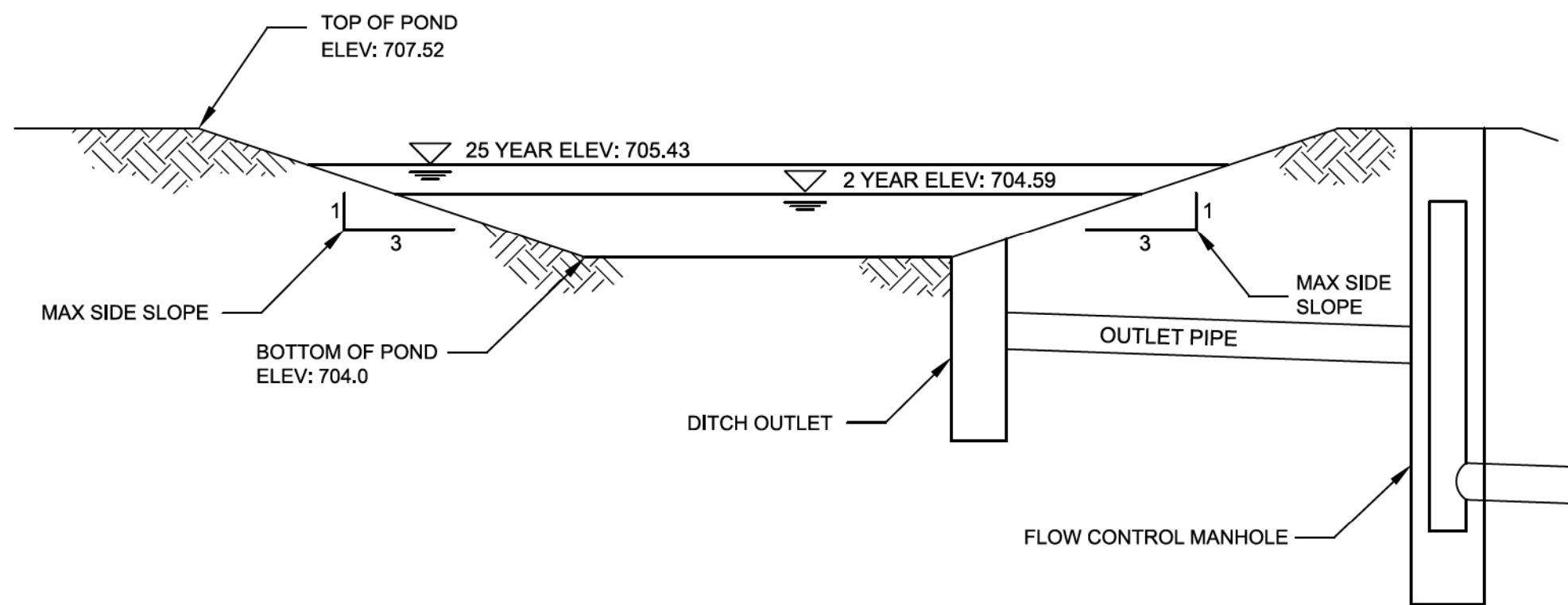
Bull Run Filtration Facility
Civil
Erosion Control
Detail 2

SAP Project No
W02229
1/4 Section
3765 / 3766
Sheet No
00-LU-510
of

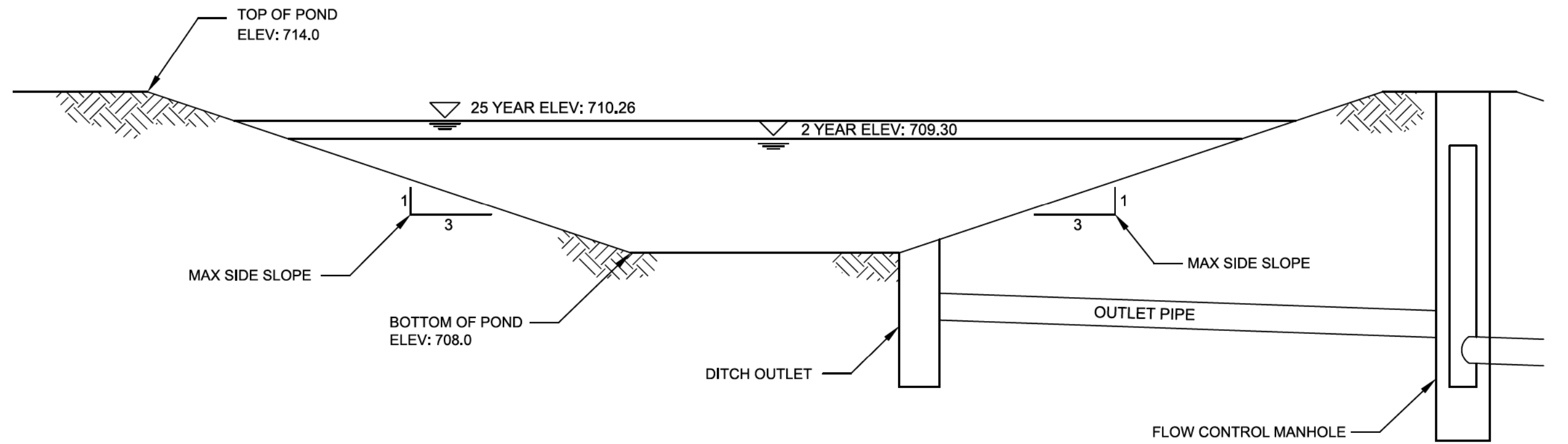
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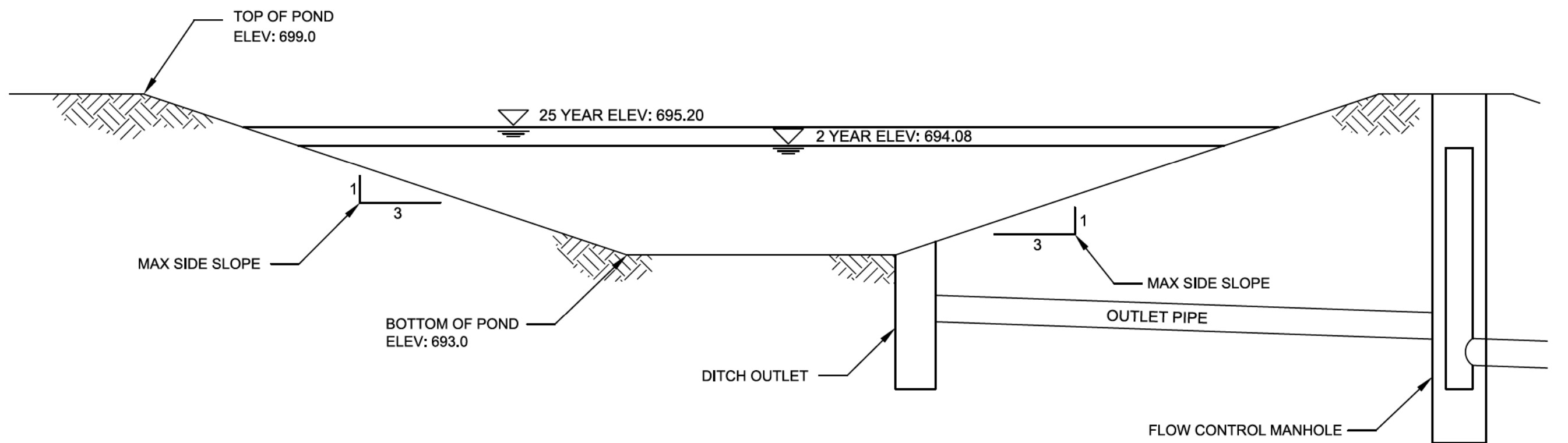
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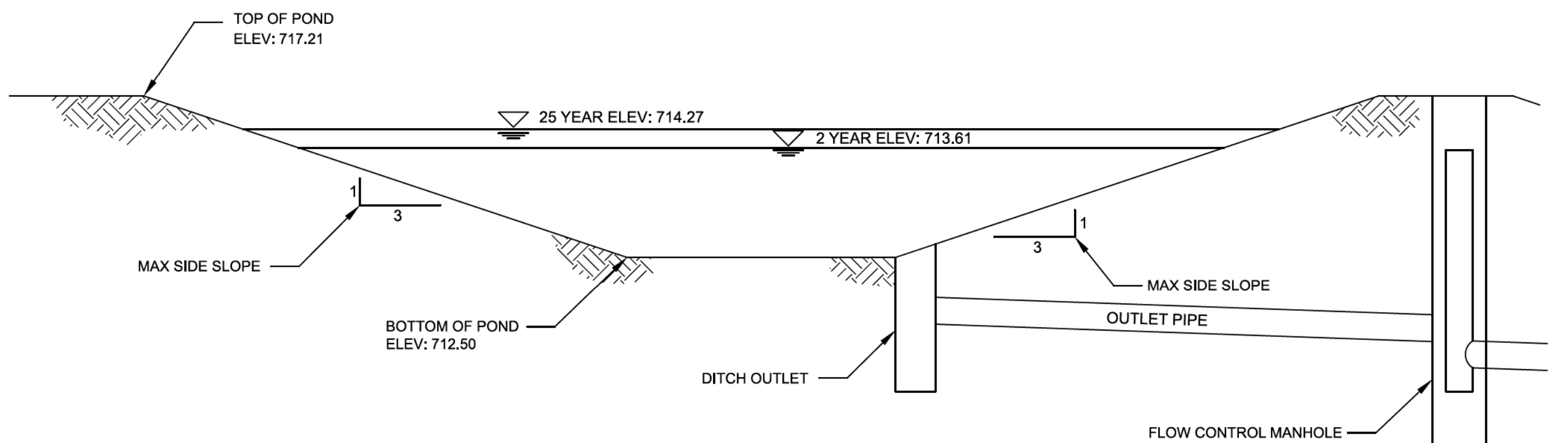
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B Pond B
00-LU-511 N.T.S.



