

# FORMER PANHANDLE SMELTING & REFINING SITE REMEDICATION AND LAKESHORE ENHANCEMENT 100% FINAL DESIGN PONDERAY IDAHO MARCH 2026

**OWNER:**  
CITY OF PONDERAY  
288 FOURTH STREET  
PONDERAY, IDAHO 83852



**PROJECT SPONSORS:**

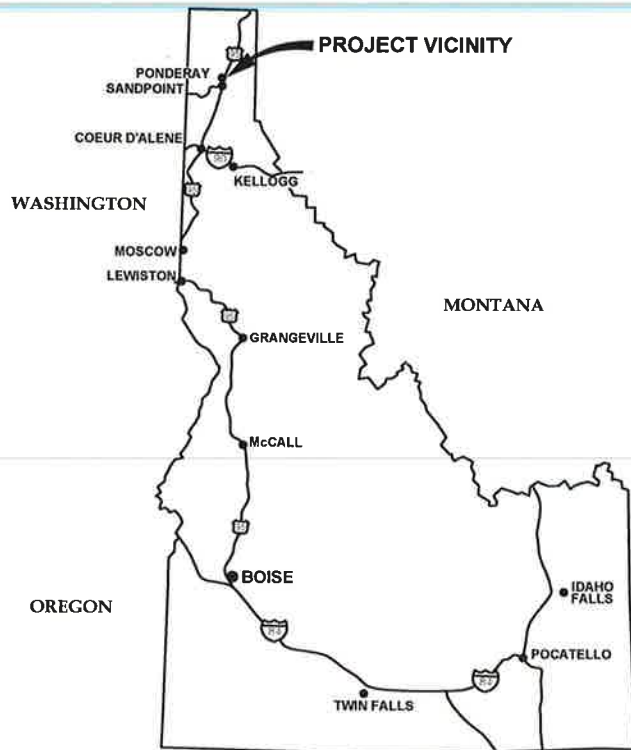
**Idaho Department  
of Environmental Quality**  
1005 WEST MCKINLEY AVENUE  
KELLOGG, IDAHO 83837

**USEPA Region 10**  
1200 6TH AVENUE  
SUITE 155  
SEATTLE, WASHINGTON 98101



Though this project has been funded, wholly or in part, by EPA, the contents of this document do not necessarily reflect the views and policies of EPA

**ENGINEER:**  
**ALTA SCIENCE & ENGINEERING, INC.**  
1220 BIG CREEK RD.  
KELLOGG, IDAHO 83837  
TELEPHONE: (208) 786-1206



**LOCATION MAP**  
SCALE: NTS



**LOCATION MAP**  
SCALE: 1" = 1000'

**COVER & GENERAL SHEETS**

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**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	
					DRAFTER: B. ROLLINS
					DESIGNER: C. MACPHERSON
					CHECKED: D. FORSETH
					DATE: 06/27/2024
					APPROVED: D. FORSETH
					DATE: 03/25/2026



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

COVER SHEET



SHEET:	CS
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	1 OF 30

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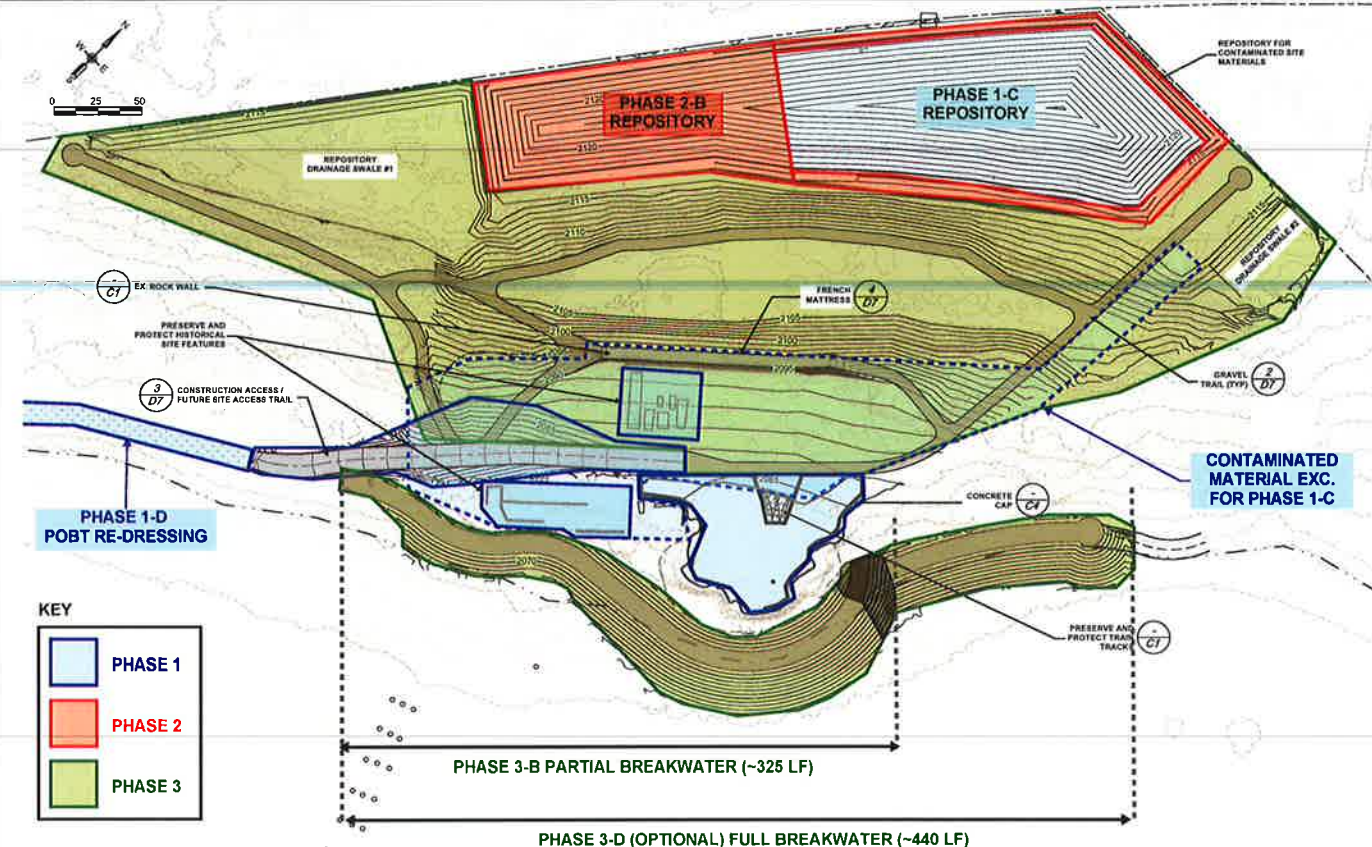
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# GENERAL NOTES AND SPECIFICATIONS

- ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, THESE PLANS, PROJECT TECHNICAL SPECIFICATIONS (UNDER SEPARATE COVER), ALL APPLICABLE PERMITS, AND ALL LOCAL, STATE, AND NATIONAL REQUIREMENTS, UNLESS OTHERWISE NOTED.
- A COPY OF THE APPROVED PLANS SHALL BE MAINTAINED AT THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL MEET OR EXCEED CURRENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS AND SHALL PROVIDE ALL REQUIRED SAFETY MEASURES TO PROTECT WORKERS, THE PUBLIC, AND PROPERTY.
- SURVEY CONTROL POINTS ARE SHOWN ON SHEET G3. LOCATIONS AND ELEVATIONS ARE GROUND COORDINATES. ALL MONUMENTS MAY NOT BE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND ANY OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF IDAHO OR AT CONTRACTOR'S EXPENSE.
- EXISTING FEATURES AND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY CONDITIONS, LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO EXCAVATION, AND CALL ONE-CALL AT (800) 398-3285 AT LEAST TWO (2) WORKING DAYS BEFORE CONSTRUCTION.
- CONTRACTOR SHALL LOCATE, PROTECT, AND REPAIR IF DAMAGED ALL ABOVE- AND BELOW-GROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, GAS, ELECTRIC, SEPTIC, WATER, SANITARY, STORM, COMMUNICATION, SPRINKLERS, IRRIGATION, ETC.
- CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES AND RIGHTS-OF-WAY, SHALL BE RESPONSIBLE FOR EQUIPMENT SIZING AND APPLICABLE WEIGHT RESTRICTIONS, AND SHALL IMMEDIATELY NOTIFY ENGINEER OF DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS; ALLOW 48 HOURS FOR DESIGN MODIFICATION UNLESS OTHERWISE SPECIFIED.
- TRAFFIC CONTROL MEETING MUTCD STANDARDS SHALL BE IMPLEMENTED BY CONTRACTOR WHEN WORKING IN OR ADJACENT TO PUBLIC RIGHTS-OF-WAY. CONTRACTOR SHALL BE FAMILIAR WITH CURRENT MUTCD STANDARDS AND HAVE THE ABILITY TO EMPLOY CERTIFIED FLAGGERS AT THE JOB SITE WHEN NEEDED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER ACTIONS NEEDED TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC AND PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.

# CONTAMINATED SOILS

- ALL EXCAVATED MATERIALS, INCLUDING SOIL AND WATER ENCOUNTERED DURING EXCAVATION OR REMOVAL, SHALL BE ASSUMED CONTAMINATED UNLESS OTHERWISE DIRECTED.
- IMPORTED MATERIALS SHALL BE STOCKPILED IN APPROVED LOCATIONS. POTENTIALLY CONTAMINATED EXCAVATED MATERIAL SHALL BE DIRECT-LOADED UNLESS OTHERWISE NOTED OR DIRECTED; CONTAMINATED MATERIAL SHALL BE HAULED TO THE ON-SITE REPOSITORY, AND NON-CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LOCATION SPECIFIED BY OWNER.
- DECONTAMINATION OF EQUIPMENT AND PERSONNEL IS REQUIRED FOR WORK INVOLVING CONTAMINATED SOILS. EROSION AND SEDIMENT CONTROL BMPS, INCLUDING TRACKING CONTROL, SHALL BE IMPLEMENTED AT ALL TIMES.
- CONTRACTOR SHALL PROVIDE ACCESS CONTROL, TEMPORARY BARRIERS, DUST CONTROL, AND EROSION AND SEDIMENT CONTROL BMPS AS NECESSARY TO PREVENT PUBLIC EXPOSURE AND OFF-SITE TRACKING OR MIGRATION OF SEDIMENT.
- ALL PERSONNEL ENGAGED IN WORK INVOLVING CONTAMINATED SOILS, MATERIALS, OR REPOSITORY OPERATIONS SHALL HAVE CURRENT 40-HOUR HAZWOPER TRAINING.



**Phase 1** Includes the construction items identified in the **Phase 1 Bid Tables** as: **Phase 1-A** Temporary Construction Facilities and Controls, Clearing and Grubbing; **Phase 1-B** Blackrock Cap Construction; **Phase 1-C** Excavation of Contaminated Material, Repository Construction (Roastery Half Only); and **Phase 1-D** Improve POBT for Access, Cleanup Historic Features, and Washwater Control for Historical Features.

**Phase 1-C** includes partial construction of the repository, limited to the roastery-half repository work identified in the **Phase 1 Bid Tables**, together with the excavation of contaminated material and related cover soil, imported topsoil, and select waste debris items assigned to **Phase 1-C**. Work assigned to completion of repository construction under **Phase 2** is not included in Phase 1 due to funding sources and is tracked separately.

**Phase 2** Includes the construction items identified in the **Phase 2 Bid Tables** as: **Phase 2-A** Temporary Construction Facilities and Controls; and **Phase 2-B** Excavation of Contaminated Material, Completion of Repository Construction.

**Phase 2-B** Includes the remaining repository construction work not included in **Phase 1-C**, including the repository completion items assigned to **Phase 2-B** in the **Phase 2 Bid Tables**, together with related excavation of contaminated material, clean borrow, cover soil, imported topsoil, fine grained soil, liner, drainage, geocomposite, and associated repository system items.

**Phase 2** is intended to complete the repository construction work that is only partially included in **Phase 1-C**. Work assigned to completion of repository construction under **Phase 2** is not included in **Phase 1** due to funding sources and must be tracked separately.

**Phase 3** includes the construction items identified in the **Phase 3 Bid Tables** as: **Phase 3-A** Temporary Construction Facilities and Controls; **Phase 3-B** Breakwater (POBT Connection to Around Blackrock Only); and **Phase 3-C** Trail Surfacing, Post Construction Erosion and Sediment Controls, Topsoil/Planting, Restoration of Historical Features.

**Phase 3** does not include Optional **Phase 3-D** Full Breakwater unless expressly authorized and added by written Change Order or amendment.



## CONSTRUCTION SET

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	N/A
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

GENERAL PLAN SET  
INFORMATION & NOTES

SHEET:	G1
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	2 OF 30

## ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	LF	LINEAR FEET
ALTA-SE	ALTA SCIENCE & ENGINEERING	MAX	MAXIMUM
APPROX.	APPROXIMATE	MIN	MINIMUM
BMPs	BEST MANAGEMENT PRACTICES	N	NORTHING
€	CENTER LINE	NAD	NORTH AMERICAN DATUM
CMP	CORRUGATED METAL PIPE	NAVD	NORTH AMERICAN VERTICAL DATUM
CU YD	CUBIC YARD	NE	NORTHEAST
Ø OR DIA.	DIAMETER	NTS	NOT TO SCALE
E	EASTING	NO.	NUMBER
EQUIV.	EQUIVALENT	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
EX.	EXISTING	OC	ON CENTER
ELEV.	ELEVATION	±	PLUS OR MINUS
FIN.	FINISHED	ROW	RIGHT-OF-WAY
FT	FEET	STA	STATION
GPS	GLOBAL POSITIONING SYSTEM	SPEC	SPECIFICATION
H	HORIZONTAL	SQ FT	SQUARE FEET
ISPW	IDAHO STATE PLANE WEST	TYP	TYPICAL
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION		
ITD	IDAHO TRANSPORTATION DEPARTMENT		

## EMERGENCY CONTACT AND UTILITY INFORMATION

**EMS (EMERGENCY MEDICAL SERVICES)**  
 STATION #4  
 60 MOODY LANE  
 PONDERAY, ID 83852  
 (208) 255-2194

**FIRE DEPARTMENT**  
 NORTHSIDE FIRE DIST STA #1  
 437 CEDAR ST.  
 PONDERAY, ID 83852  
 (208) 265-4114

**POLICE**  
 PONDERAY POLICE DEPT  
 476770 US-95  
 PONDERAY, ID 83852  
 (208) 265-4251

**CITY OF PONDERAY (CITY HALL)**  
 288 FOURTH STREET  
 PONDERAY, ID 83852  
 (208) 265-5468

**CALL BEFORE YOU DIG**  
**1-800-398-3285**

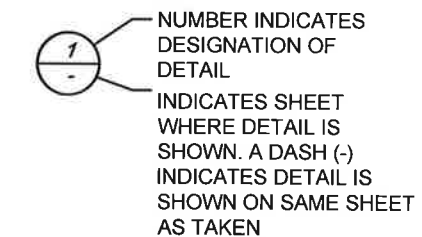
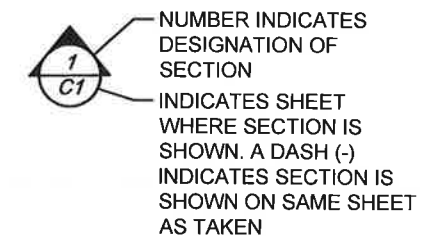
1. THE LOCATION OF THE EXISTING UTILITIES SHOWN IN THIS DESIGN ARE APPROXIMATE. DESIGN MAY NOT INCLUDE ALL OF THE UTILITIES PRESENT AT THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL ABOVE-GRADE AND BELOW-GRADE UTILITIES.
2. THE CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS REQUIRED BY THE UTILITY COMPANIES WHILE WORKING AROUND UTILITIES.

## LEGEND AND SYMBOLS

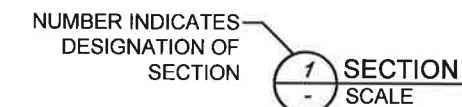
●	EXISTING MONUMENT/SURVEY PIN	———	EXISTING CONTOURS (1' & 5')	———	DESIGN CONTOURS (1' & 5')
△	EXISTING OTHER SURVEY/CONTROL	———	EXISTING CONC	~~~~~	DESIGN SHORELINE PROTECTION FEATURE
		-----	EXISTING GROUND	- - - - -	DESIGN DITCH (€)
		- · - · -	EXISTING SEASONAL HIGH/LOW WATER LINE	+ + + + +	DESIGN FIBER ROLL
□	DESIGN MONUMENT (REPOSITORY DEFINITION)	- · - · -	EXISTING PROPERTY LINE	- * - * -	DESIGN FENCE
		-----	EXISTING TRAIL	—————	DESIGN REPOSITORY FOOTPRINT
		-----	EXISTING HAUL TRAIL/ROAD	■	DESIGN TRAIL
● ● ● ●	EXISTING CONCRETE	● ● ● ●	DESIGN CONCRETE	■ ■ ■ ■	DESIGN ¾" MINUS AGGREGATE (TYPE-1 GRAVEL)
■ ■ ■ ■	EXISTING COMPACTED SUB-GRADE	○ ○ ○ ○	DESIGN DRAIN ROCK	↓ ↓ ↓ ↓	DESIGN HYDROSEED
■ ■ ■ ■	EXISTING BLACK ROCK (SLAG)	■ ■ ■ ■	DESIGN EROSION CONTROL BLANKET	+ + + +	DESIGN QUARRY SPALLS
~ ~ ~ ~	EXISTING CONTAMINATED SOIL	■ ■ ■ ■	DESIGN EROSION CONTROL BLANKET WITH PLANTINGS	○ ○ ○ ○	DESIGN RIP RAP
		● ● ● ●	DESIGN FINE GRAINED SOIL/MATERIAL		

## SECTION AND DETAIL DESIGNATION

POINT AT WHICH SECTION OR DETAIL IS TAKEN



PAGE ON WHICH SECTION OR DETAIL IS SHOWN



### CONSTRUCTION SET

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	N/A
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

GENERAL PLAN SET INFORMATION & NOTES

SHEET:	G2
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	3 OF 30

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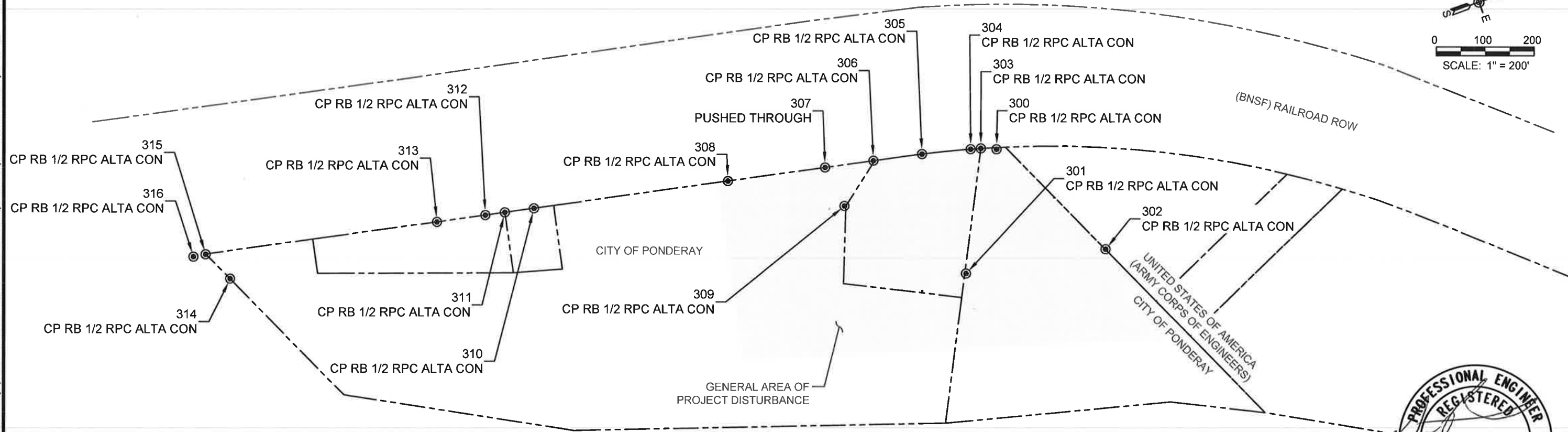
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Point No.	Easting	Northing	Elev.	Description
300	2434509.73	2420083.87	2116.11	AC 3.5IN ARMY CORPS
301	2434646.03	2419860.49	2076.31	REB5 YPC PLS 11187
302	2434811.93	2420097.52	2079.04	AC 2IN PLS 1947
303	2434486.14	2420062.33	2116.80	REB5 YPC PLS 11187
304	2434472.71	2420046.53	2116.64	REB5 RPC ILLEGIBLE
305	2434409.53	2419968.97	2116.46	REB5 RPC PLS 1947
306	2434349.32	2419889.19	2116.52	REB5 RPC PLS 1947
307	2434289.18	2419809.34	2116.62	REB5 RPC PUSHED THROUGH
308	2434168.98	2419649.40	2113.98	REB5 RPC PLS 1947
309	2434372.83	2419781.77	2115.25	REB5 YPC PLS 11187
310	2433928.78	2419329.92	2083.94	REB5 RPC ILLEGIBLE
311	2433892.57	2419281.95	2084.17	REB5 YPC PLS 11187
312	2433868.65	2419249.80	2083.32	REB5 RPC PLS 1947
313	2433808.55	2419169.92	2081.86	REB5 RPC PLS 1947
314	2433593.64	2418789.86	2068.69	REB5 YPC PLS 6107
315	2433523.51	2418790.41	2078.58	REB5 YPC PLS 6107
316	2433509.62	2418769.29	2077.33	REB5 RPC PLS 1947
317*	2432536.68	2417478.83	2064.02	REB5 YPC PLS 6107
318*	2432489.86	2417479.04	2073.94	AC 3.5IN LS 813
319*	2430927.95	2412213.04	2089.32	AC 3IN LS 813

\*SOME SURVEY MONUMENTS ARE INCLUDED IN THE TABLE, BUT ARE LOCATED OUTSIDE OF THE MAP VIEW.