D Pond D
00-LU-511 N.T.S.



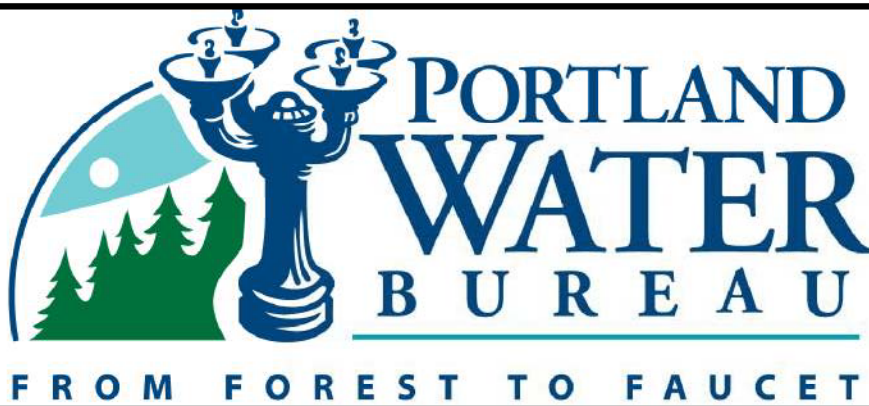
E Pond E
00-LU-511 N.T.S.

No	Date	Description	Appd
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B	01/2022	Intermediate Design - 60% Submittal	MRG
A	07/2021	Initial Design - 30% Submittal	MRG
Revision			
Survey			



Designed By	USL	Program Mgr	DWP
Drawn By	KRF	Const Mgr	YG
Checked By	LCS	Const Supvr	RW
Project Mgr	MRG	Date	01/03/23

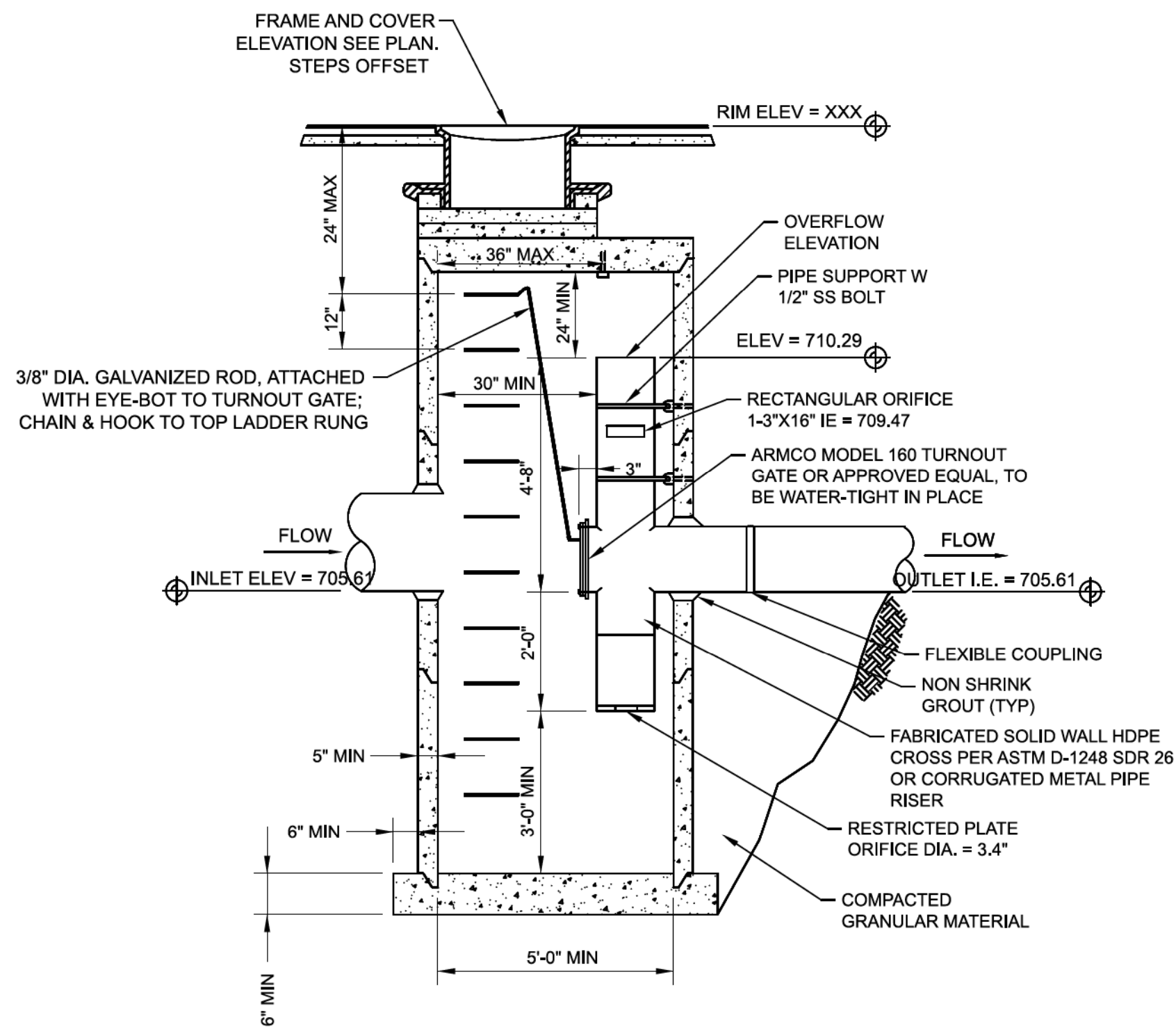
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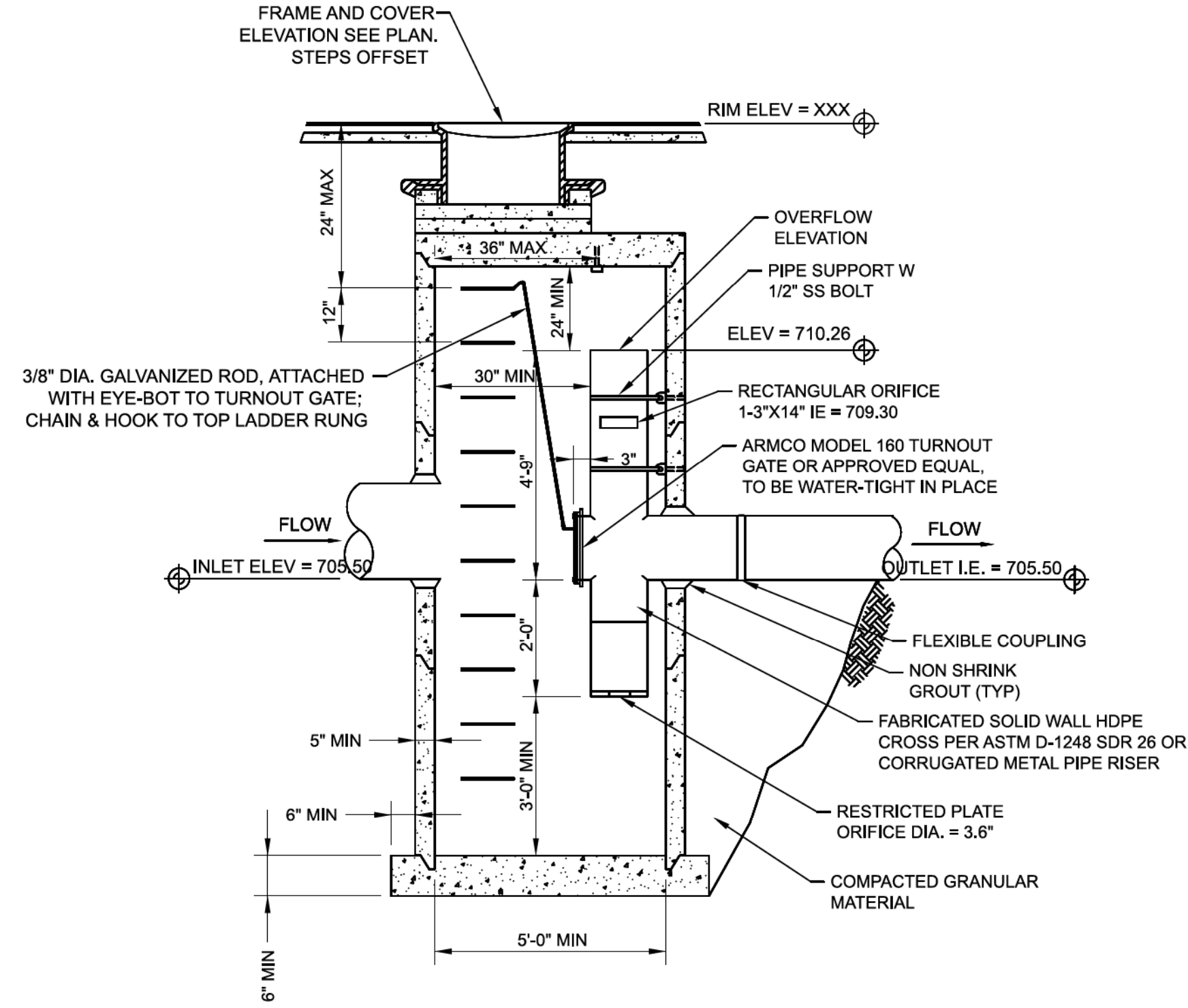
Bull Run Filtration Facility
Civil
Erosion Control
Storm Pond Sections