**NOTES:**

- 1.) SURVEY DATA POINTS SHOWN BELOW WERE PROVIDED TO ALTA IN OCTOBER 2023 BY WELCH COMER (SUB-CONTRACTOR) IN IDAHO COORDINATE SYSTEM OF 1983 WEST ZONE (NAD83) 2011 ON GRID.
- 2.) THE SURVEY MONUMENT POSITIONS WERE BASED UPON GPS BASE POINT POSITIONS ESTABLISHED BY ANOTHER FIRM. WE UNDERSTAND THEIR DATA TO BE ON THE IDAHO COORDINATE SYSTEM OF 1983 WEST ZONE (NAD83) 2007 ON GRID. WE COMPARED THIS DATA TO ADJACENT PROJECT DATA OF OUR OWN AND FOUND IT TO MORE CLOSELY MATCH (NAD83) 2011 ON GRID. NO ADDITIONAL CONFIRMATION OR VERIFICATION WAS COMPLETED BY WELCH COMER.
- 3.) PARCEL LINE WORK SHOWN IS BASED UPON THE BONNER COUNTY GIS WEBSITE. FOR MORE INFORMATION, PLEASE CONTACT THE BONNER COUNTY ASSESSOR'S OFFICE. <https://www.bonnercountyid.gov/departments/gis>
- 4.) THE MONUMENTS SHOWN ON THIS SHEET WERE LOCATED IN ACCORDANCE WITH IDAHO STATUTE 55-1613. THIS SHEET SHOWS THE PHYSICAL EXISTENCE AND LOCATION OF THE MONUMENTS OF PROPERTY CONTROLLING CORNERS AND ACCESSORIES TO CORNERS, AS WELL AS BENCHMARKS ESTABLISHED AND POINTS SET IN CONTROL SURVEYS BY AGENCIES OF THE US GOVERNMENT OR THE STATE OF IDAHO, DETERMINED BY A FIELD SEARCH AND LOCATION SURVEY CONDUCTED BY OR UNDER THE DIRECTION OF A LICENSED PLS PRIOR TO THE TIME WHEN PROJECT CONSTRUCTION OR RELATED ACTIVITIES MAY DISTURB THEM. THERE IS NO GUARANTEE THAT ALL MONUMENTS ARE SHOWN OR THAT OTHER MONUMENTS MAY NOT BE DISCOVERED DURING CONSTRUCTION.
- 5.) CONTRACTOR SHALL SAVE AND PROTECT ALL MONUMENTS IN ACCORDANCE WITH C 55-1613 AND 54-1234. CONTRACTOR SHALL RE-ESTABLISH ALL MONUMENTS, ACCESSORIES TO CORNERS, BENCHMARKS AND POINTS SET IN CONTROL SURVEYS SHOWN ON THIS SHEET OR DISCOVERED DURING CONSTRUCTION THAT ARE LOST OR DISTURBED BY CONSTRUCTION. THE MONUMENTS SHALL BE RE-ESTABLISHED AND RE-MONUMENTED, AT THE EXPENSE OF THE CONTRACTOR, BY A LICENSED PLS. ANY MONUMENT SET SHALL CONFORM TO THE PROVISIONS OF IDAHO STATUTE 54-1227 AND REQUIRED RECORDS OF SURVEY AND CORNER PERPETUATION AND FILING (CP&F) RECORDS FILED WITH THE COUNTY RECORDS OFFICE PURSUANT TO IDAHO STATUTES 55-1904 AND 55-1604 RESPECTIVELY.



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 200'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026

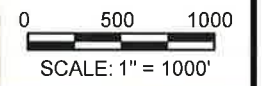
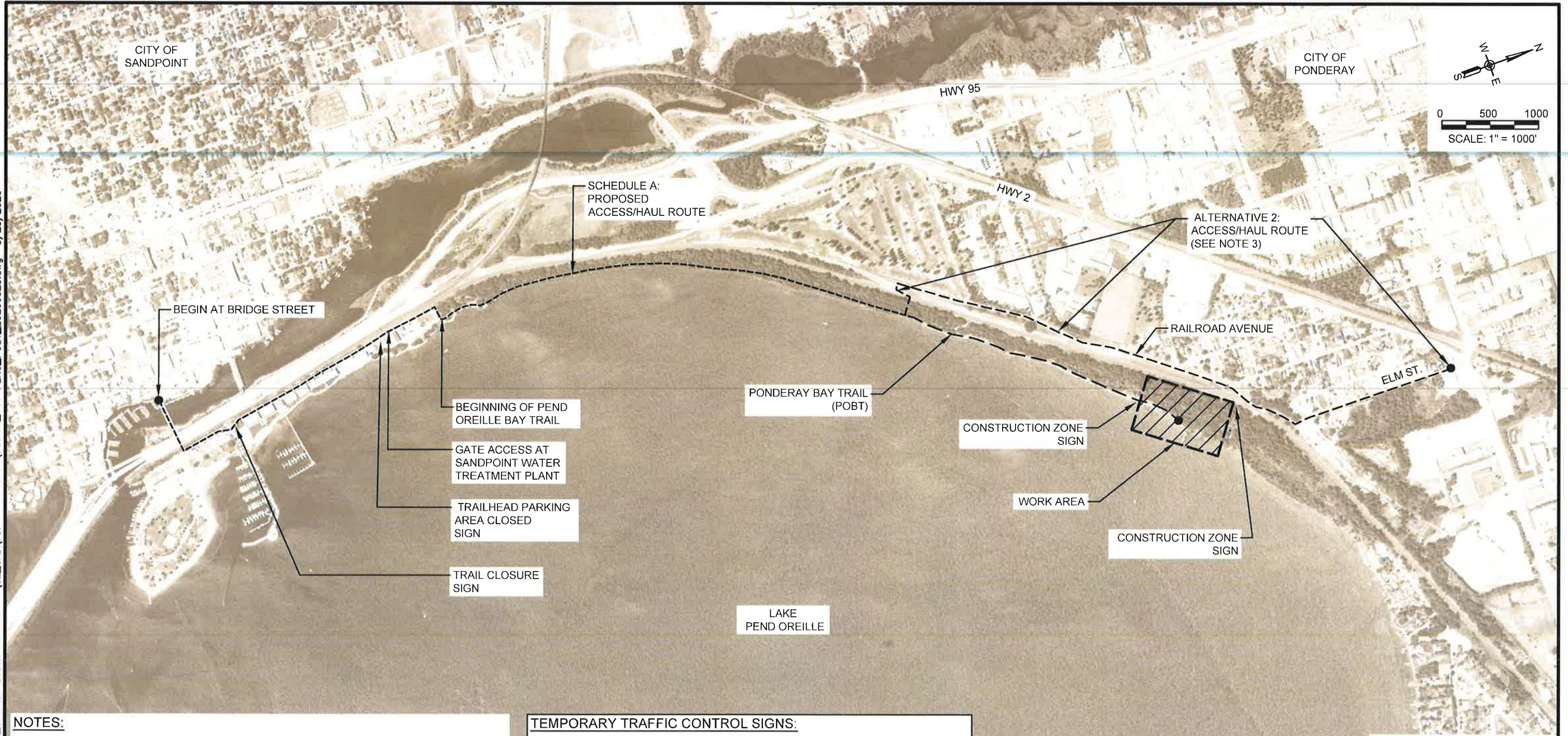


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**SURVEY INFORMATION**

SHEET:	G3
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	4 OF 30

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- NOTES:**
- 1.) CLEAR AND GRUB THE ACCESS/HAUL ROUTE TO CREATE APPROPRIATE ACCESS FOR CONSTRUCTION VEHICLES. FOR REMOVAL OF TREES GREATER THAN 6" DIA. PRIOR AUTHORIZATION FROM OWNER IS REQUIRED.
  - 2.) REPAIR TRAIL IN AREAS WHERE CONSTRUCTION VEHICLES HAVE CAUSED RUTS, EROSION, CHANGE IN GRADE, OR HAVE CAUSED DAMAGE.
  - 3.) ALTERNATIVE 2 OPTIONAL HAUL ROUTE STARTING AT ELM STREET. CONTRACTOR WOULD BE RESPONSIBLE FOR ALL TEMPORARY CROSSING PERMIT(S), INSURANCE, RESTORATION OF ROUTE TO ORIGINAL CONDITION, AND COORDINATION WITH BNSF.
  - 4.) TEMPORARY TRAFFIC CONTROL SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE OWNER AND ENGINEER PRIOR TO PLACEMENT. TYPICAL SIZE OF EACH SIGN SHALL BE 36" x 36".

**TEMPORARY TRAFFIC CONTROL SIGNS:**



CONSTRUCTION ZONE



TRAIL CLOSURE



TRAILHEAD PARKING CLOSURE



**CONSTRUCTION SET**

NO	DATE	REVISIONS	BY	CHK	DATE	DRAFTER: B. ROLLINS	DESIGNER: C. MACPHERSON	CHECKED: D. FORSETH	DATE: 06/27/2024	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT	SCALE: 1" = 1000'	APPROVED: D. FORSETH	DATE: 03/25/2026
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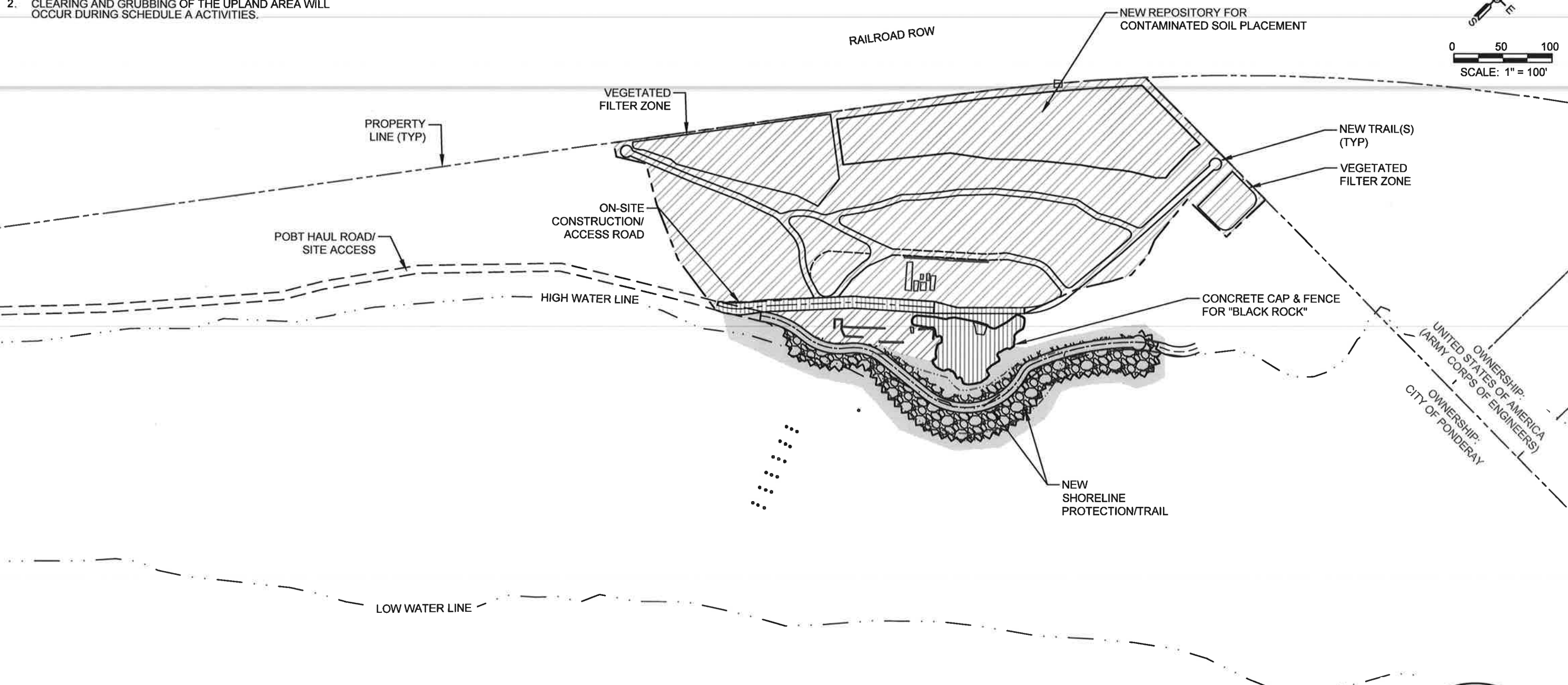
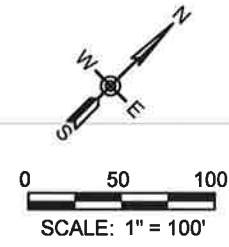
**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**ACCESS/HAUL ROUTE PLAN VIEW**

SHEET:	O1
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	5 OF 30

**NOTES:**

1. OWNERSHIP OF PROPERTY/PARCEL(S) SHOWN ARE THE "CITY OF PONDERAY" UNLESS OTHERWISE NOTED.
2. CLEARING AND GRUBBING OF THE UPLAND AREA WILL OCCUR DURING SCHEDULE A ACTIVITIES.



- SCHEDULE A - SLAG PILE CAP
- SCHEDULE B - UPLAND WORK AND REPOSITORY
- SCHEDULE B - SHORELINE WORK



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 100'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



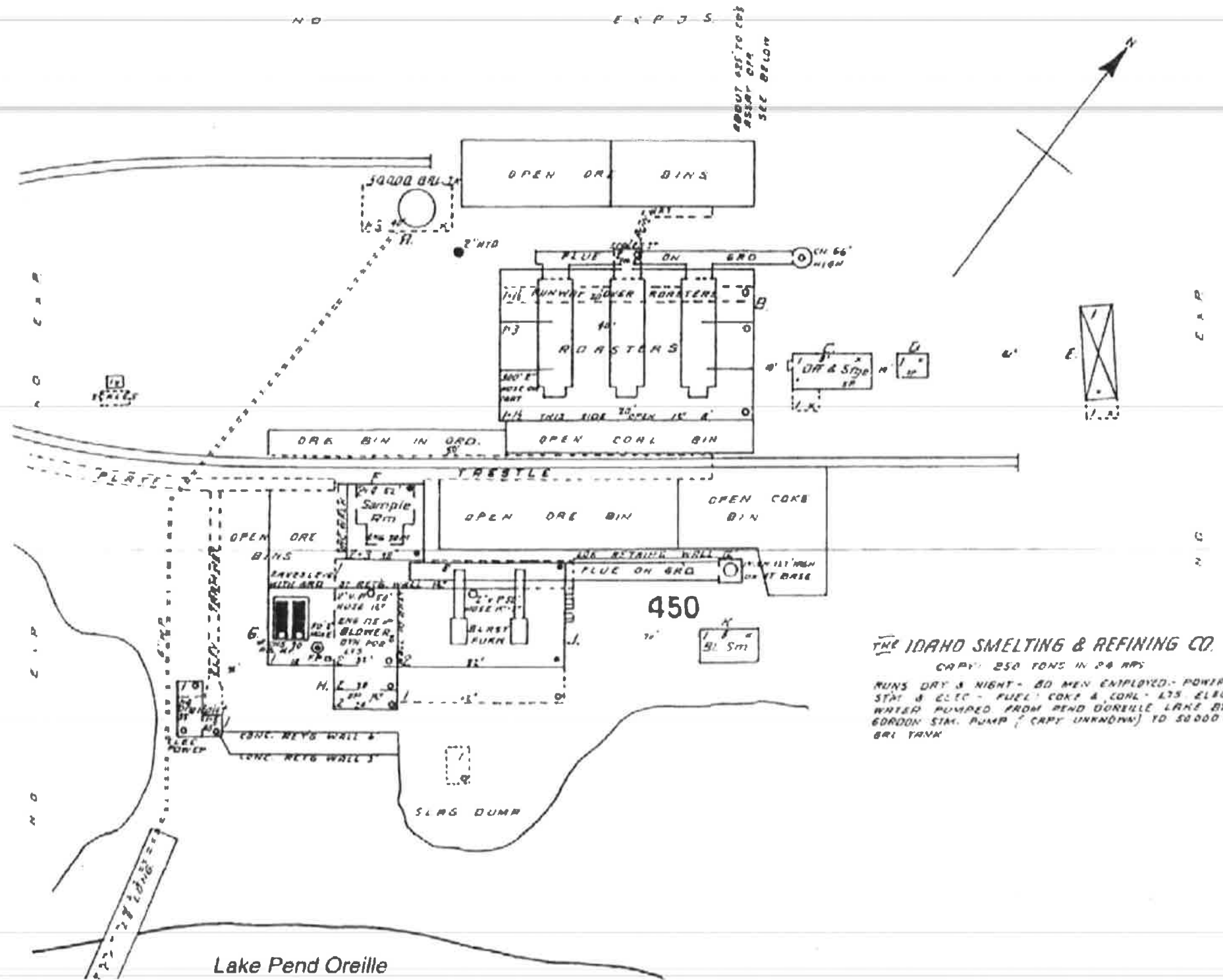
**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**PROJECT OVERVIEW**  
**PLAN VIEW**

SHEET:	O2
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	6 OF 30

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THE IDAHO SMELTING & REFINING CO.  
 CAPY: 250 TONS IN 24 HRS  
 RUNS DAY & NIGHT - 80 MEN EMPLOYED - POWER  
 SUPPLY & ELEC - FUEL: COKE & COAL - 175 ELBC  
 WATER PUMPED FROM PEND OREILLE LAKE BY  
 60000 GAL PUMP (CAPY UNKNOWN) TO 50000  
 GAL TANK



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	NTS
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026

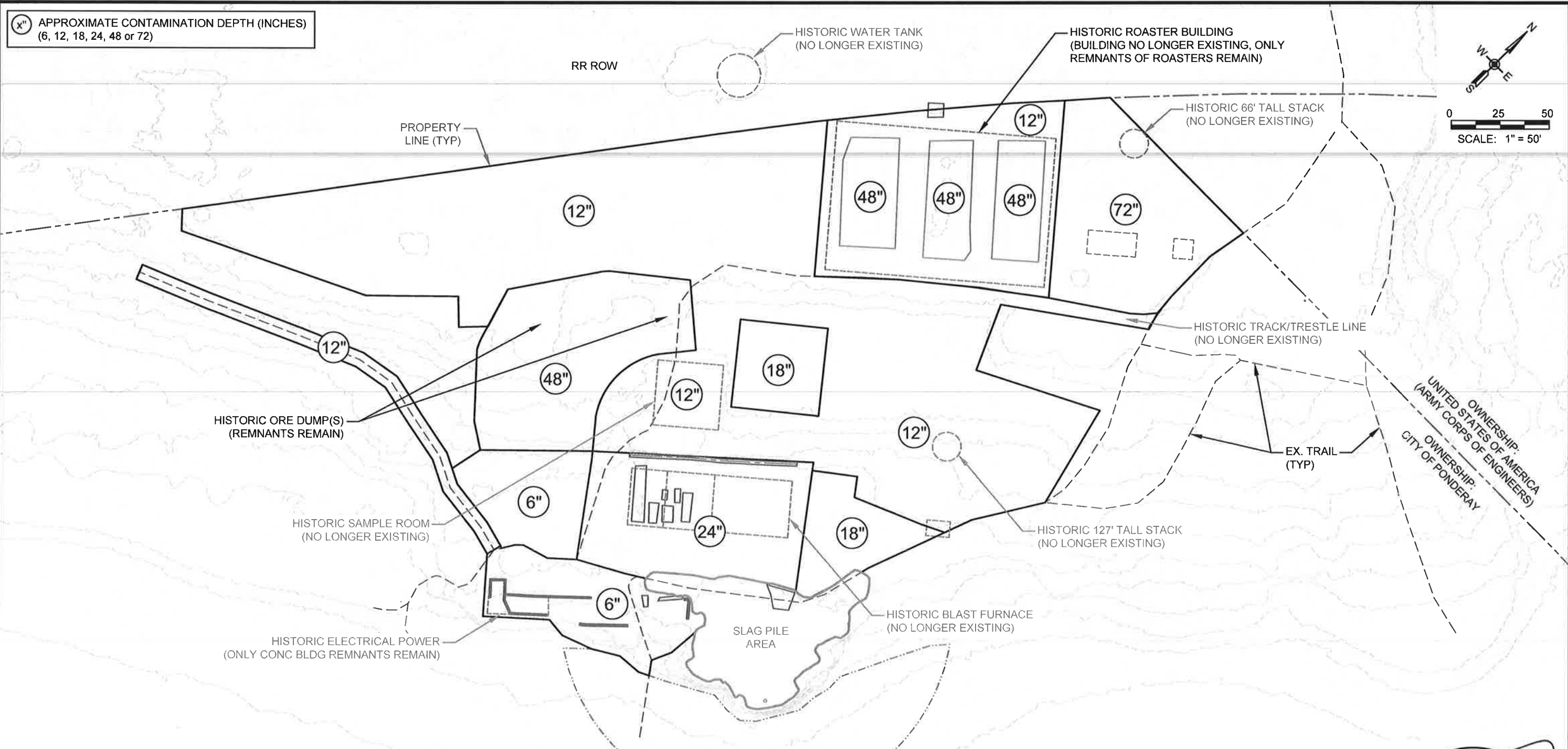
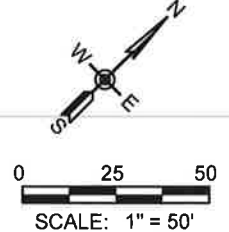


**PONDERAY REMEDIATION AND  
 LAKESHORE ENHANCEMENT**  
 BONNER COUNTY, ID

**HISTORIC SITE LAYOUT  
 PLAN VIEW**

SHEET:	O3
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	7 OF 30

ⓧ APPROXIMATE CONTAMINATION DEPTH (INCHES)  
(6, 12, 18, 24, 48 or 72)



**NOTES:**

- 1.) SUBSURFACE CONDITIONS ARE APPROXIMATE. IT IS ANTICIPATED THAT UNKNOWN STRUCTURES/EQUIPMENT/AND MATERIALS MAY BE UNCOVERED DURING CONTAMINATED SOIL REMOVAL AND REPOSITORY CONSTRUCTION. NOTIFY THE ENGINEER IF UNANTICIPATED STRUCTURES/EQUIPMENT/AND MATERIALS ARE ENCOUNTERED THAT CANNOT BE EASILY EXCAVATED OR REMOVED.
- 2.) CONTAMINATED DEPTHS MAY VARY FROM EXCAVATION AND REMOVAL DEPTHS.