SAP Project No
W02229
1/4 Section
3765 / 3766
Sheet No
00-LU-511
of

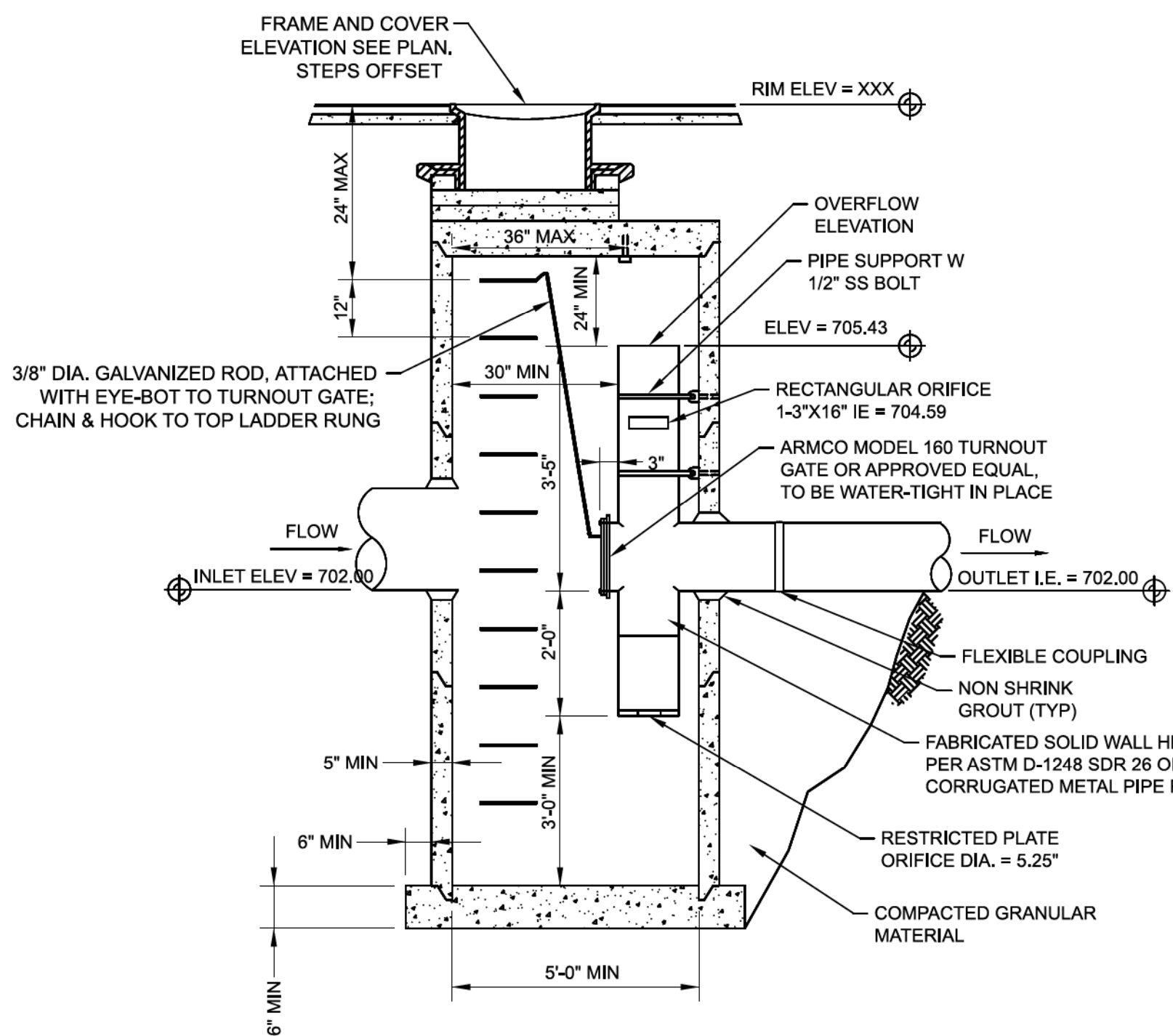
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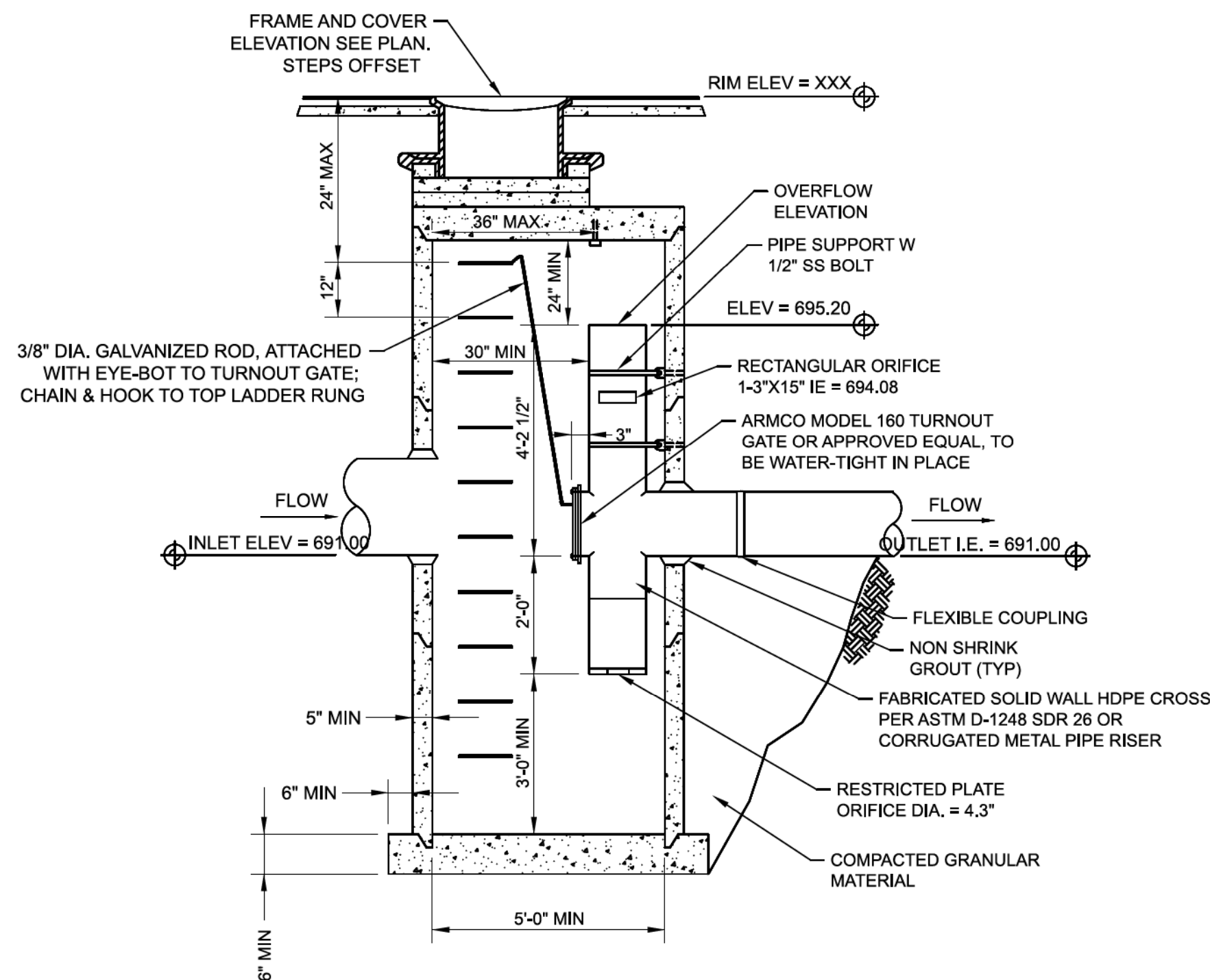
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10-LU-512 N.T.S.



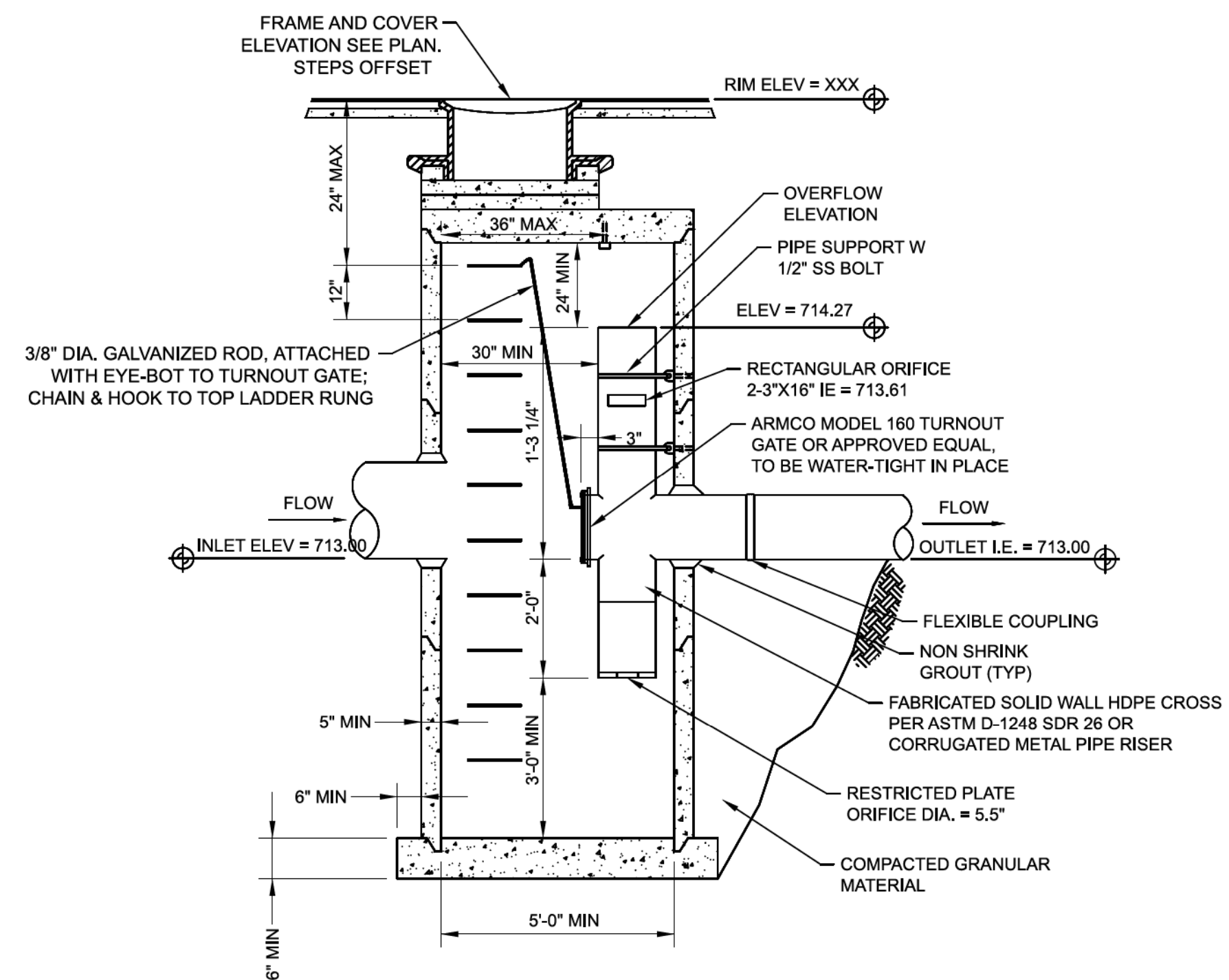
B Flow Control Maintenance Hole - Pond B
10-LU-512 N.T.S.