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	06/27/2024	DATE:	03/25/2026



**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

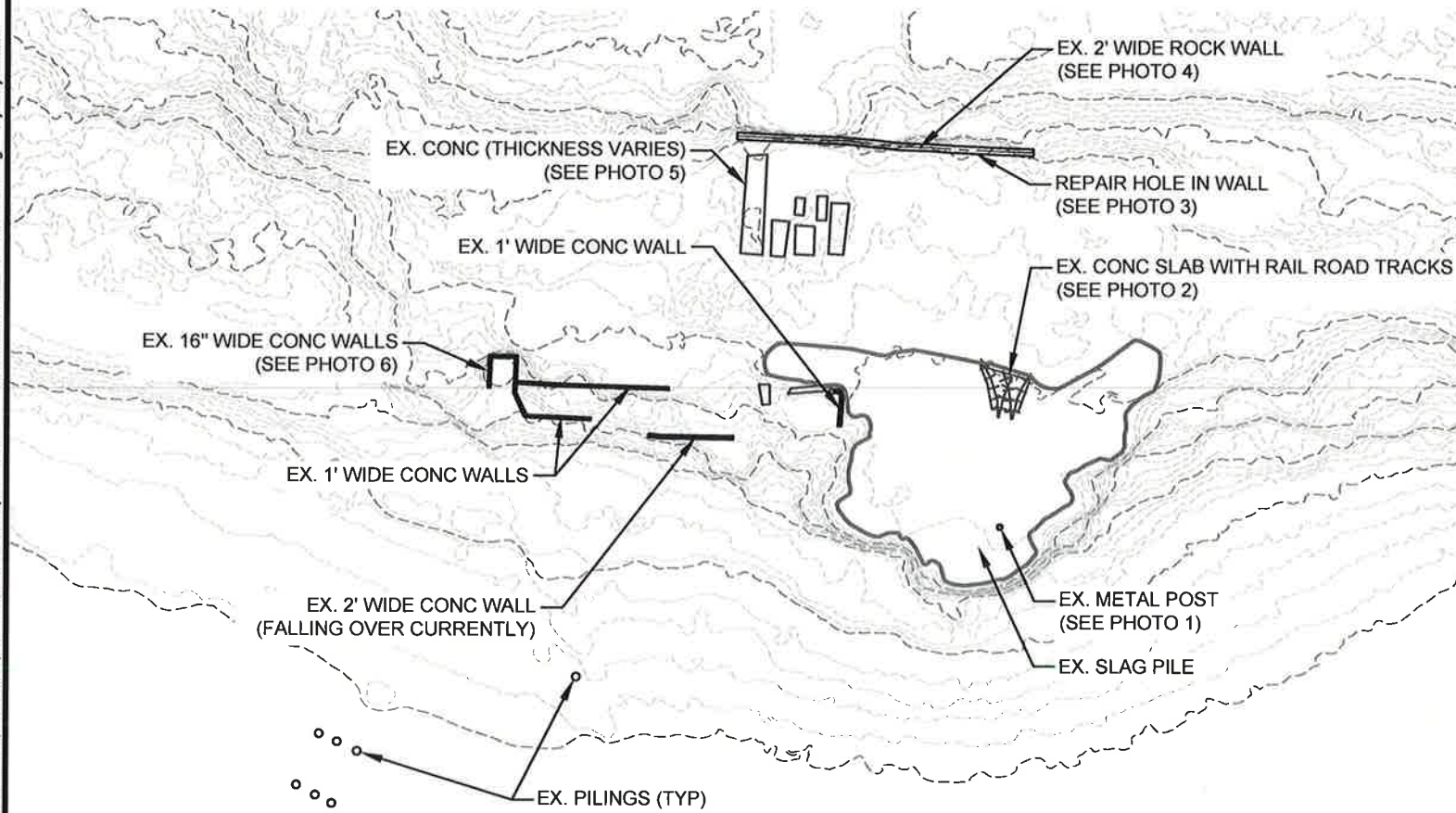
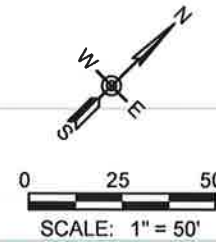
**CONTAMINATED SOIL DEPTHS & HISTORIC FEATURES OVERVIEW**

SHEET:	O4
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	8 OF 30

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**GENERAL NOTES:**

- 1.) HAND DIG AROUND ALL WALLS, CONC, ANY OTHER PRESERVE AND PROTECT FEATURES.
- 2.) EX. CONC SLABS. EXCAVATE 24" OR TO THE TOP OF THE EX. CONC SLAB.



1.) PRESERVE AND PROTECT. FORM CONCRETE AROUND POSTS. SEE SHEET C4



2.) PRESERVE AND PROTECT. CLEAN OUT AND EXCAVATE SOIL AROUND THE EXISTING SLAB AND METAL RAIL IN PREPARATION FOR NEW BLACK ROCK CONC SLAB. FORM CONCRETE AROUND EX. SLAB AND RAILROAD TRACKS. SEE SHEET C4



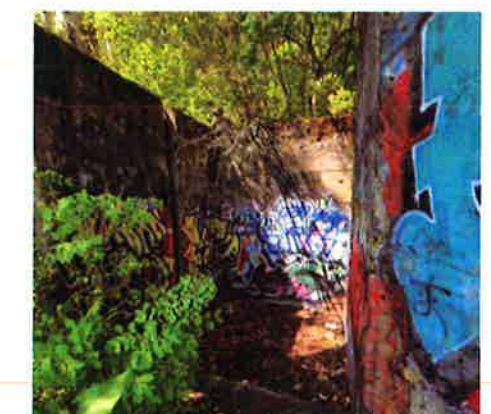
3.) REPAIR EXISTING HOLE IN 2' WIDE ROCK WALL. REMOVE LOOSE MATERIAL AND DIRT BEFORE REPAIRING. USE EXISTING ROCKS IN SITE AREA TO REPAIR WALL. USE TYPE "N" MORTAR.



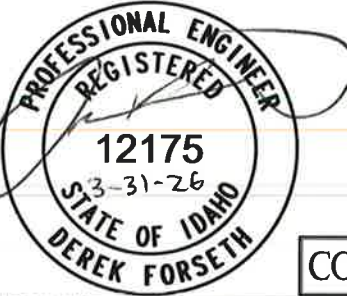
4.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND ROCK WALL. EXCAVATE SOIL ON THE NW SIDE OF THE WALL UNTIL 42" OF THE LOWEST POINT ON THE WALL IS EXPOSED. SEE SHEET C8-B FOR GRADING PLAN. SEE SHEET C6 FOR TRAIL AND FRENCH MATTRESS DETAILS.



5.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND EX. CONC STRUCTURES. REMOVE AS MUCH SOIL/MATERIAL AS POSSIBLE WITHOUT DISTURBING THE PHYSICAL STRUCTURES. POWER WASH CONC AFTER ALL EXCAVATION ACTIVITIES HAVE BEEN COMPLETED. SEE SHEET C5 FOR EXCAVATION PLAN AND SHEET C6 FOR GRADING PLAN.



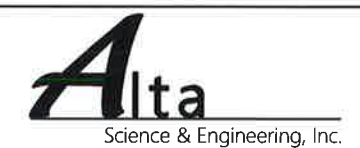
6.) CAREFULLY REMOVE VEGETATION GROWING ON AND AROUND EX CONC WALLS. SEE SHEET C6 FOR GRADING PLAN.



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	06/27/2024	DATE:	03/25/2026



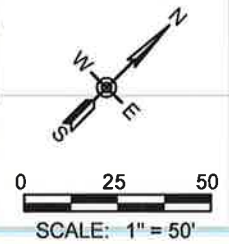
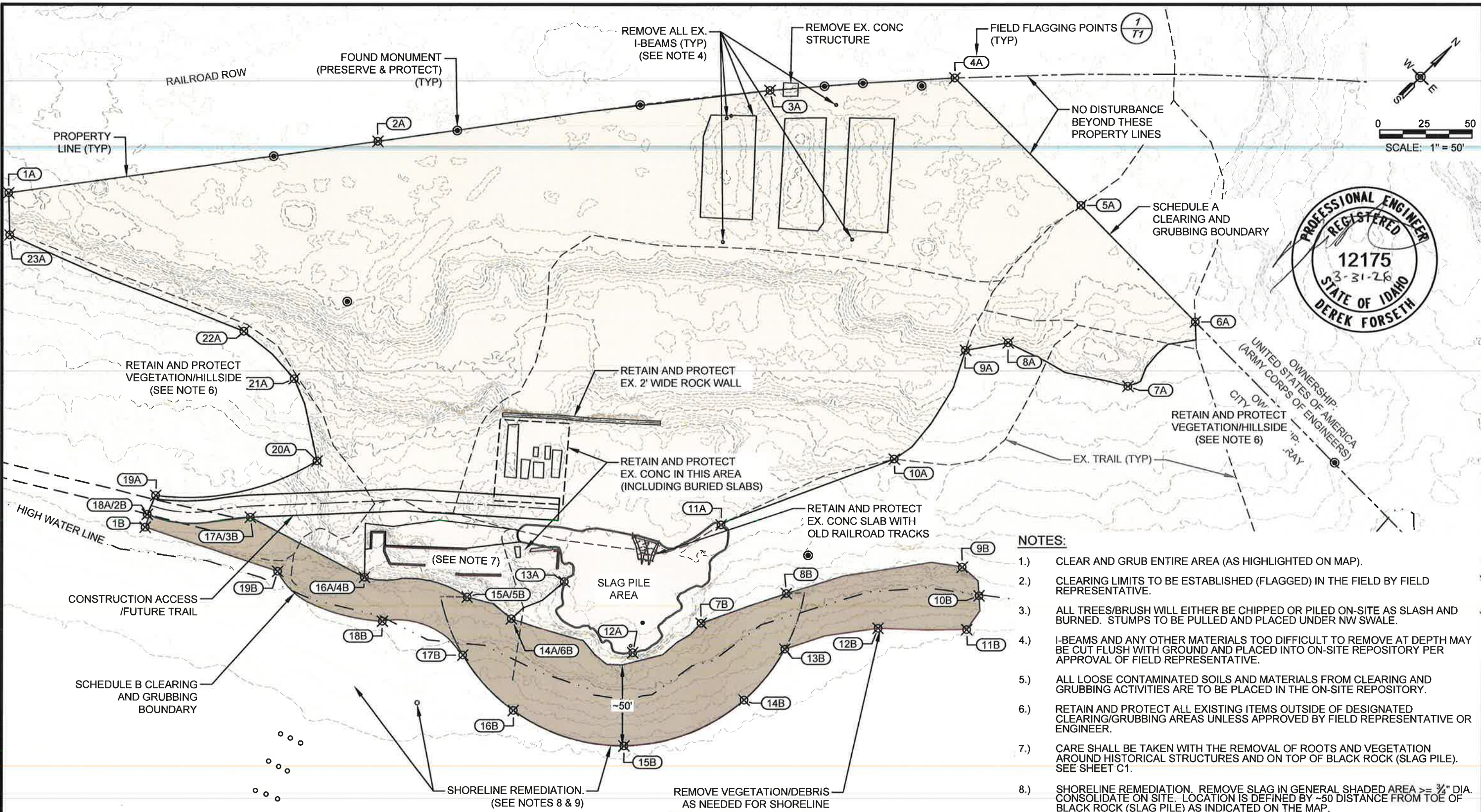
**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**SCHEDULES A & B PRESERVE & PROTECT HISTORICAL ITEMS**

SHEET:	C1
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	9 OF 30

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**NOTES:**

- 1.) CLEAR AND GRUB ENTIRE AREA (AS HIGHLIGHTED ON MAP).
- 2.) CLEARING LIMITS TO BE ESTABLISHED (FLAGGED) IN THE FIELD BY FIELD REPRESENTATIVE.
- 3.) ALL TREES/BRUSH WILL EITHER BE CHIPPED OR PILED ON-SITE AS SLASH AND BURNED. STUMPS TO BE PULLED AND PLACED UNDER NW SWALE.
- 4.) I-BEAMS AND ANY OTHER MATERIALS TOO DIFFICULT TO REMOVE AT DEPTH MAY BE CUT FLUSH WITH GROUND AND PLACED INTO ON-SITE REPOSITORY PER APPROVAL OF FIELD REPRESENTATIVE.
- 5.) ALL LOOSE CONTAMINATED SOILS AND MATERIALS FROM CLEARING AND GRUBBING ACTIVITIES ARE TO BE PLACED IN THE ON-SITE REPOSITORY.
- 6.) RETAIN AND PROTECT ALL EXISTING ITEMS OUTSIDE OF DESIGNATED CLEARING/GRUBBING AREAS UNLESS APPROVED BY FIELD REPRESENTATIVE OR ENGINEER.
- 7.) CARE SHALL BE TAKEN WITH THE REMOVAL OF ROOTS AND VEGETATION AROUND HISTORICAL STRUCTURES AND ON TOP OF BLACK ROCK (SLAG PILE). SEE SHEET C1.
- 8.) SHORELINE REMEDIATION. REMOVE SLAG IN GENERAL SHADED AREA  $\geq \frac{3}{4}$ " DIA. CONSOLIDATE ON SITE. LOCATION IS DEFINED BY  $\sim 50'$  DISTANCE FROM TOE OF BLACK ROCK (SLAG PILE) AS INDICATED ON THE MAP.
- 9.) REMOVE AND DISPOSE OF ALL REMAINING WOOD AND DEBRIS ON BEACH AREA (RETAIN ALL PILINGS (TYP)).

**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	
DRAFTER:		B. ROLLINS		COORDINATE SYSTEM:	
DESIGNER:		C. MACPHERSON		ISPW NAD83 (2011) US FT	
CHECKED:		D. FORSETH		SCALE:	
DATE:		06/27/2024		1" = 50'	
APPROVED:		D. FORSETH		APPROVED:	
DATE:		03/25/2026		D. FORSETH	



**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**SCHEDULE A & B CLEARING AND GRUBBING**

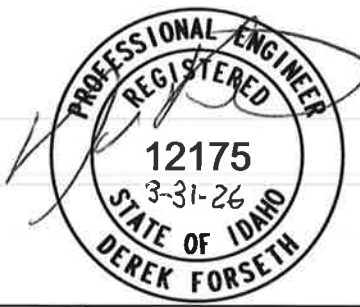
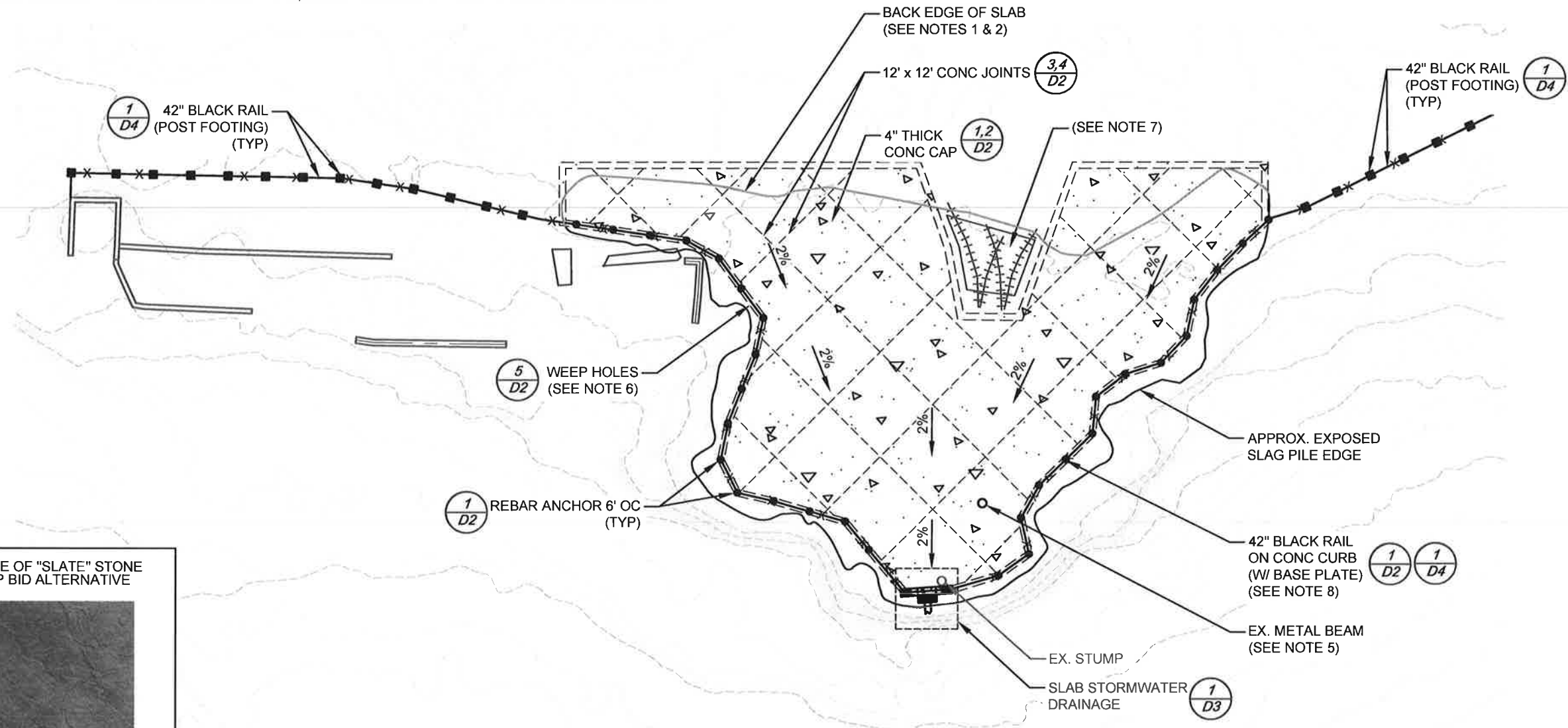
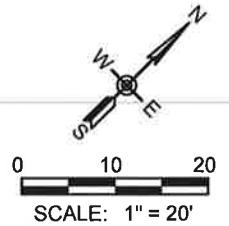
SHEET:	C2
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	10 OF 30



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**NOTES:**

- 1.) CLEAR AND GRUB AREA IN PREPARATION FOR DESIGN CONC SLAB (SEE SHEET C2).
- 2.) EXCAVATE AND PREPARE SUBGRADE FOR BACK EDGE OF THE DESIGN CONC SLAB PER SPECIFICATIONS. IT IS UNKNOWN WHERE THE BACK (LAND SIDE) EDGE IS LOCATED. EXPLORATORY FIELD WORK WILL BE REQUIRED IN ORDER TO LOCATE GROUND SUITABLE FOR THE BACK EDGE OF THE DESIGN CONC SLAB.
- 3.) CONCRETE IS TO BE DYED BLACK USING IRON-OXIDE PIGMENT. REFERENCE SPECIFICATIONS FOR DETAILS.
- 4.) SLAB FINISH TO BE BROOMED OR STONE STAMPED. TO BE DETERMINED BY OWNER AFTER BIDDING.
- 5.) EXISTING METAL BEAM IS TO BE RETAINED AND PROTECTED. FORM REBAR AND CAST CONCRETE AROUND METAL BEAM.
- 6.) WEEP HOLES ARE TO BE PLACED EVERY 6' ALONG CONC CURB ON CAP (SEE SHEET D2).
- 7.) RETAIN & PROTECT EX. RAILROAD TRACKS AND SLAB (SEE SHEET C1).
- 8.) RAILING IS TO BE INSTALLED AFTER SCHEDULE B ACTIVITIES, AND IS CONSIDERED TO BE A PART OF SCHEDULE B.