C Flow Control Maintenance Hole - Pond C
10-LU-512 N.T.S.



D Flow Control Maintenance Hole - Pond D
10-LU-512 N.T.S.



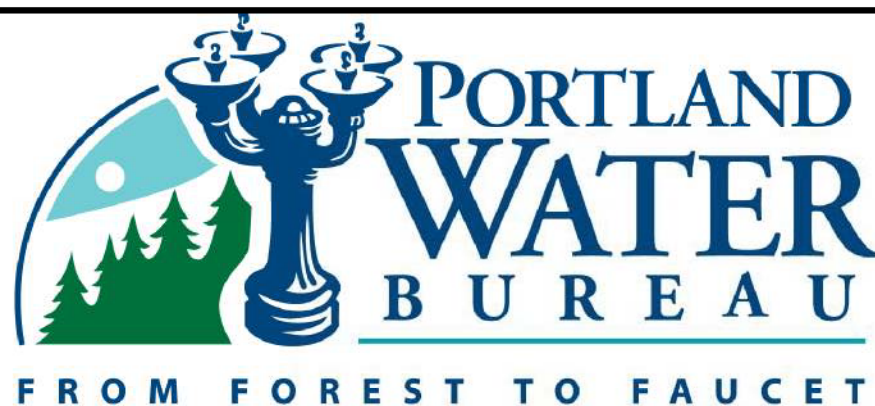
E Flow Control Maintenance Hole - Pond E
10-LU-512 N.T.S.

No	Date	Description	Appd
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B	01/2022	Intermediate Design - 60% Submittal	MRG
A	07/2021	Initial Design - 30% Submittal	MRG
No			
Revision			
Survey			



Designed By	KRF	Program Mgr	MRG
Drawn By	KRF	Const Mgr	MRG
Checked By	LCS	Const Supr	MRG
Project Mgr	MRG	Date	01/03/23

Warning
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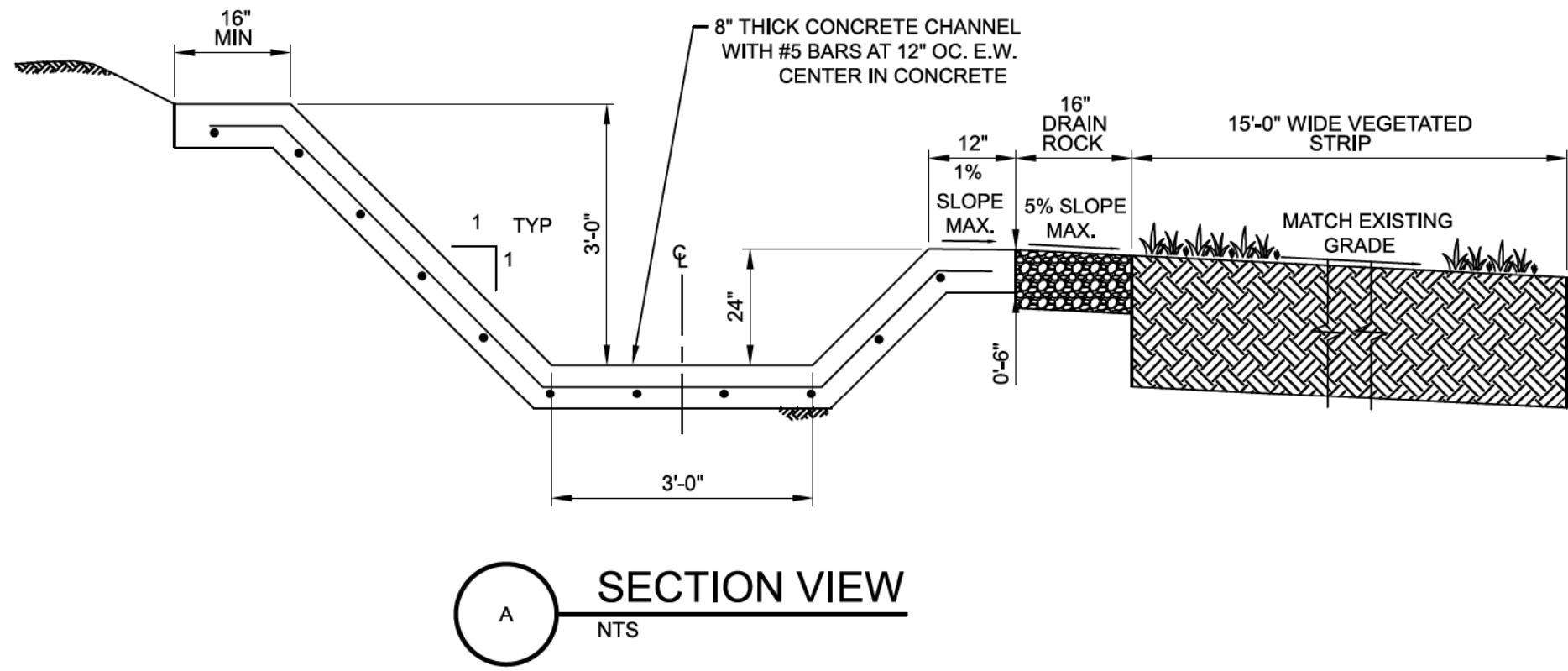
David W. Peters, Engineering Manager, PE No 16683



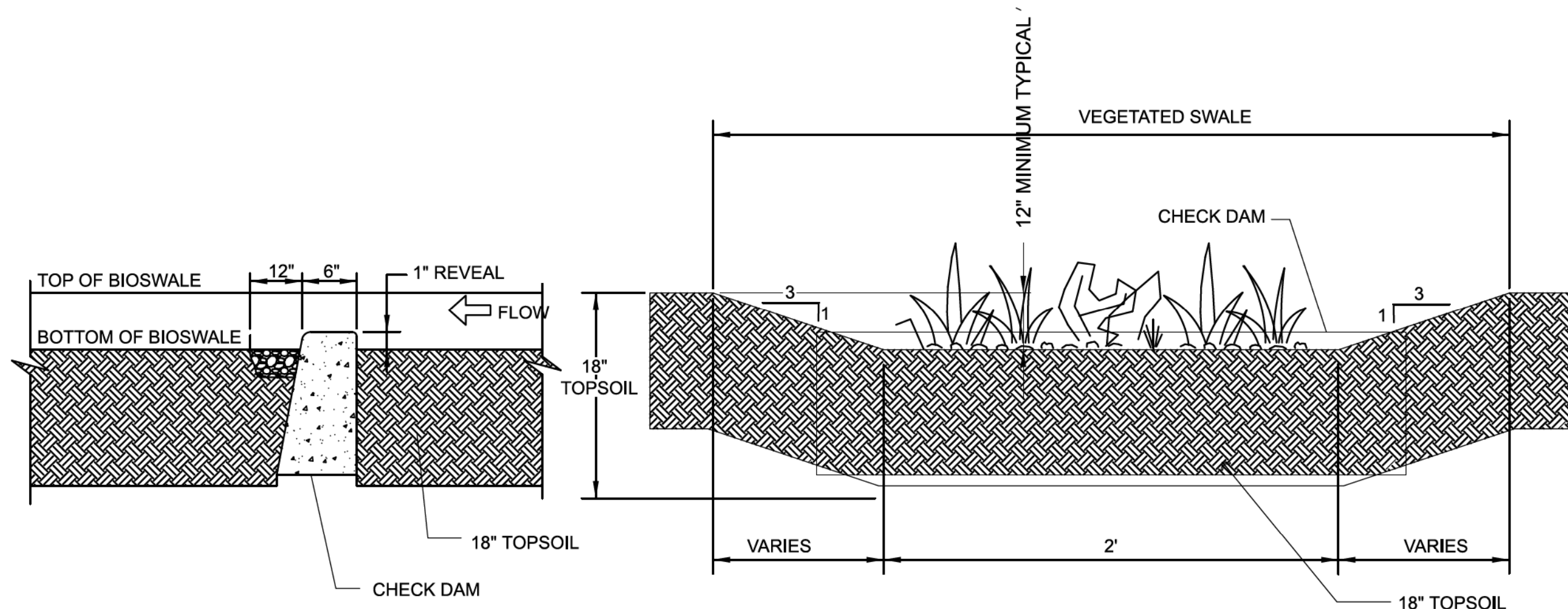
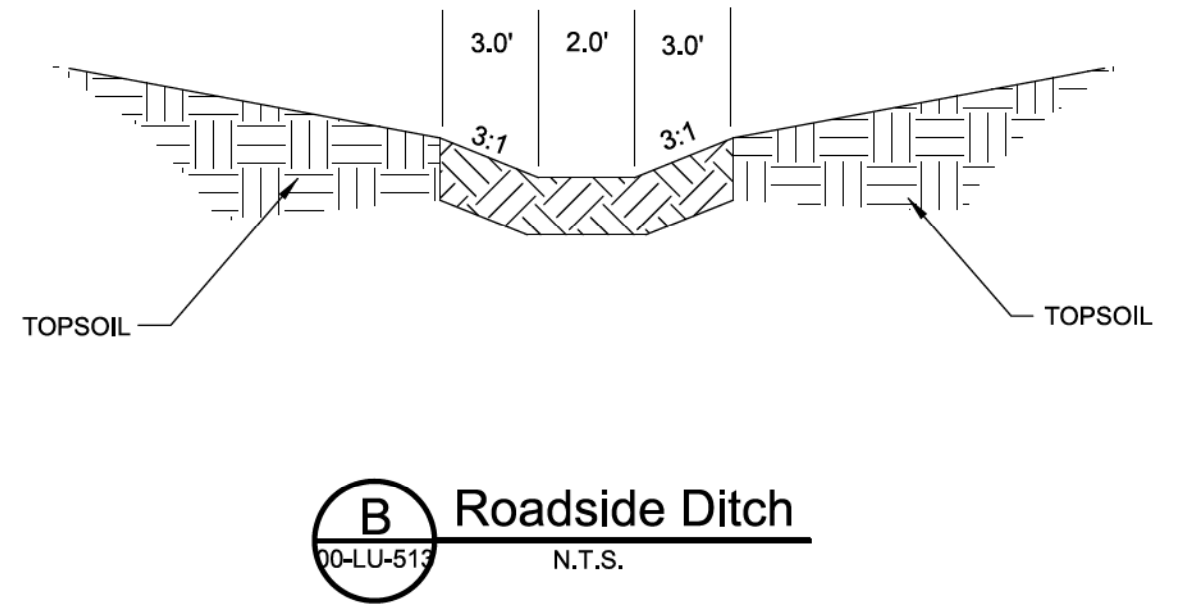
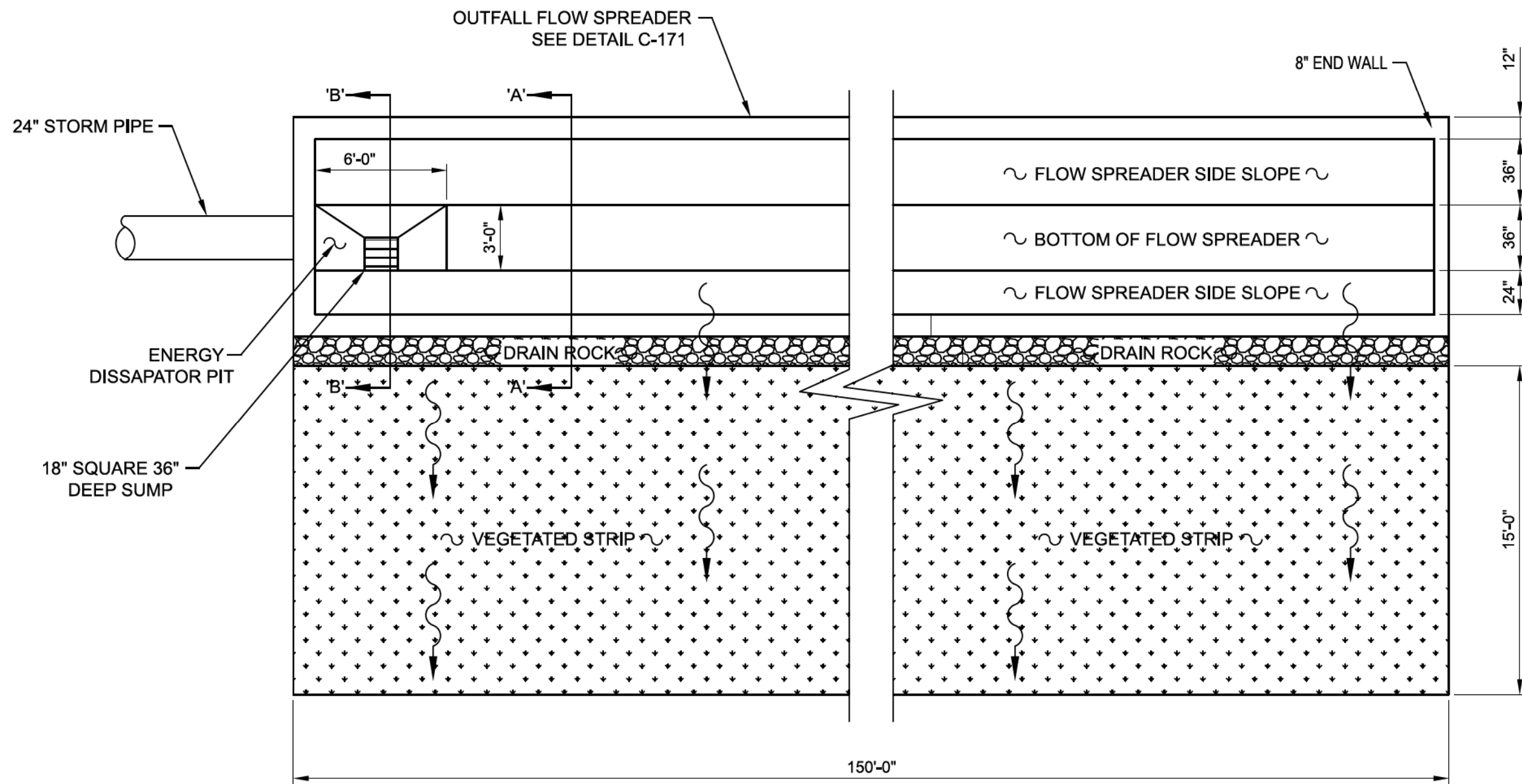
Bull Run Filtration Facility
Civil
Erosion Control
Flow Control Structures