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 20'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026

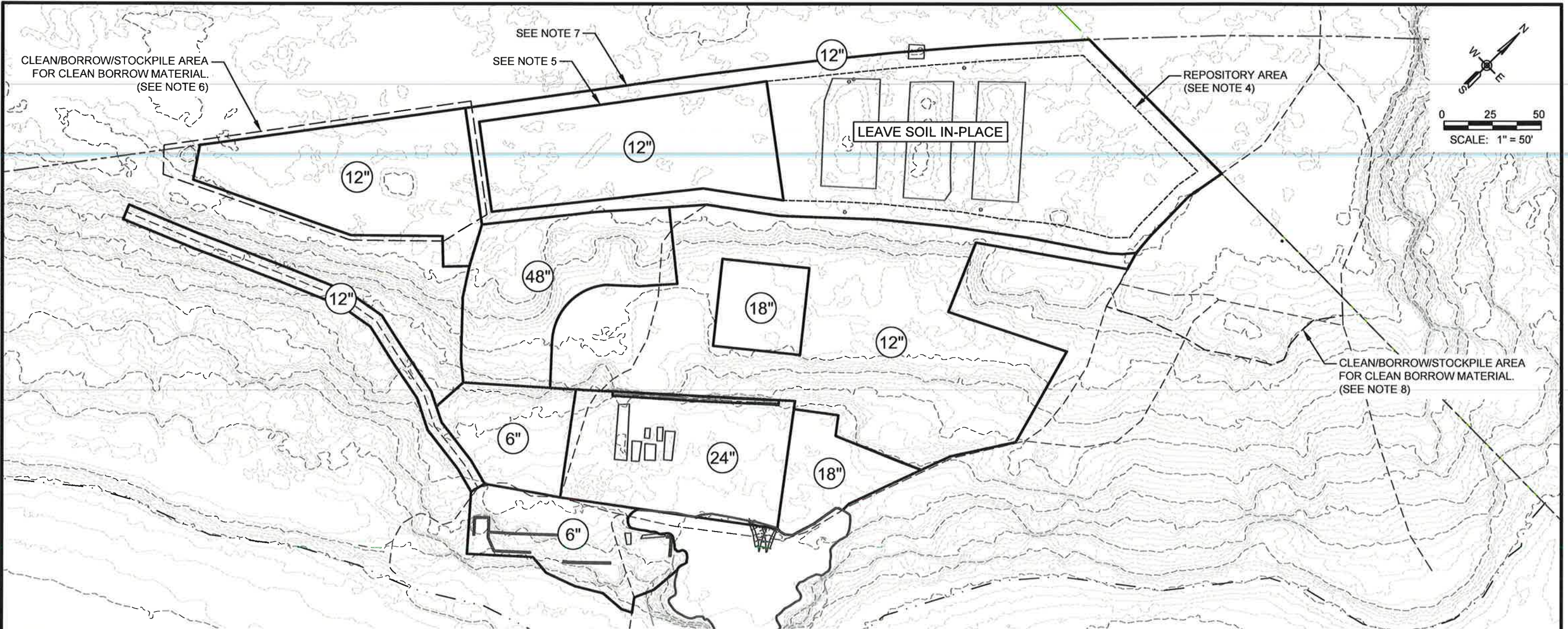


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SCHEDULE A SLAG CAP**

SHEET:	C4
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	12 OF 30

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**NOTES:**

- 1.) ALL CONTAMINATED SOIL/MATERIAL TO BE REMOVED TO DEPTHS SPECIFIED OR AS DIRECTED BY FIELD REPRESENTATIVE. CHASE MATERIAL AS DIRECTED BY FIELD REPRESENTATIVE AS NEEDED TO REMOVE ALL CONTAMINATION ALONG EDGES OF DESIGN REMOVAL AREAS.
- 2.) ALL CONTAMINATED SOIL/MATERIALS REMOVED WILL BE PLACED IN ON-SITE REPOSITORY. SEE SHEETS C6 AND C7 FOR REPOSITORY FOOTPRINT.
- 3.) DO NOT REMOVE SOIL UNDERNEATH STOCKPILE AREA UNTIL THE REPOSITORY HAS BEEN PREPARED TO ACCEPT CONTAMINATED SOIL.
- 4.) CONTAMINATED MATERIAL TO BE PILED IN THIS AREA. SEE SHEET C7 FOR HEIGHT AND SLOPE OF CONTAMINATED MATERIAL PLACEMENT.
- 5.) THE FIRST 12" OF SOIL ARE ASSUMED CONTAMINATED. REMOVE TOP 12" OF SOIL AND PLACE NE AREA OF REPOSITORY. THE REMAINING SOIL, DOWN TO A DEPTH OF AN ADDITIONAL 7', SHALL BE REMOVED AND STOCKPILED AS CLEAN COVER TO BE USED ON-SITE. ACQUIRE APPROVAL FROM FIELD REPRESENTATIVE PRIOR TO USING SOIL AS CLEAN BORROW.
- 6.) THIS AREA MAY BE UTILIZED FOR CLEAN BORROW WITH APPROVAL FROM FIELD REPRESENTATIVE. REMOVE TOP 12" OF CONTAMINATED MATERIAL, XRF AND SAMPLE SOIL UNDERNEATH BEFORE USING. PERMITTING THAT SOILS ARE NOT CONTAMINATED BELOW THE REMOVAL, BORROW MAY BE ACQUIRED TO 2108' ELEVATION. THIS AREA MAY ALSO BE USED FOR STOCK PILING CLEAN BORROW.
- 7.) REMOVE 12" DEPTH OF CONTAMINATED SOIL BETWEEN PROPERTY LINE AND REPOSITORY FOOTPRINT. PLACE CONTAMINATED SOIL INTO THE REPOSITORY. TOTAL EXCAVATION DEPTHS WILL VARY FOR DRAINAGE TRENCH CONSTRUCTION; EXCAVATE PER DETAILS ON SHEETS D5 AND D6. LEAVE A 2' BUFFER BETWEEN DRAINAGE TRENCH AND PROPERTY LINE.
- 8.) THIS AREA MAY BE UTILIZED FOR CLEAN BORROW WITH APPROVAL FROM FIELD REPRESENTATIVE. MATERIAL IN THIS AREA IS ASSUMED UNCONTAMINATED. THIS AREA MAY BE USED FOR STOCK PILING CLEAN BORROW.
- 9.) PRESERVE AND PROTECT ALL EXISTING HISTORICAL ITEMS. SEE SHEET C1.



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					DESIGNER: C. MACPHERSON	SCALE: 1" = 50'
					CHECKED: D. FORSETH	APPROVED: D. FORSETH
					DATE: 06/27/2024	DATE: 03/25/2026

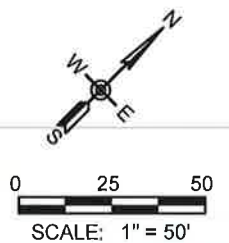
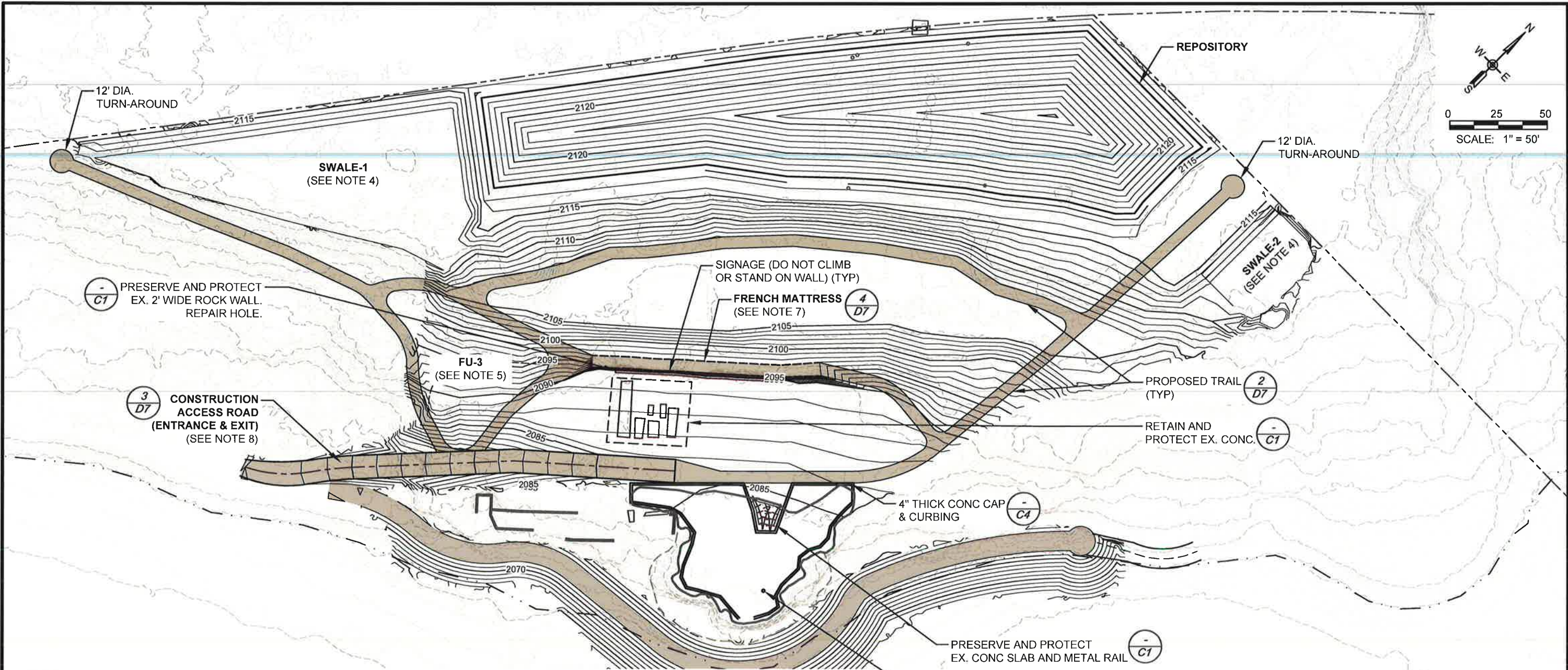


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SCHEDULE A  
 REMEDIATION DESIGN  
 REMOVAL DEPTHS  
 PLAN VIEW**

SHEET:	C5
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	13 OF 30

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**NOTES:**

- 1.) GRADING LIMITS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD.
- 2.) **SLOPES:** SLOPES VARY. GRADE AT A MAX 2:1 SLOPE.
- 3.) **GRADED AREAS:** PROVIDE AT LEAST 1' COVER AND GRADE/FLATTEN AREA TO TIE INTO SURROUNDING GRADES SMOOTHLY. ENSURE THAT THERE ARE NO AREAS IN WHICH STORM WATER CAN POOL.
- 4.) **SWALES:** FLATTEN AND GRADE AREA TO ELEVATION 2111.5' ON THE NW EDGE OF PROPERTY AND NE END OF REPOSITORY. GRADE 3:1 SLOPE UP TO ELEVATION 2115'. ENSURE THAT THERE ARE NO AREAS IN WHICH STORM WATER CAN POOL.
- 5.) **FU-3:** NO COVER REQUIRED. GRADE AND FLATTEN AREA TO TIE INTO SURROUNDING GRADES SMOOTHLY.
- 6.) **TRAIL (TYP):** ENSURE THAT TRAIL(S) SMOOTHLY TRANSITIONS TO SURROUNDING GRADES.
- 7.) **FRENCH MATTRESS:** DO NOT DISTURB EXISTING ROCK WALL WHILE INSTALLING MATERIALS.
- 8.) **CONSTRUCTION ENTRANCE/EXIT & ACCESS ROAD:** REFINISH WITH NEW GRAVEL AND TIE INTO NEW TRAIL SYSTEM AT END OF PROJECT.



**CONSTRUCTION SET**

**SCHEDULE A  
REMEDATION DESIGN  
GRADING INFORMATION  
PLAN VIEW**

SHEET:	C6
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	14 OF 30

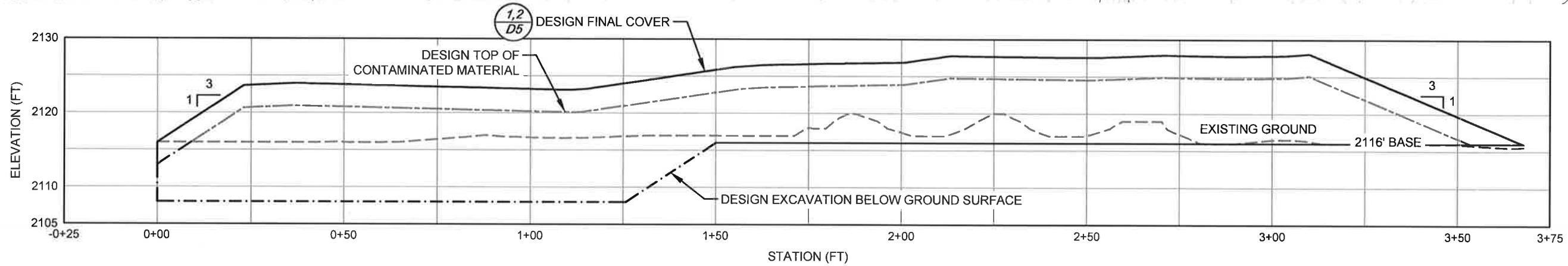
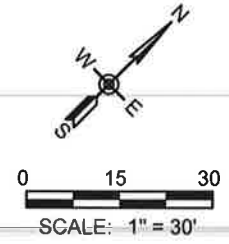
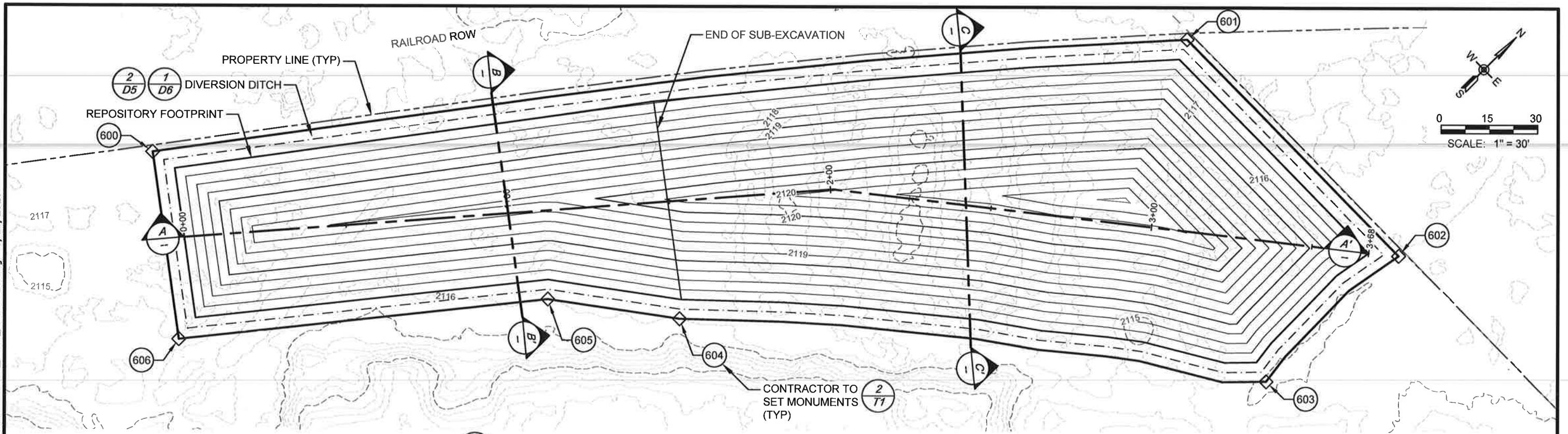
NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	06/27/2024	DATE:	03/25/2026



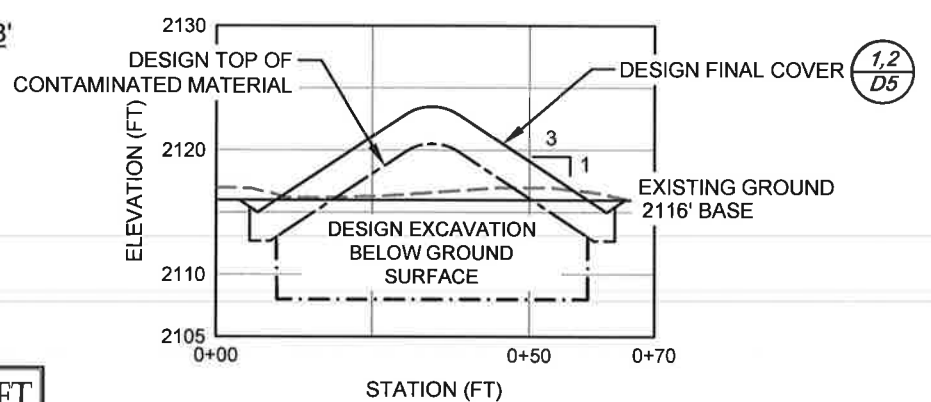
**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
  
**BONNER COUNTY, ID**

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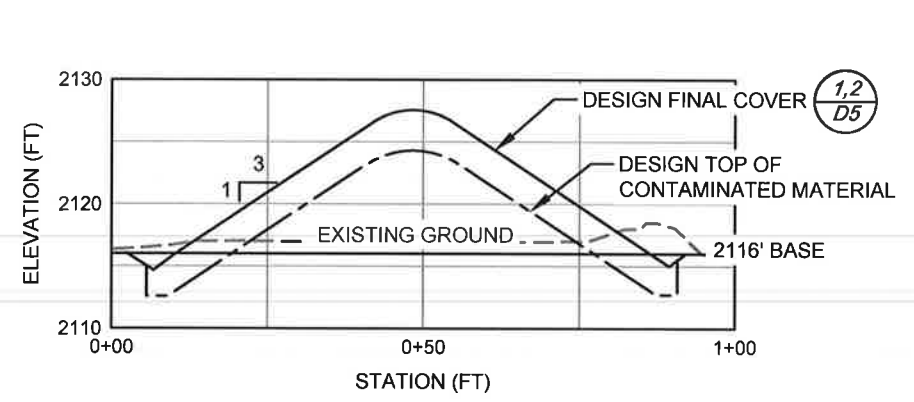


**A**  
PROFILE A - A'  
SCALE: VE = 2x

**B**  
SECTION B - B'  
SCALE: VE = 2x



**C**  
SECTION C - C'  
SCALE: VE = 2x



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 30'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
  