SAP Project No
W02229
1/4 Section
3765 / 3766
Sheet No
00-LU-512
of

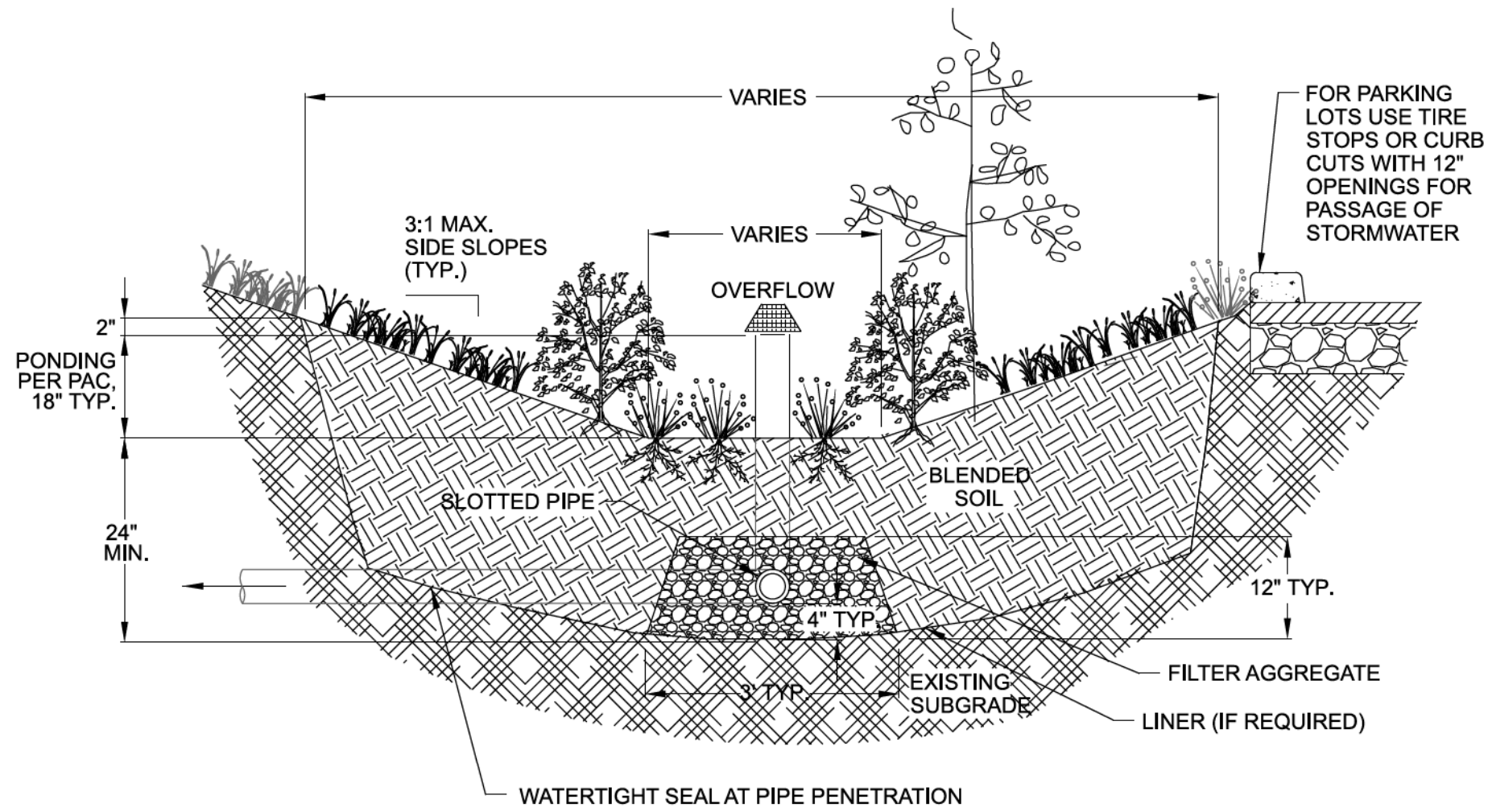
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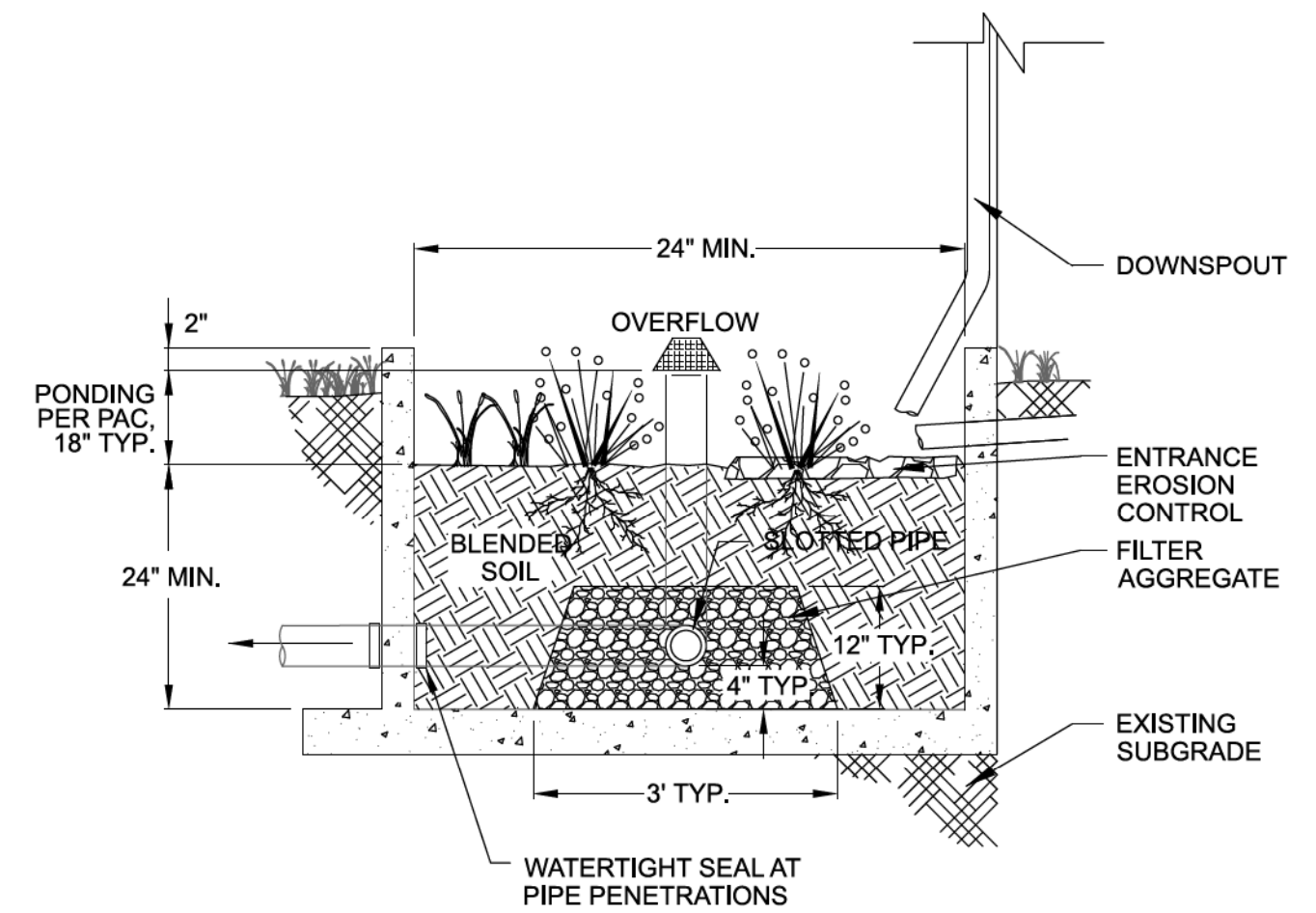
A Outfall Flow Spreader
00-LU-513 N.T.S.