**BONNER COUNTY, ID**

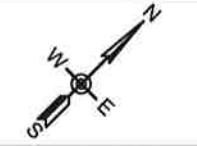
**SCHEDULE B  
REPOSITORY EXCAVATION,  
FILL, GRADING AND COVER  
PLAN VIEW**



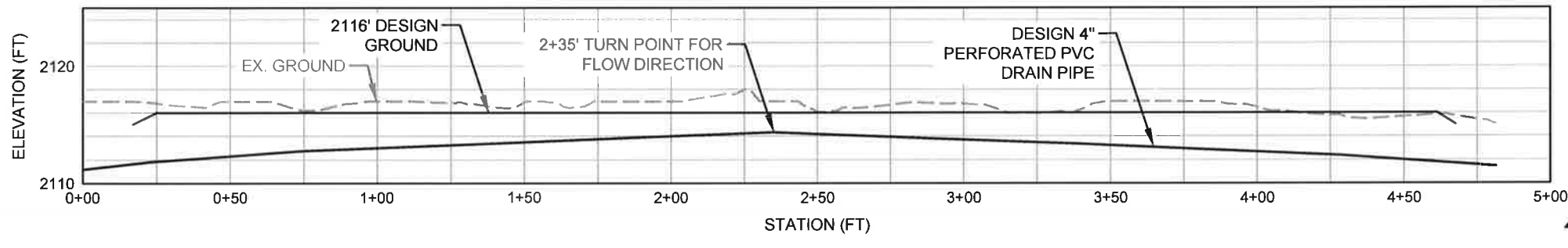
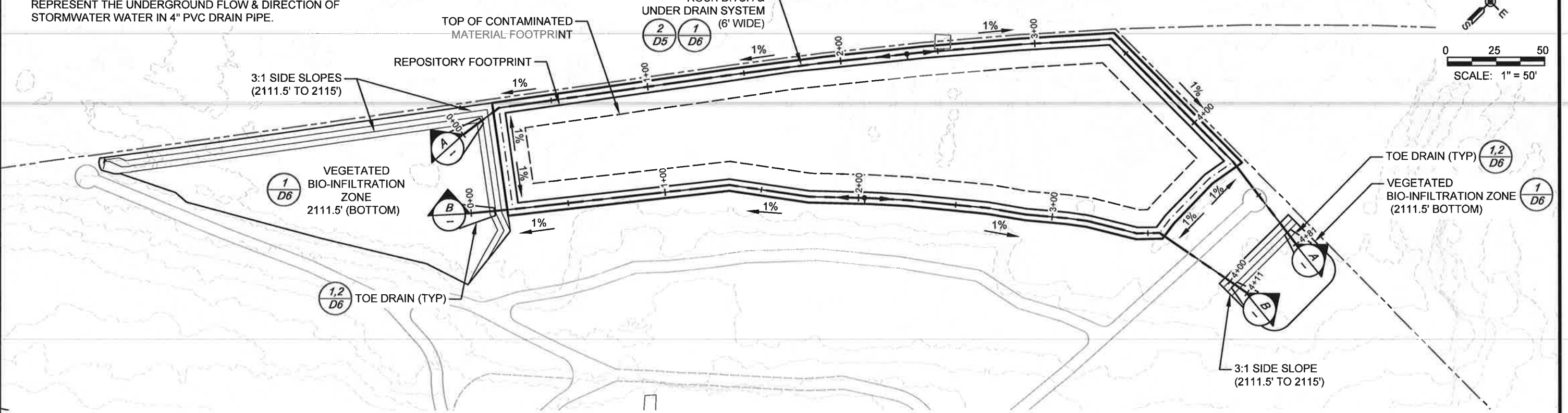
SHEET:	C7
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	15 OF 30

**NOTES:**

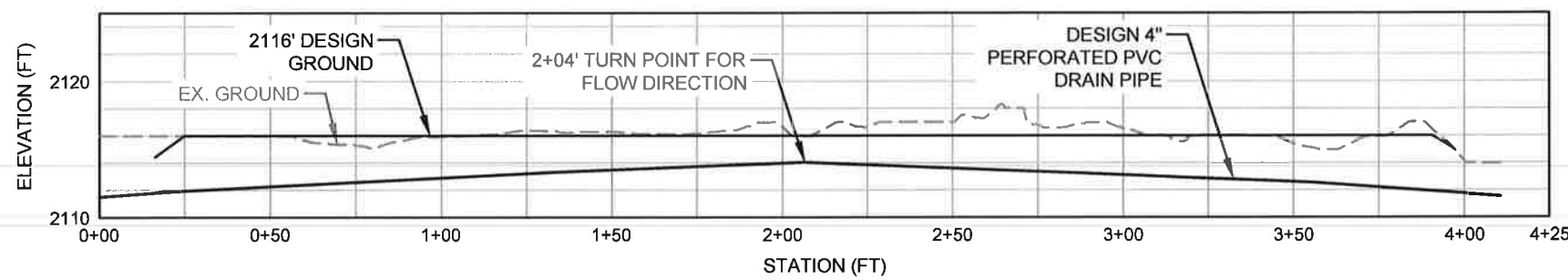
- SLOPE PERCENTAGES AND DIRECTIONAL ARROWS SHOWN REPRESENT THE UNDERGROUND FLOW & DIRECTION OF STORMWATER WATER IN 4" PVC DRAIN PIPE.



0 25 50  
SCALE: 1" = 50'



**PROFILE A - A**  
SCALE: VE = 4x



**PROFILE B - B**  
SCALE: VE = 4x



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

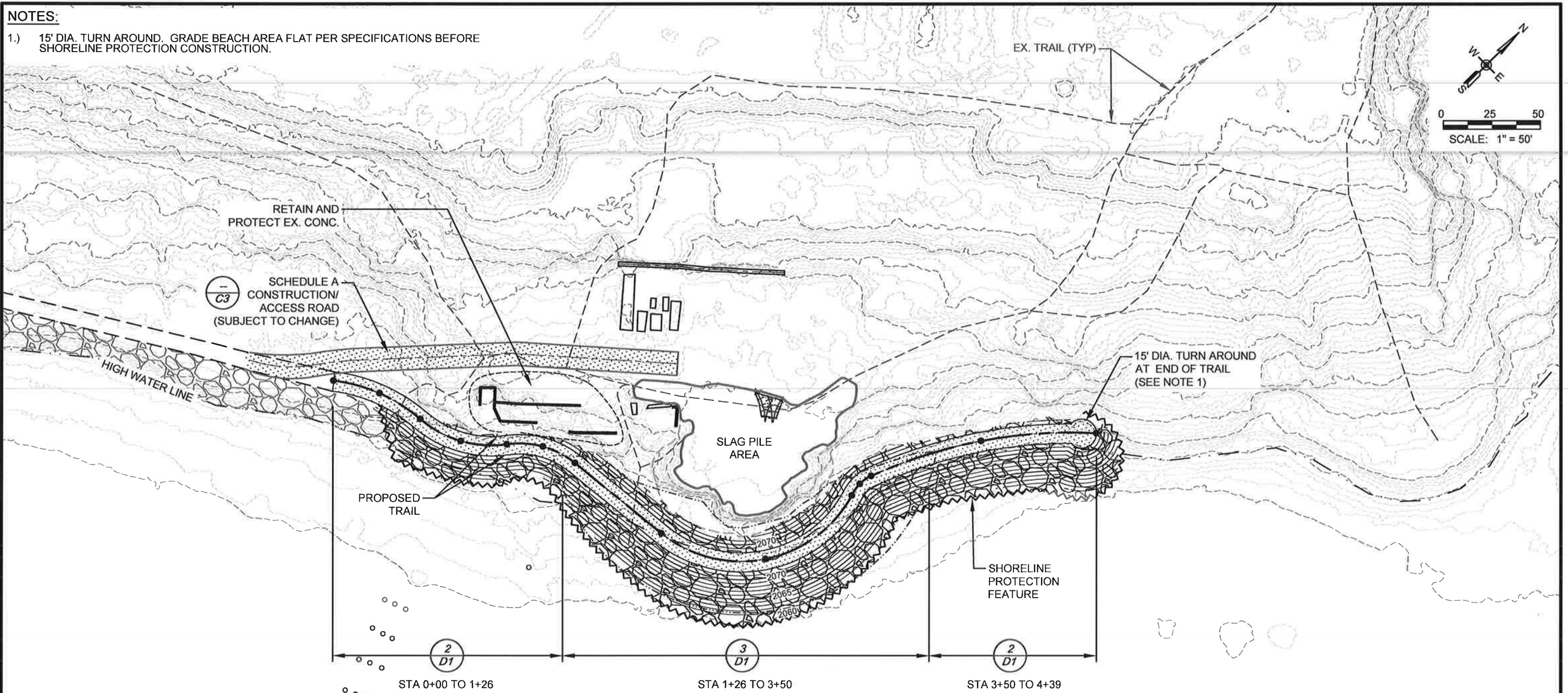
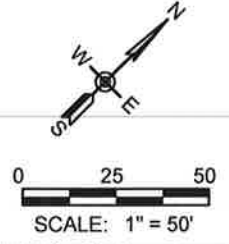
**SCHEDULE B REPOSITORY DRAINAGE SYSTEM**

SHEET:	C8
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	16 OF 30

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**NOTES:**

- 1.) 15' DIA. TURN AROUND. GRADE BEACH AREA FLAT PER SPECIFICATIONS BEFORE SHORELINE PROTECTION CONSTRUCTION.



Number	Start Station	End Station	Type	Radius (ft) / Direction	Arc/Line Length (ft)	Delta Angle (d)	Chord Length (ft)	Chord Direction	Start Point		Mid-Point		End Point		Degree of Curvature by Arc
									Easting	Northing	Easting	Northing	Easting	Northing	
1	0+00.00'	0+49.34'	Curve	82.32	49.34	34.34	48.61	N68° 57' 24.50"E	2,434,414.56	2,419,651.98	2,434,435.92	2,419,664.14	2,434,459.92	2,419,669.44	69.60
2	0+49.34'	0+96.93'	Curve	55.00	47.59	49.57	46.12	N61° 20' 27.26"E	2,434,459.92	2,419,669.44	2,434,482.59	2,419,676.05	2,434,500.39	2,419,691.56	104.17
3	0+96.93'	1+34.34'	Curve	45.00	37.41	47.63	36.34	N60° 22' 13.25"E	2,434,500.39	2,419,691.56	2,434,514.29	2,419,703.87	2,434,531.98	2,419,709.52	127.32
4	1+34.34'	1+91.61'	Line	N84° 11' 12.16"E	57.28				2,434,531.98	2,419,709.52	2,434,588.96	2,419,715.32	2,434,588.96	2,419,715.32	
5	1+91.61'	3+05.42'	Curve	64.62	113.81	100.91	99.66	N33° 43' 54.82"E	2,434,588.96	2,419,715.32	2,434,636.15	2,419,743.73	2,434,644.30	2,419,798.21	88.67
6	3+05.42'	3+19.94'	Curve	20.00	14.51	41.58	14.20	N0° 20' 13.22"W	2,434,644.30	2,419,798.21	2,434,642.96	2,419,805.30	2,434,644.22	2,419,812.40	286.48
7	3+19.94'	4+38.71'	Curve	246.81	118.78	27.57	117.63	N34° 14' 18.58"E	2,434,644.22	2,419,812.40	2,434,671.43	2,419,865.03	2,434,710.40	2,419,909.65	23.21



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	

DRAFTER: B. ROLLINS  
 DESIGNER: C. MACPHERSON  
 CHECKED: D. FORSETH  
 DATE: 06/27/2024

COORDINATE SYSTEM: ISPW NAD83 (2011) US FT  
 SCALE: 1" = 50'  
 APPROVED: D. FORSETH  
 DATE: 03/25/2026



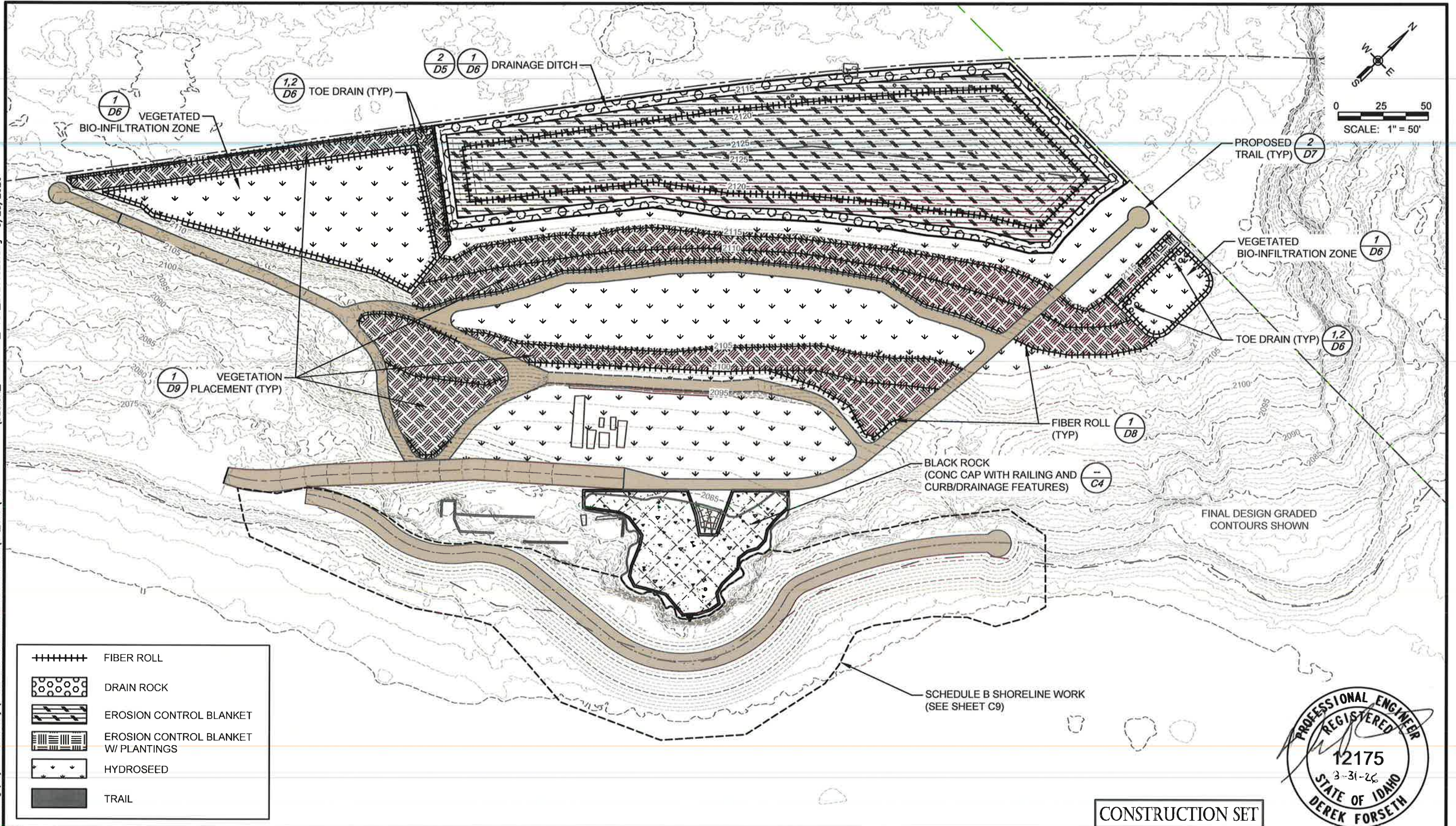
**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SCHEDULE B SHORELINE WORK**

SHEET:	C9
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	17 OF 30

V:\Projects\Engineering\City of Ponderay\POBT\_Smelter-Beach Remediation\02\_CAD\For Construction\DESIGN\_100 PERC\_POBT\_20260325.dwg 3/25/2026

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	FIBER ROLL
	DRAIN ROCK
	EROSION CONTROL BLANKET
	EROSION CONTROL BLANKET W/ PLANTINGS
	HYDROSEED
	TRAIL



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	1" = 50'
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026

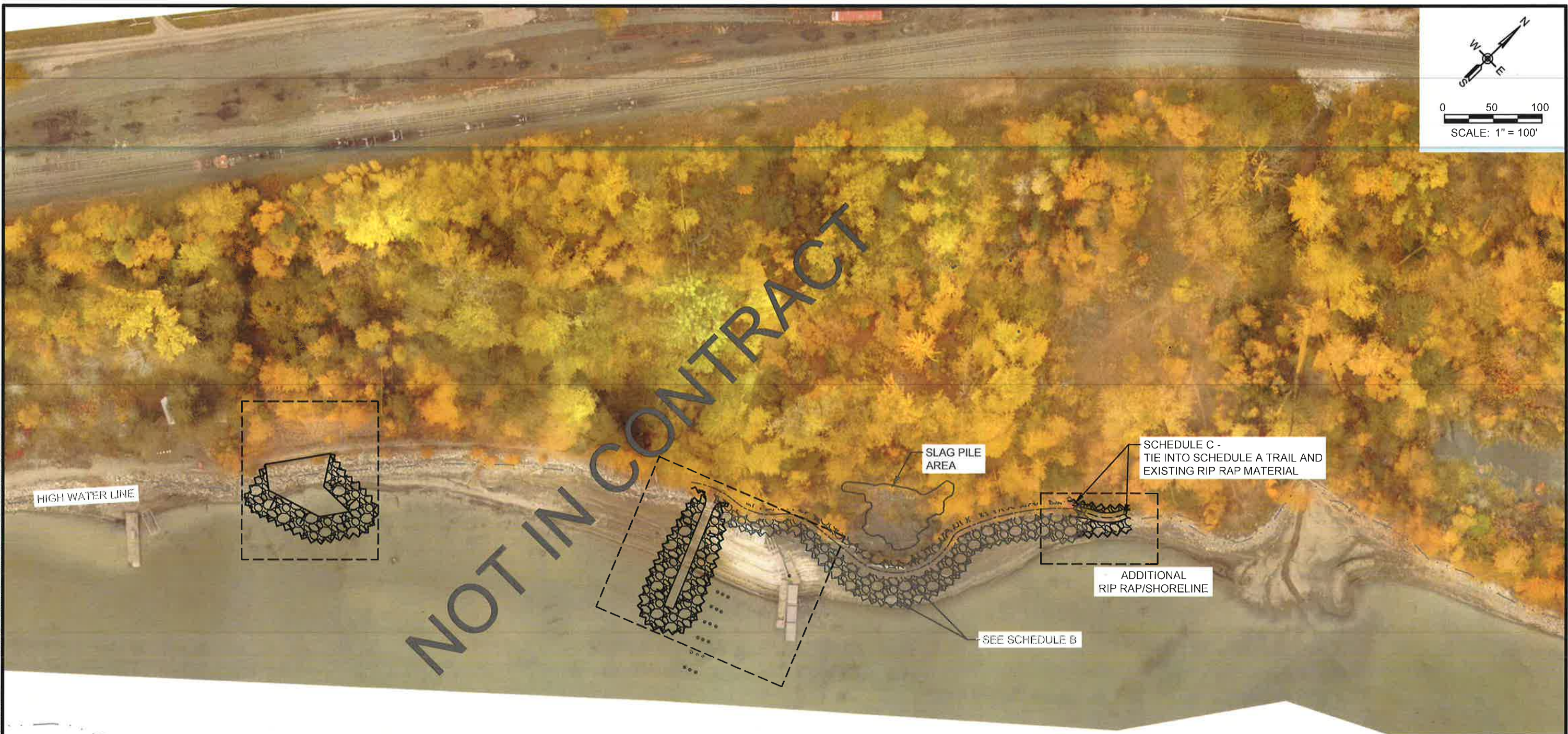
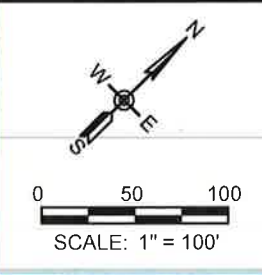


**PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SCHEDULE B EROSION CONTROL & RE-VEGETATION PLAN**

SHEET:	C10
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	18 OF 30

V:\Projects\Engineering\City of Ponderay\POBT\_Smelter-Beach Remediation\02\_CAD\For Construction\DESIGN\_100 PERC\_POBT\_20260325.dwg 3/25/2026



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					DESIGNER: C. MACPHERSON	SCALE: 1" = 100'
					CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	DATE:
					06/27/2024	03/25/2026



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

SCHEDULE C  
SHORELINE ENCROACHMENT

SHEET:	C11
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	19 OF 30

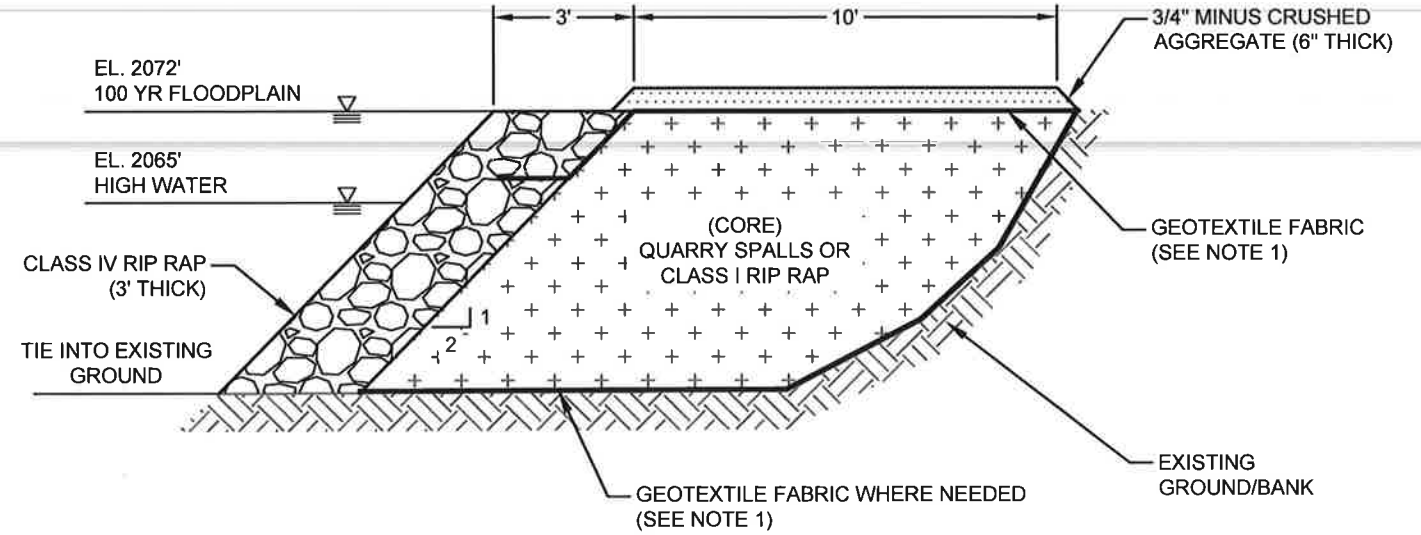
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Class	I	IV
100% Smaller Than	150#	800#
50% Size	50#	300#
90% Larger Than	25#	150#
10%	25#	25-150#
Tolerance	+4"	+8"

1. ASSUMING W = 165 LB/FT<sup>3</sup>
2. ASSUMES 1:2 SLOPE.
3. ASSUMES THAT THE L/W RATIO OF THE ROCK IS NO GREATER THAN 3.