C Typical Grassy Swale
00-LU-513 N.T.S.



D Basin With Underdrain
00-LU-513 N.T.S.



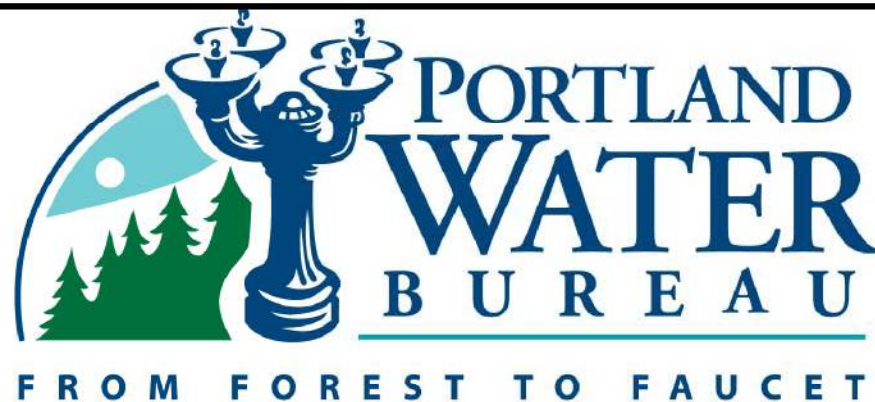
E Planter With Underdrain
00-LU-513 N.T.S.

No	Date	Description	Appd
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B	01/2022	Intermediate Design - 60% Submittal	MRG
A	07/2021	Initial Design - 30% Submittal	MRG
No	Date	Description	Appd
Revision			
Survey			



Designed By	KRF	Program Mgr	MRG
Drawn By	KRF	Const Mgr	MRG
Checked By	LCS	Const Supr	MRG
Project Mgr	MRG	Date	01/03/23

Warning
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If this bar does not measure 1" then the drawing is not to scale



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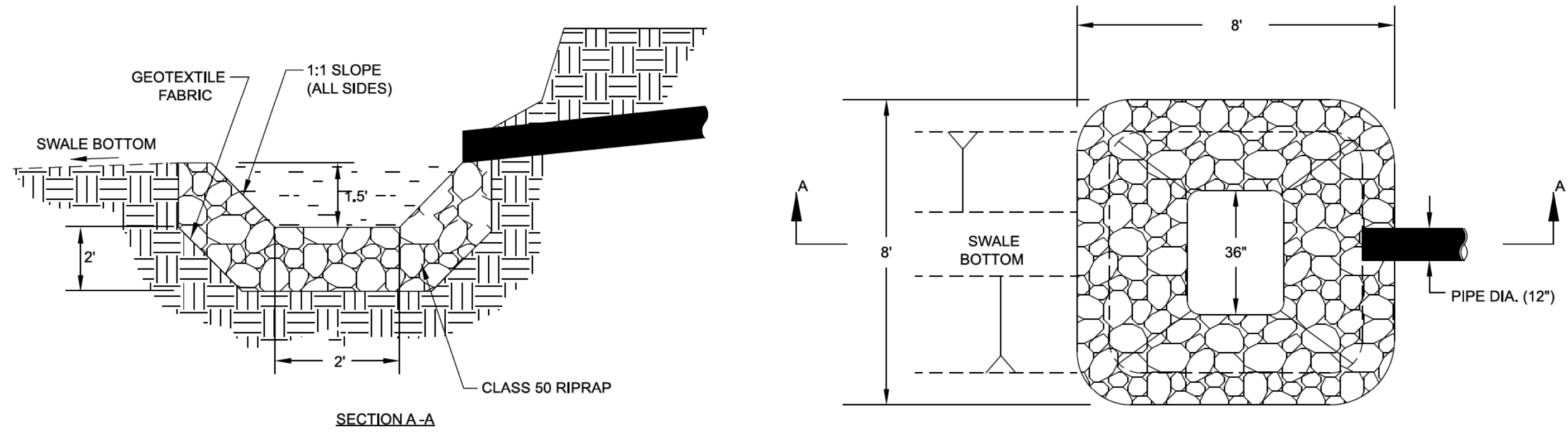


Bull Run Filtration Facility
Civil
Erosion Control
Storm Details - 1

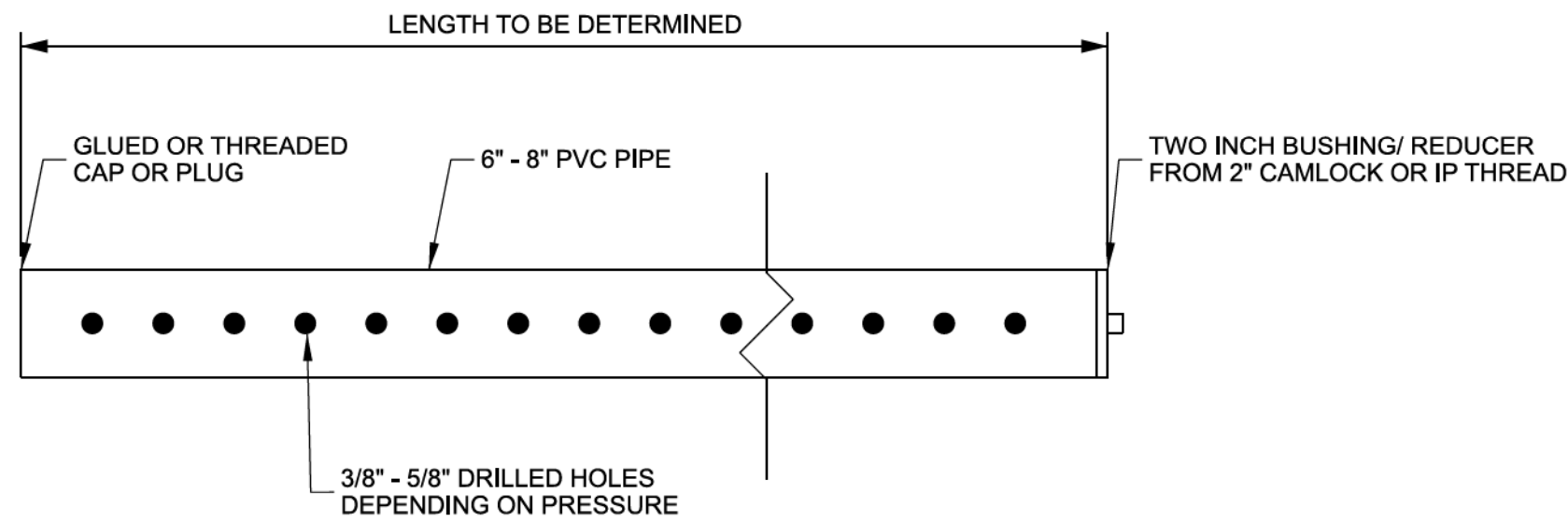
SAP Project No
W02229
1/4 Section
3765 / 3766
Sheet No
00-LU-513
of

User: stanpw11cs03\$ W02229_FF_00-LU-514.dgn

3/27/2023



A Stilling Basin
00-LU-514 N.T.S.



B PVC FLOW SPREADER DETAIL
00-LU-514 N.T.S.

No	Date	Description	Appd
Revision			
Survey			



Designed By	KRF	Design Mgr	LSH
Drawn By	KRF	Const Mgr	TG
Checked By	LCS	Const Supvr	RM
Project Mgr	MRG	Date	

Warning
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If this bar does not measure 1" then the drawing is not to scale



David W. Peters, Engineering Manager, PE No 16683

Date



Bull Run Filtration Facility

Civil
Erosion Control
Storm Details

SAP Project No W02229
1/4 Section 3765 / 3766
Sheet No 00-LU-514
of