EXAMPLE CLASS 1: 90% OF STONES SHALL RANGE BETWEEN 25 AND 150 POUNDS. THE 50% SIZE OF THE GRADATION SHALL BE 50 POUNDS. 10% OF THE STONES MAY BE 25 POUNDS.

ALL ROCK SHALL BE SOUND, CLEAN, ANGULAR, DURABLE STONE. ROUNDED ROCKS ARE NOT ACCEPTABLE. ACCEPTABILITY OF STONES WILL BE DETERMINED BY VISUAL INSPECTION, LABORATORY TESTS, AND/OR GEOLOGIC INSPECTION.



NOTES:

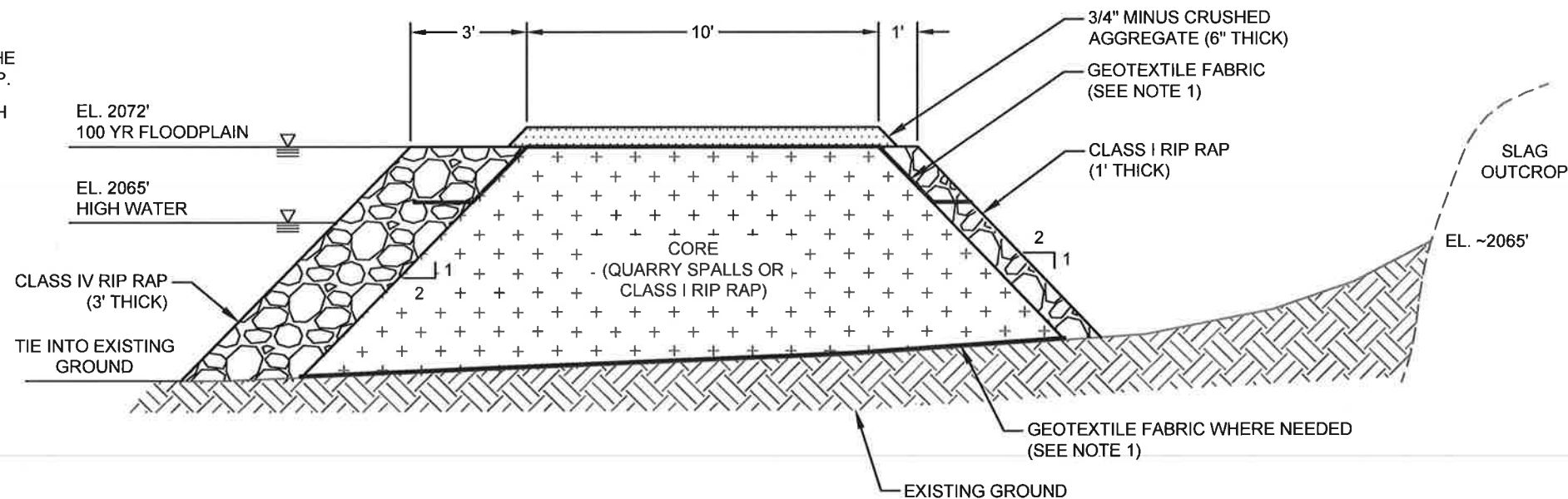
1. FILTER FABRIC TO BE USED WHERE SOFT SOIL NECESSITATES BETWEEN EX. GROUND AND STRUCTURE. PLACE FILTER FABRIC UNDERNEATH THE ENTIRE LENGTH OF TRAIL; ANCHOR BENEATH RIP RAP.
2. COMPACT CORE UNTIL REFUSAL FOR EVERY 1' OF ROCK PLACEMENT.
3. EXPECTED WINTER MIN. LAKE LEVEL = 2055'.

X-SECTION SHORELINE PROTECTION FEATURE (BEFORE/AFTER SLAG PILE)

2 SCALE: NTS

NOTES:

1. FILTER FABRIC TO BE USED WHERE SOFT SOIL NECESSITATES BETWEEN EX. GROUND AND STRUCTURE. PLACE FILTER FABRIC UNDERNEATH THE ENTIRE LENGTH OF TRAIL; ANCHOR BENEATH RIP RAP.
2. COMPACT CORE UNTIL REFUSAL FOR EVERY 1' DEPTH OF ROCK PLACEMENT.
3. EXPECTED WINTER MIN. LAKE LEVEL = 2055'.



3 X-SECTION SHORELINE PROTECTION FEATURE (SURROUNDING SLAG PILE) SCALE: NTS

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK	DATE	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
						DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
						CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
						DATE:	06/27/2024	DATE:	03/25/2026



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

SHORELINE PROTECTION DETAILS

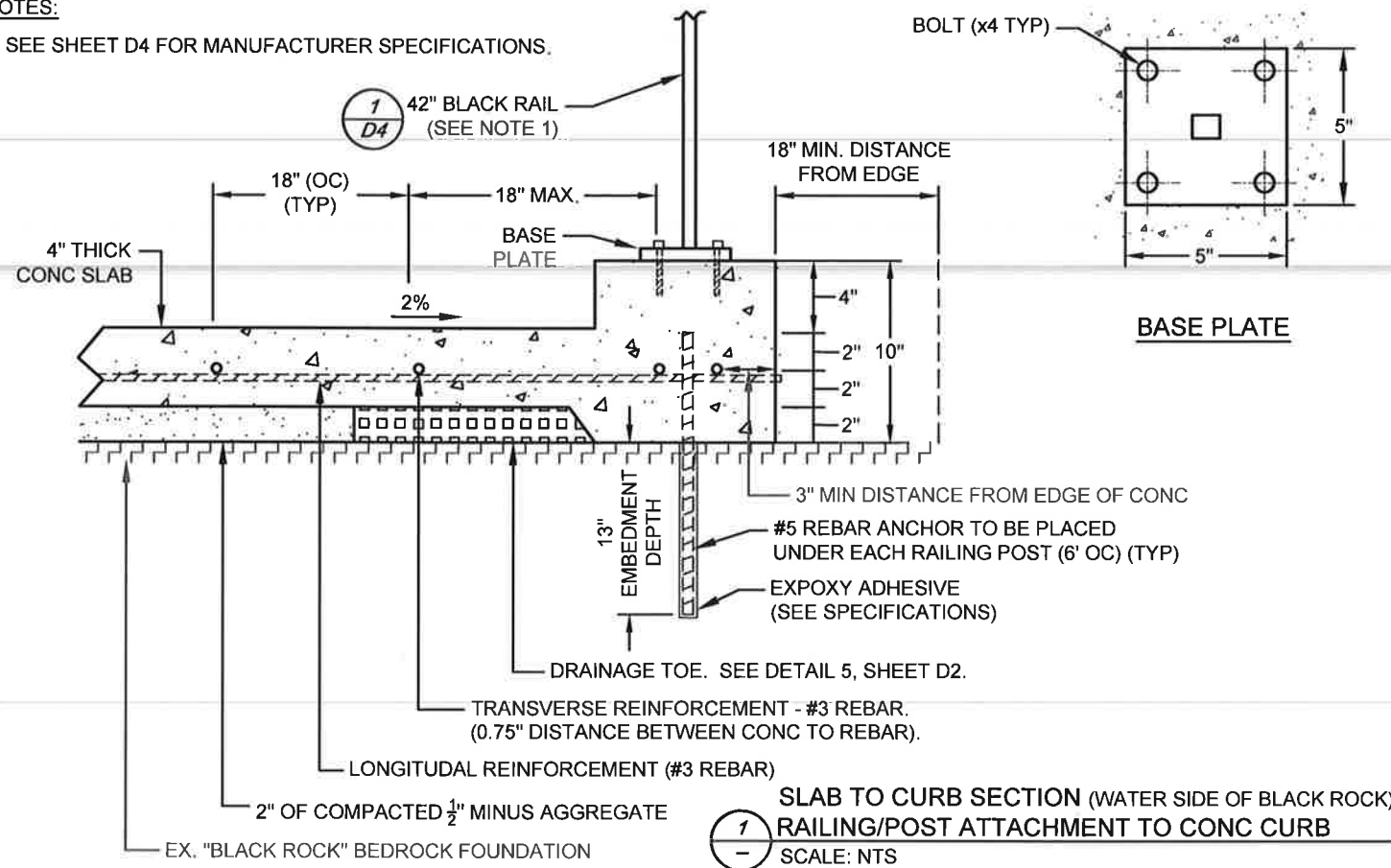


SHEET:	D1
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	20 OF 30

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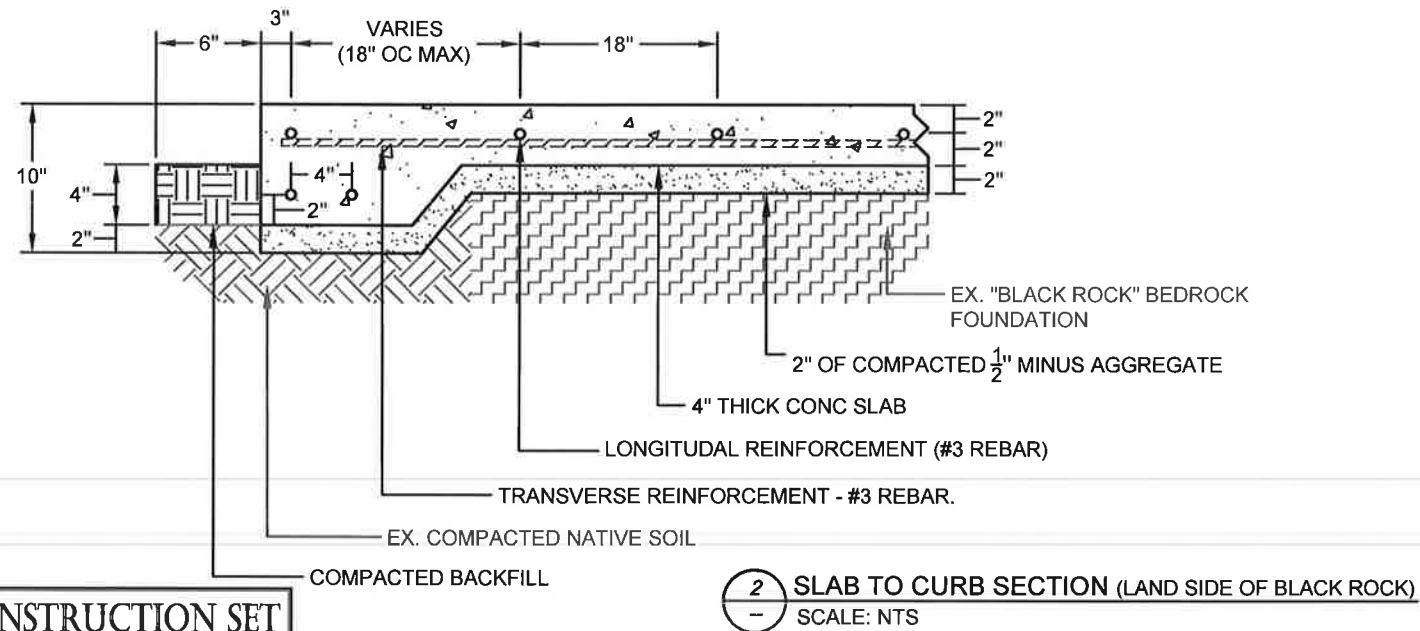
**NOTES:**

1. SEE SHEET D4 FOR MANUFACTURER SPECIFICATIONS.



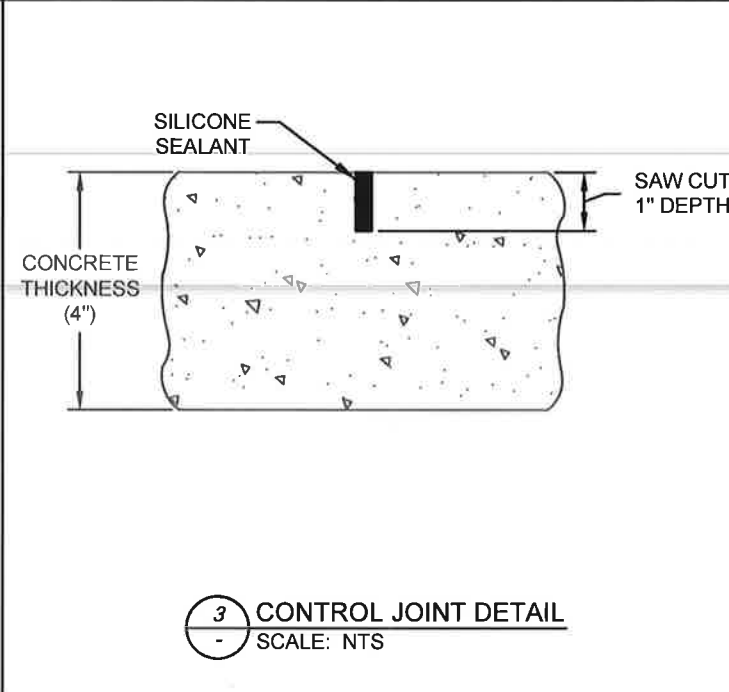
**NOTE:**

1. EXPLORATORY EXCAVATION WILL BE REQUIRED TO LOCATE THE EXTENT OF THE SLAG PILE BEFORE POURING THE LAND SIDE EDGE OF THE SLAB. THE SLAB TO CURB SECTION MUST REST ON COMPACTED SOIL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR FIELD REPRESENTATIVE.



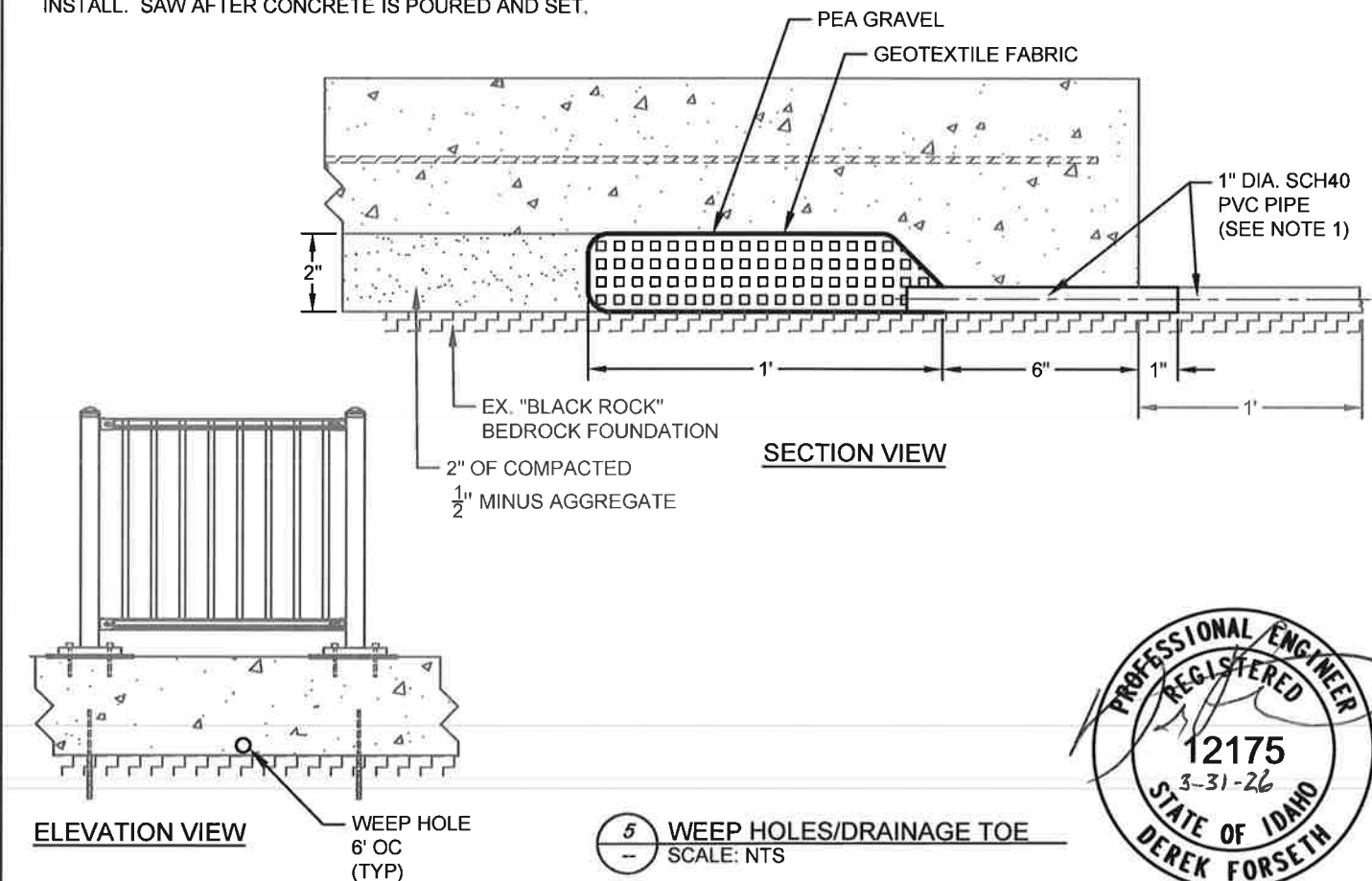
**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



**NOTES:**

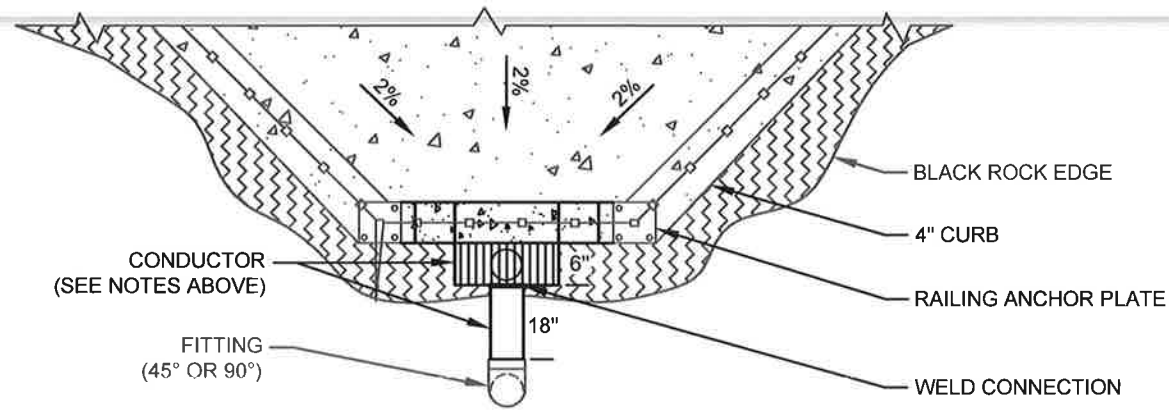
1. SET PIPE A MINIMUM OF 12" OUT FROM SLAB DURING INSTALL. SAW AFTER CONCRETE IS POURED AND SET.



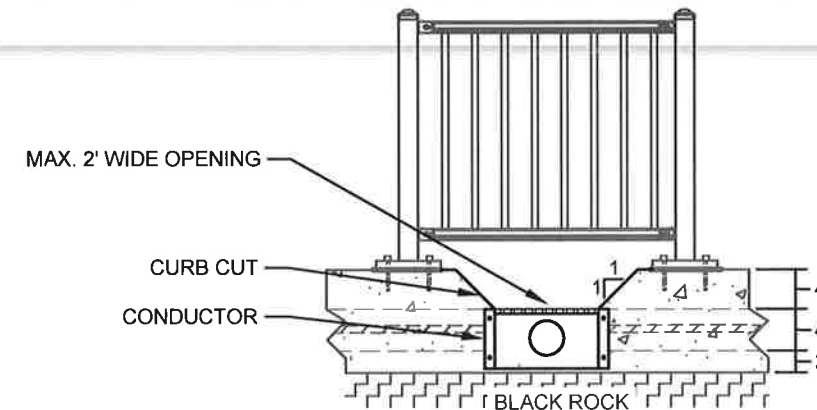
PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT	BONNER COUNTY, ID	SLAG CAP DETAILS	SHEET:	D2
			DATE:	3/25/2026
			PROJECT NO.:	24072.001
			SHEET NO.:	21 OF 30

**CONDUCTOR NOTES:**

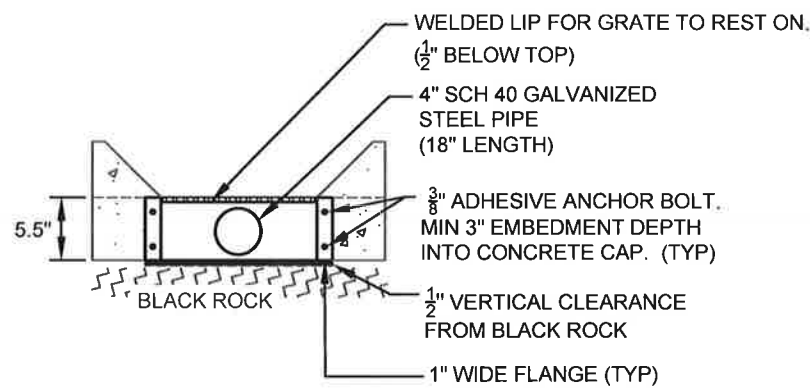
- 1.) CONDUCTOR SHALL BE 1/4" A653 GALVANIZED STEEL. FINISH WITH BLACK POWDER COATING.
- 2.) DIMENSIONS OF CONDUCTOR ARE 6" x 26" x 5.5". PROVIDE STEEL GRATE WITH 1" MAX SLOT SPACING.



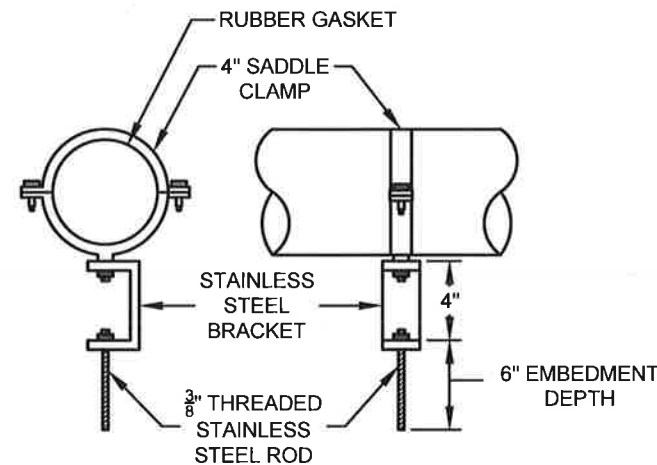
**PLAN VIEW**



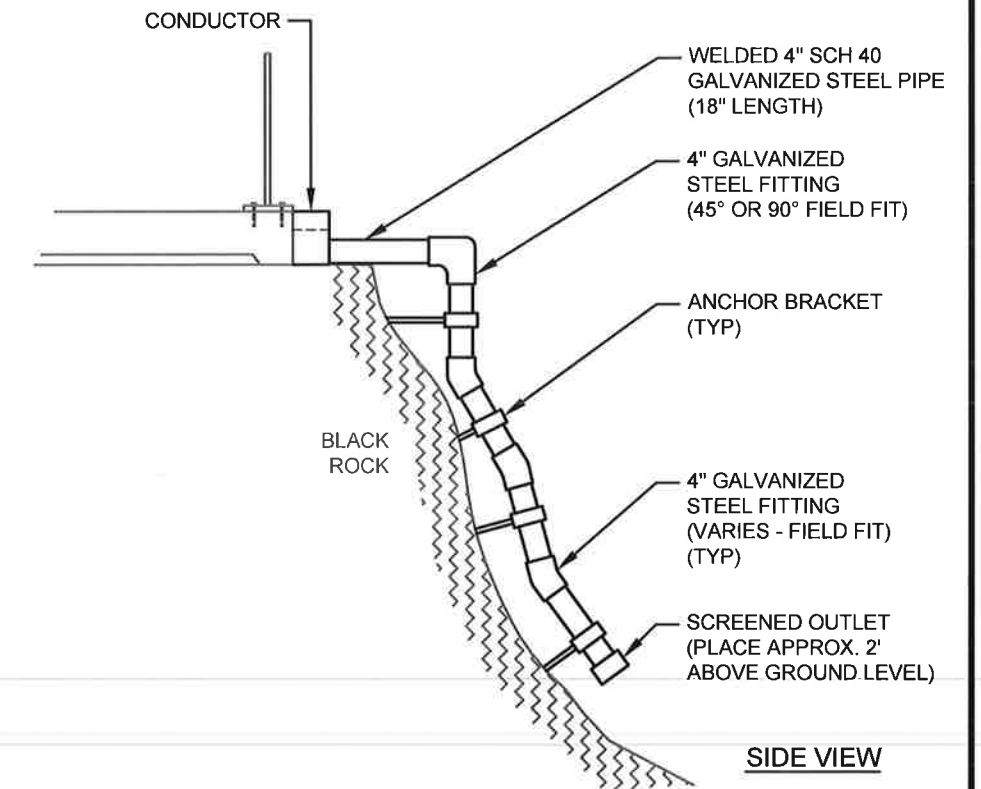
**ELEVATION VIEW**



**CONDUCTOR (ELEVATION VIEW)**



**ANCHOR BRACKET**



**SIDE VIEW**

**1** SLAB DRAINAGE DETAIL  
SCALE: NTS

**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**SLAG CAP RE-SURFACE AND  
DRAINAGE DETAILS**

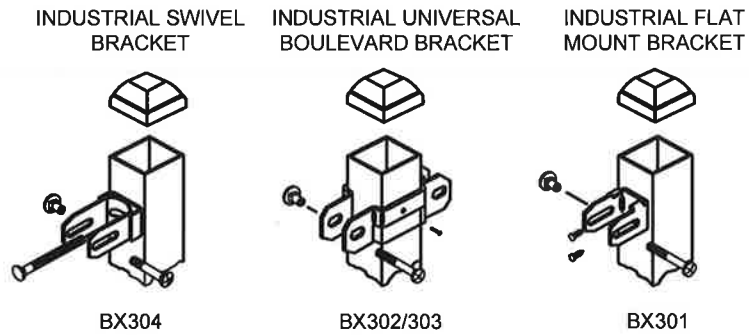
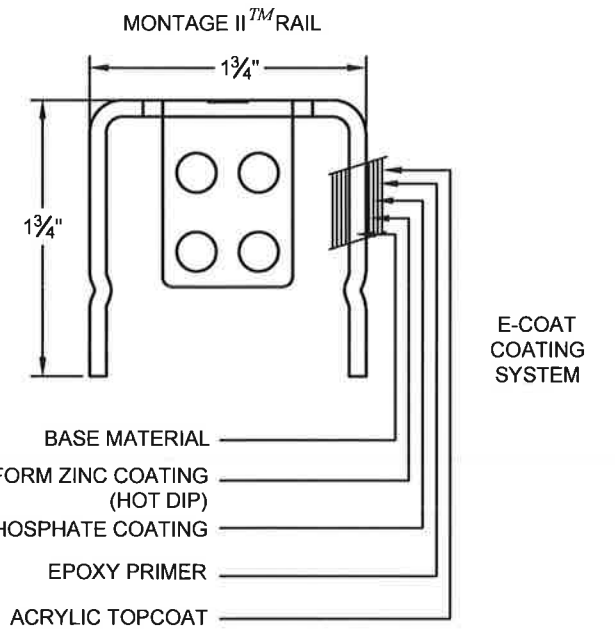
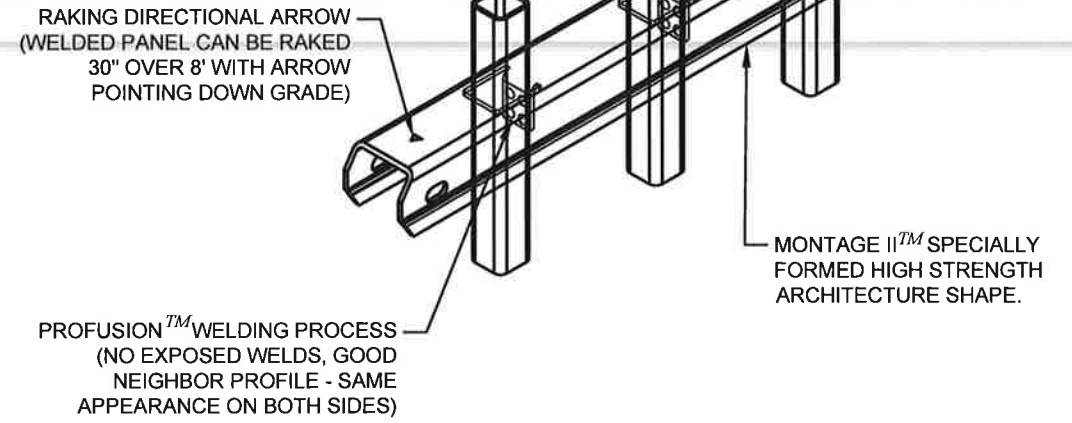
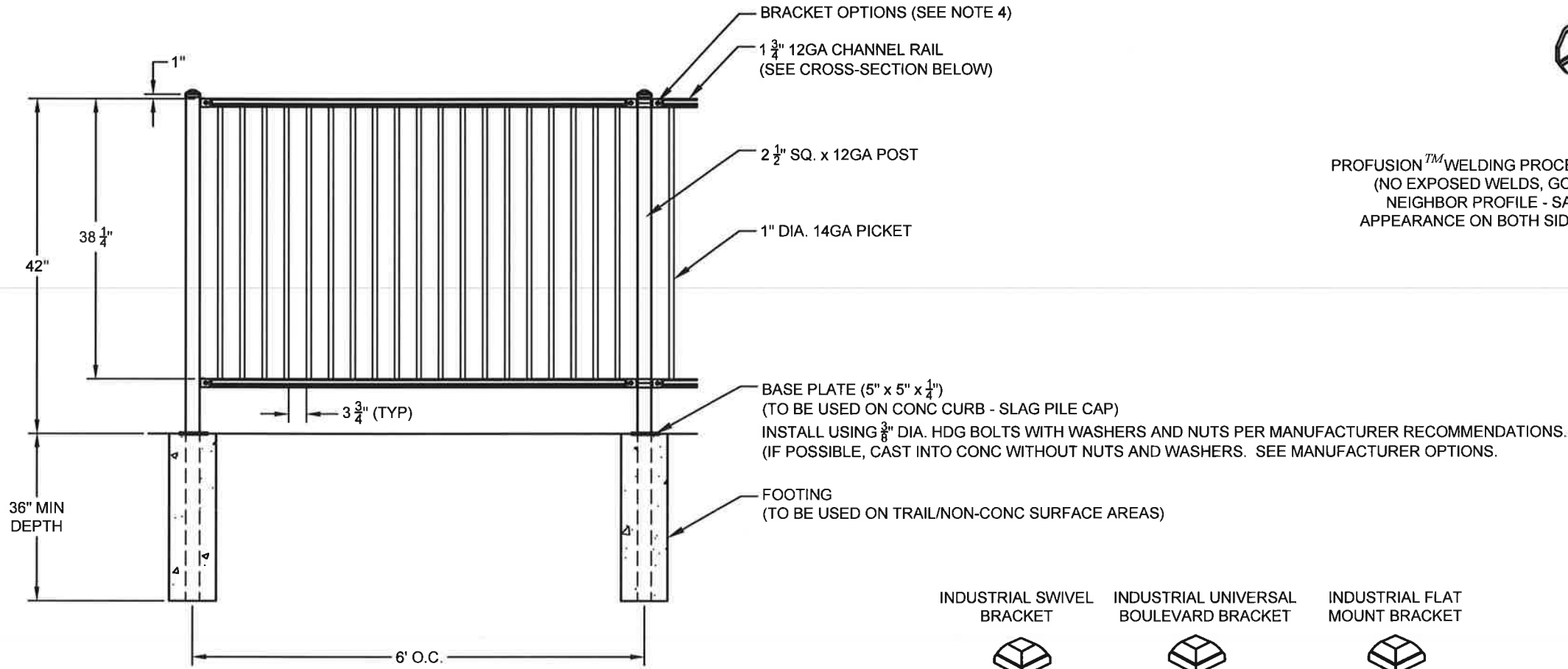
SHEET:	D3
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	22 OF 30

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**NOTES:**

- 1.) POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS. SEE MONTAGE II™ SPECIFICATIONS FOR POST SIZING CHART AND DIMENSIONS.
- 2.) THIRD & FORTH RAIL OPTIONAL.
- 3.) AVAILABLE IN FLUSH BOTTOM.
- 4.) FLAT MOUNT BRACKETS MUST BE THRU-BOLTED THROUGH POST IN ORDER TO MEET LOADING REQUIREMENTS FOR IBC GUARD RAIL.



VALUES SHOWN ARE NOMINAL AND NOT TO BE USED FOR INSTALLATION PURPOSES. SEE PRODUCT SPECIFICATION FOR INSTALLATION REQUIREMENTS.

1 MONTAGE II™ RAIL  
SCALE: NTS

**MONTAGE II MAJESTIC 2/3/4-RAIL 2HMISO**



1555 N. Mingo  
Tulsa, OK 74116  
1-888-333-3422  
www.ameristarfence.com

**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					DESIGNER: C. MACPHERSON	SCALE: NTS
					CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 06/27/2024	DATE: 03/25/2026



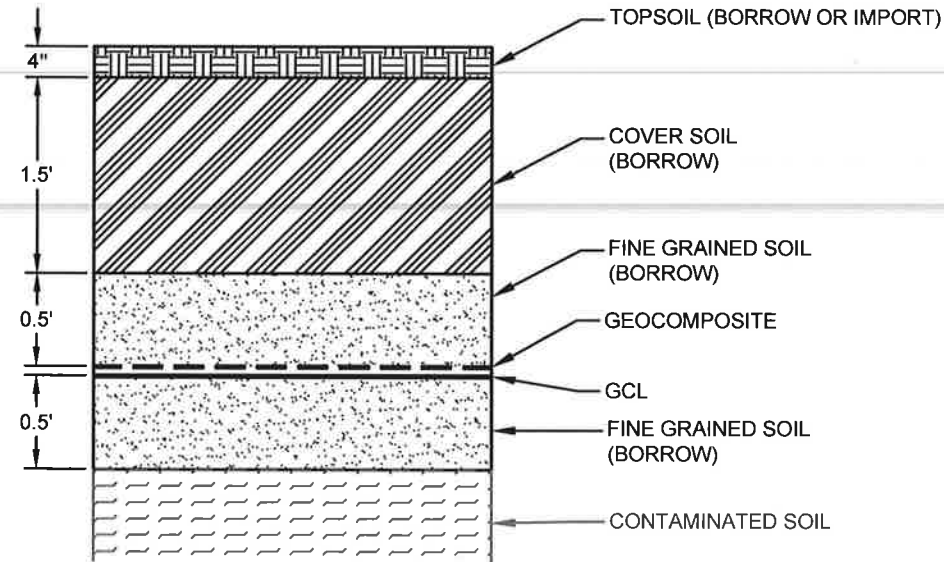
**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
**BONNER COUNTY, ID**

**BLACK RAIL RAILING  
DETAILS**

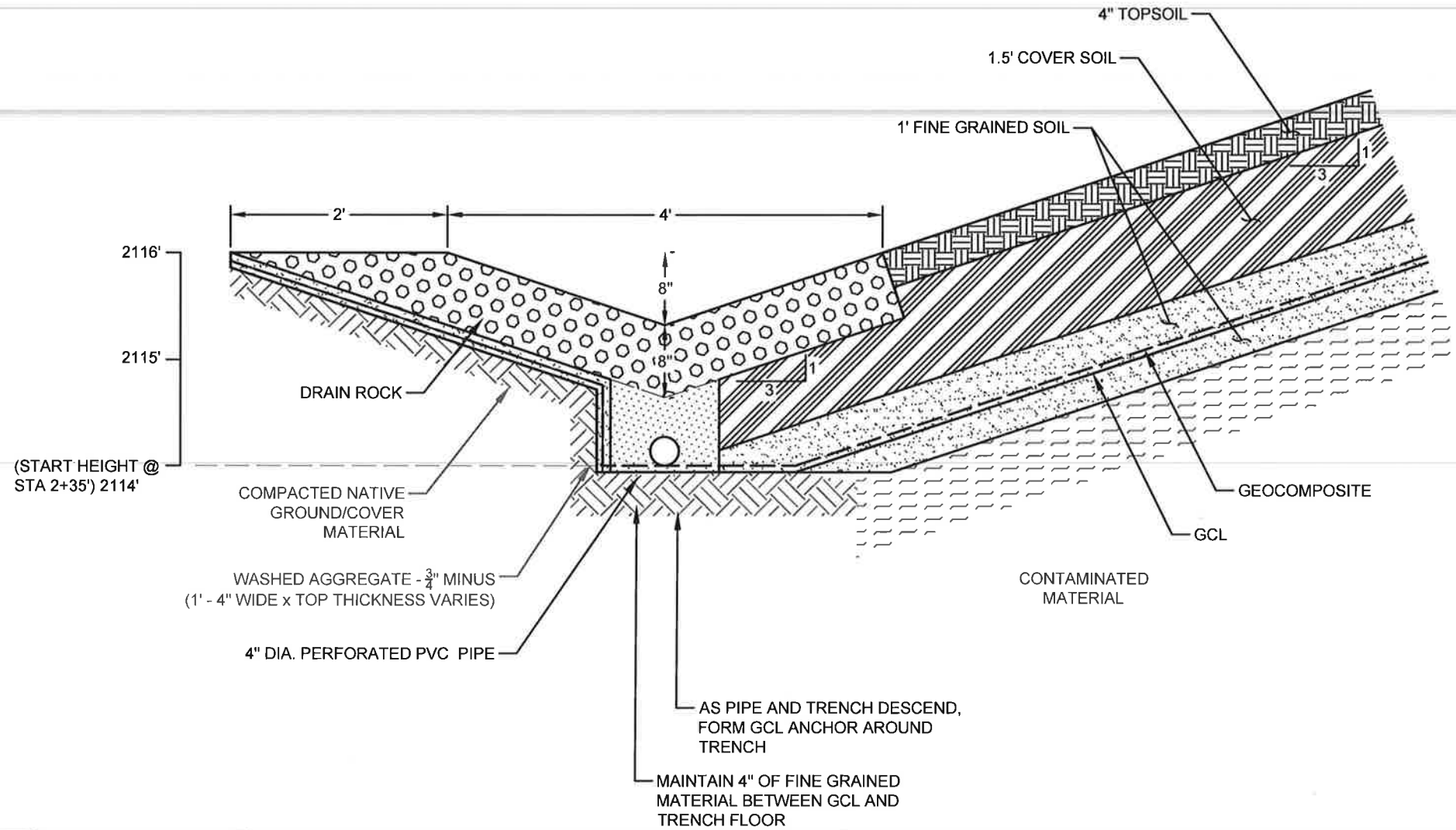


SHEET:	D4
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	23 OF 30

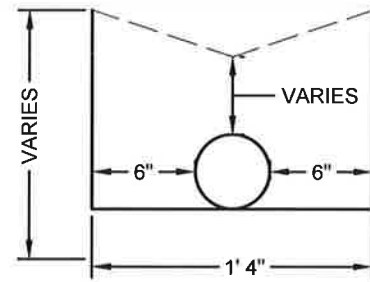
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1 REPOSITORY COVER SECTION  
SCALE: NTS



2 COVER/DRAINAGE SECTION  
SCALE: NTS



**CONSTRUCTION SET**

NO	DATE	REVISIONS	BY	CHK	DATE	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					DESIGNER: C. MACPHERSON	SCALE: AS NOTED
					CHECKED: D. FORSETH	APPROVED: D. FORSETH
					DATE: 06/27/2024	DATE: 03/25/2026



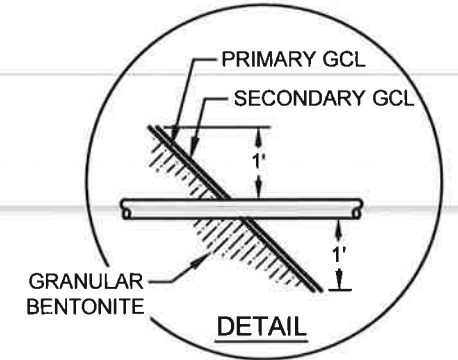
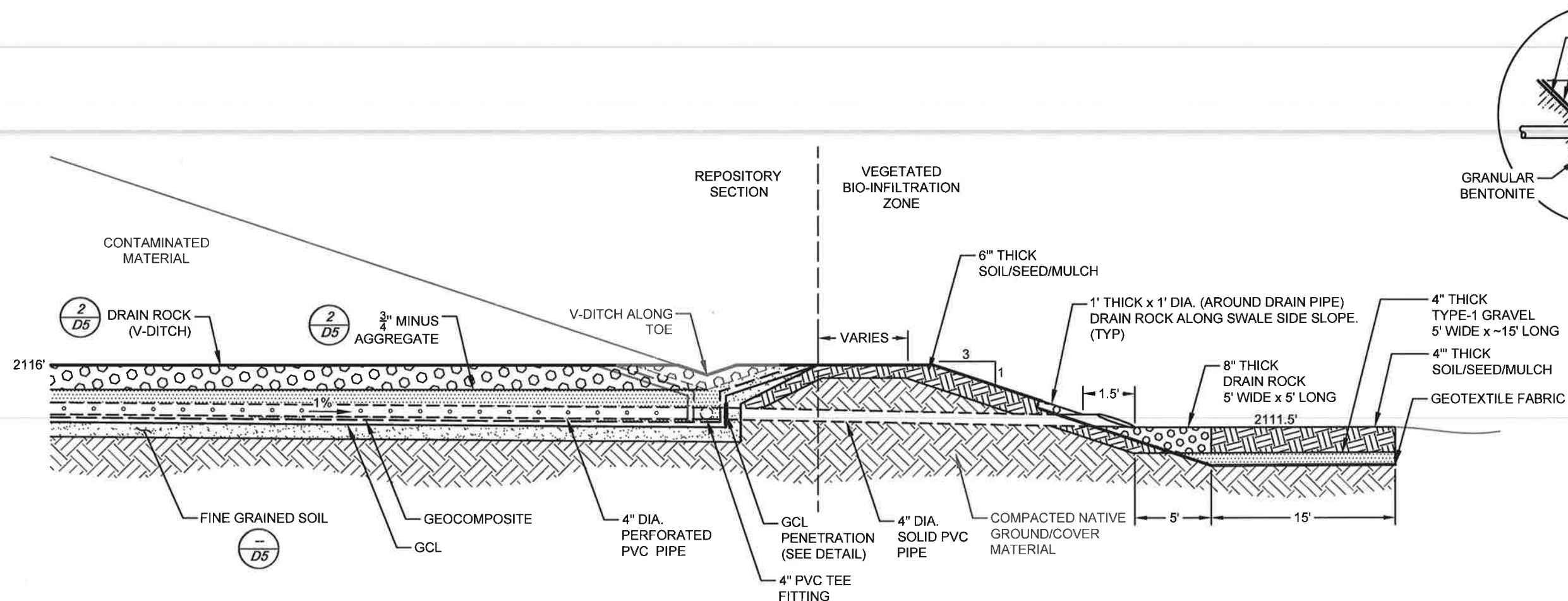
PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

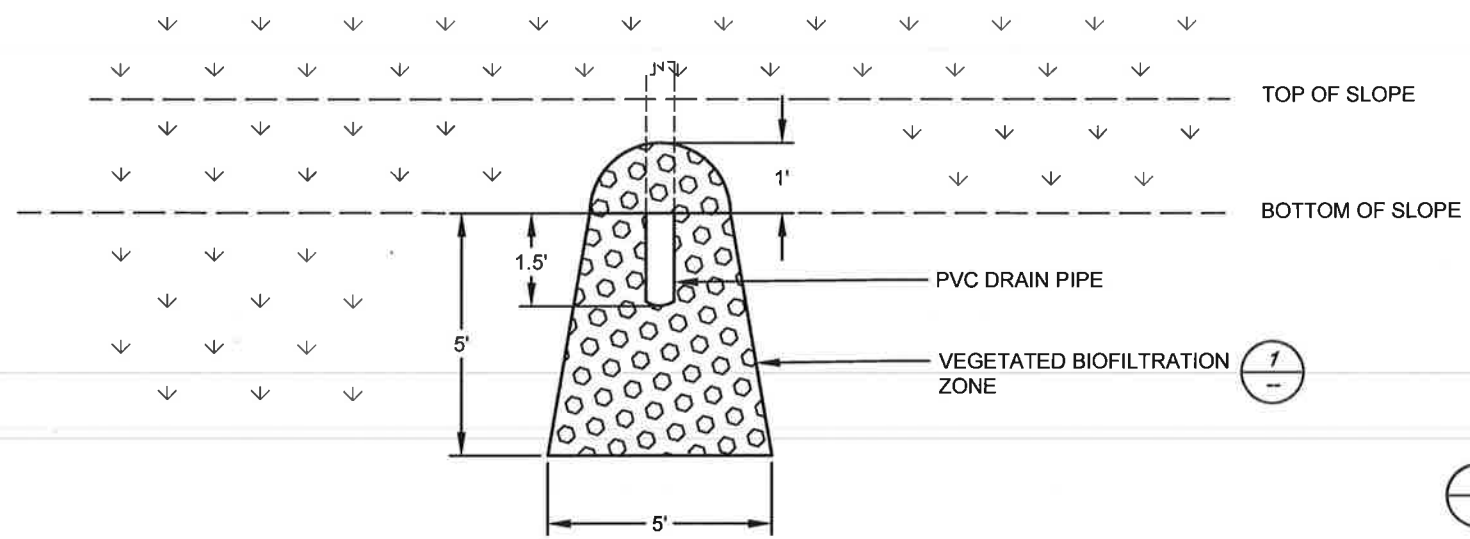
REPOSITORY  
DETAILS

SHEET:	D5
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	24 OF 30

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1 REPOSITORY DRAINAGE/TOE SECTION  
SCALE: NTS



2 TOE DRAIN OUTLET  
SCALE: NTS



CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK	DATE	06/27/2024	DATE	03/25/2026
		ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH

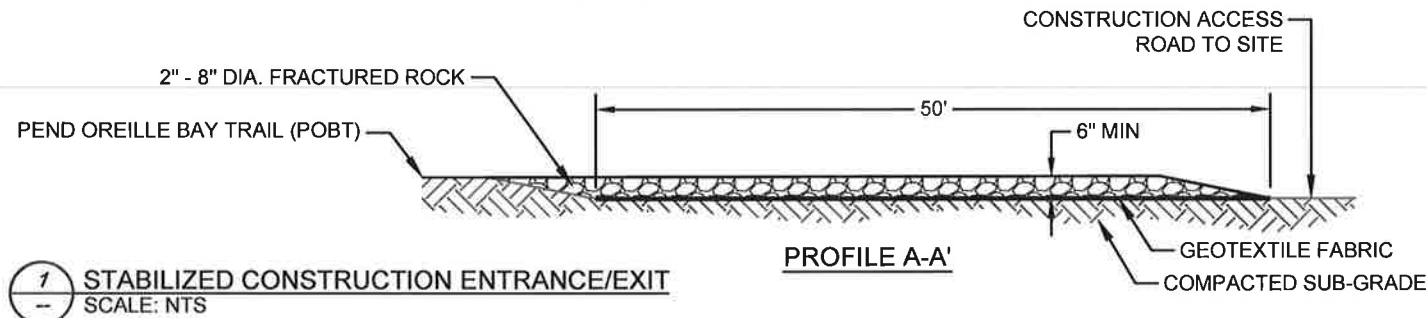
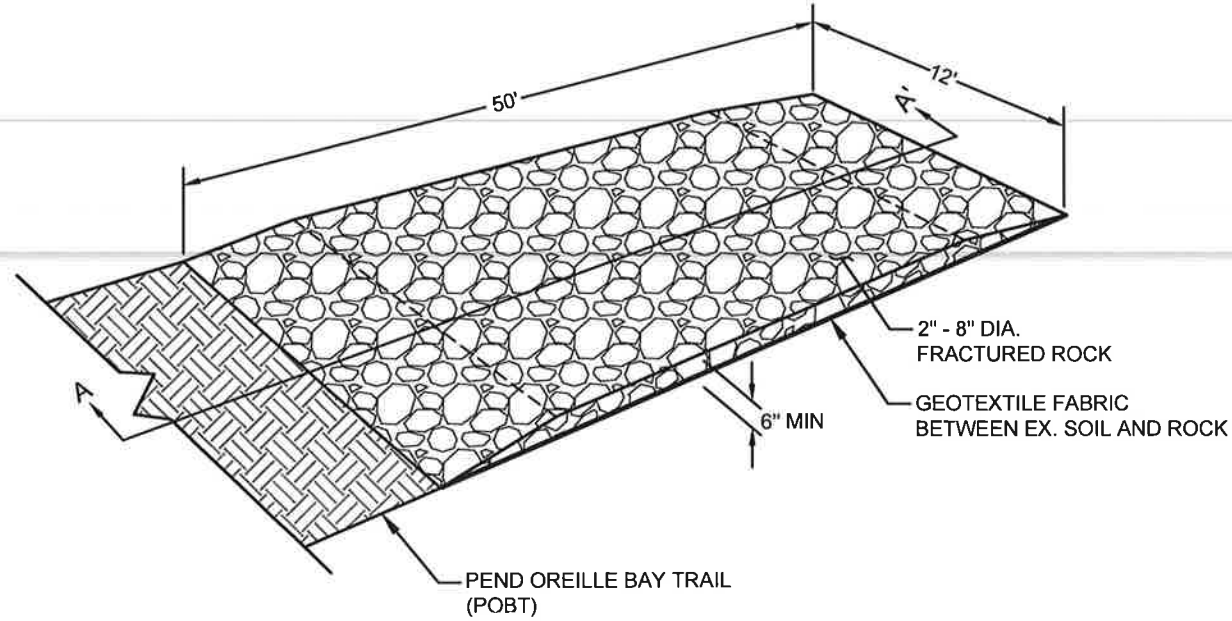


PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

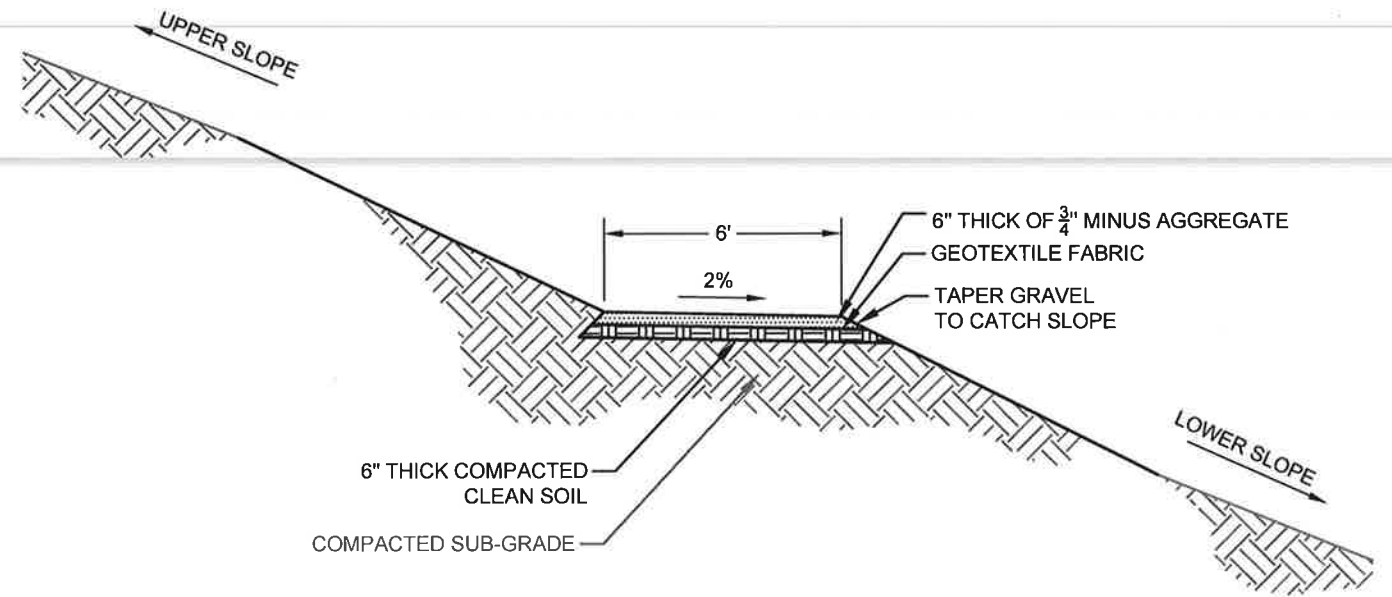
REPOSITORY  
DETAILS

SHEET:	D6
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	25 OF 30

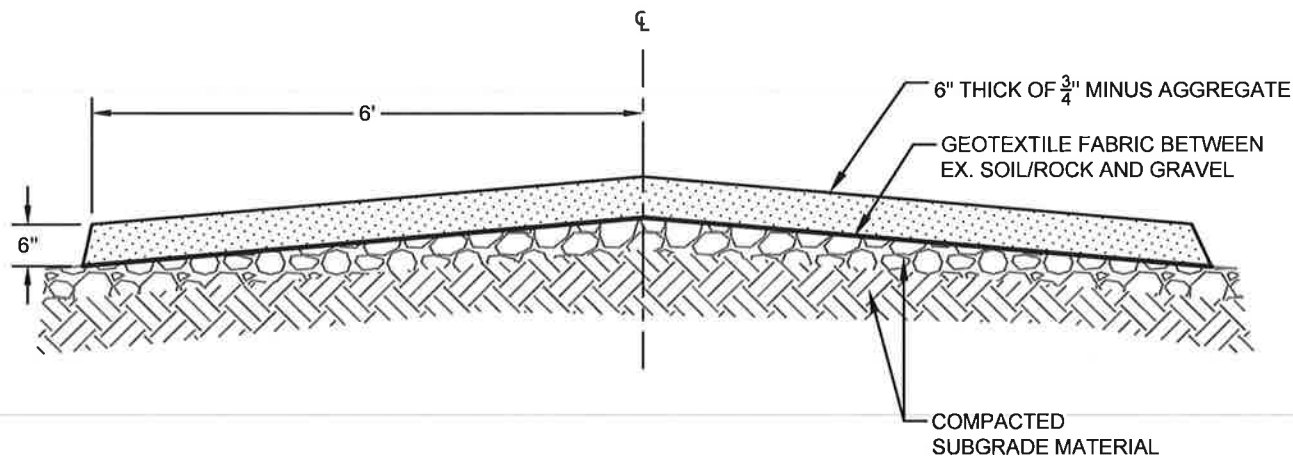
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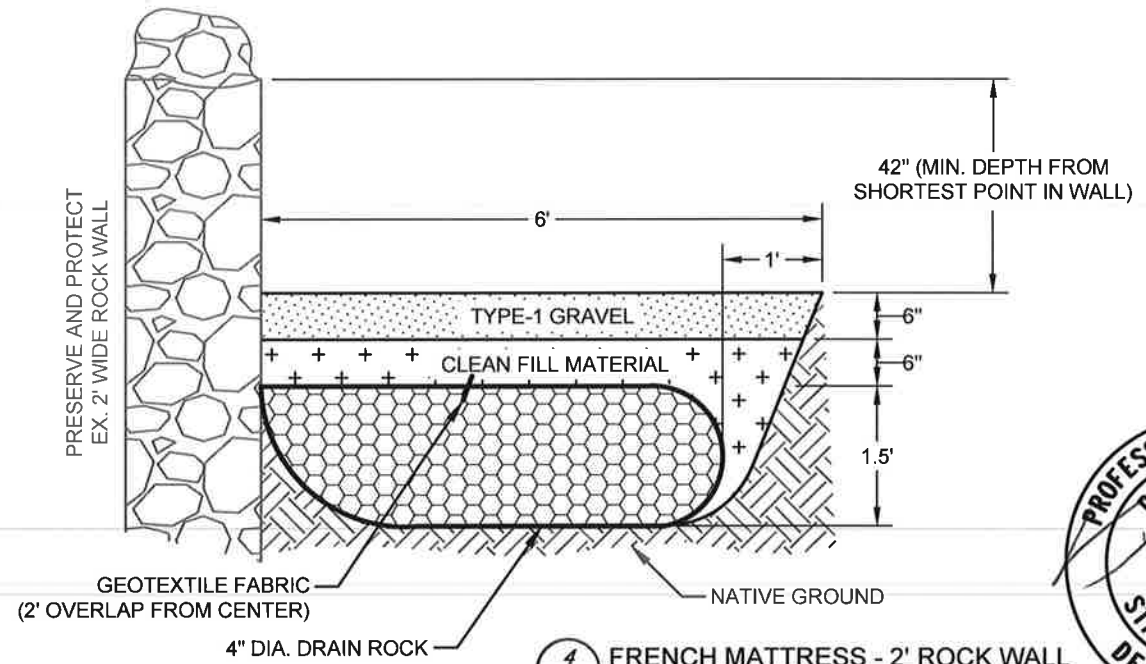
1 STABILIZED CONSTRUCTION ENTRANCE/EXIT  
SCALE: NTS



2 TYPICAL GRAVEL TRAIL CROSS-SECTION  
SCALE: NTS



3 CONSTRUCTION ACCESS/NEW TRAIL SECTION  
SCALE: NTS



4 FRENCH MATTRESS - 2' ROCK WALL  
SCALE: NTS



**CONSTRUCTION SET**

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
					DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
					CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE:	06/27/2024	DATE:	03/25/2026



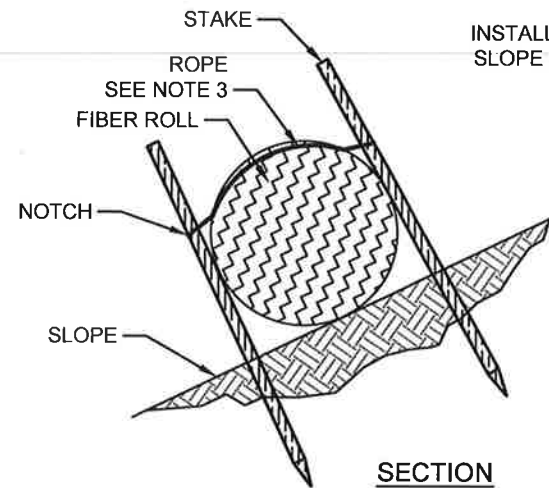
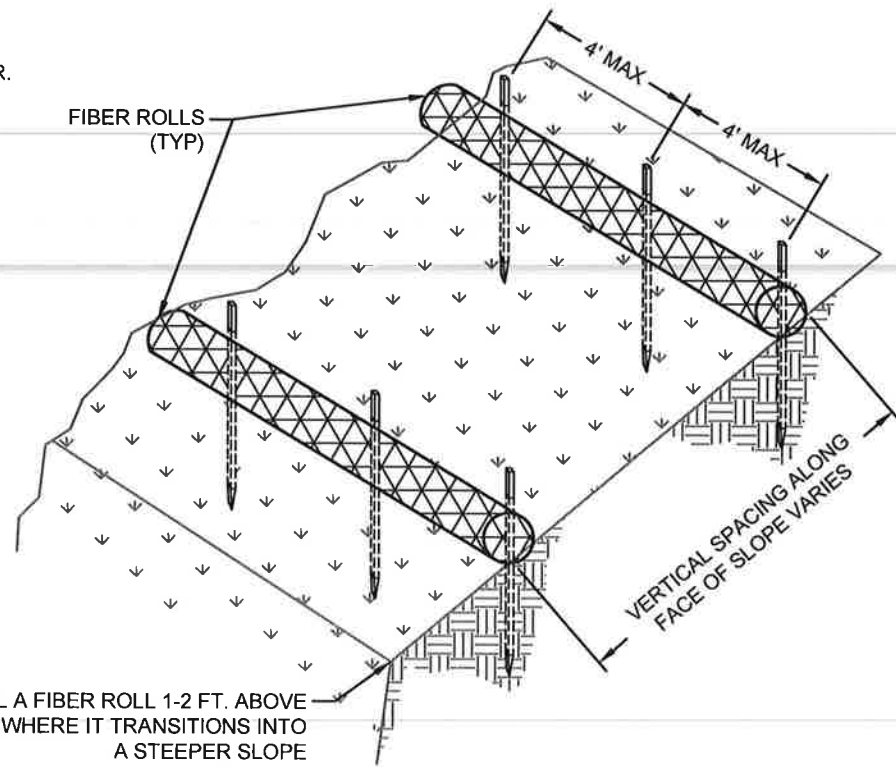
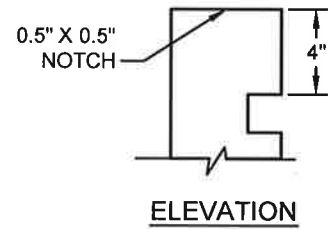
**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
BONNER COUNTY, ID

**CONSTRUCTION SITE ACCESS  
DETAILS**

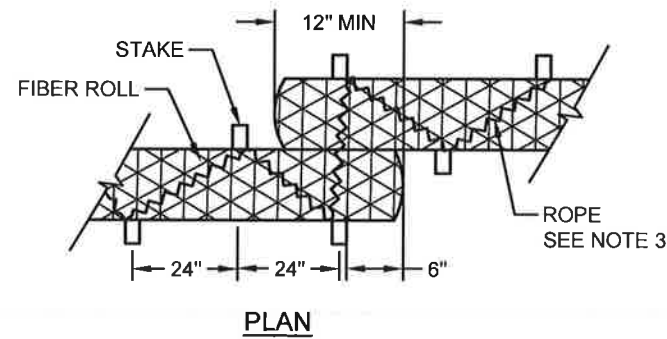
SHEET:	D7
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	26 OF 30

**NOTES:**

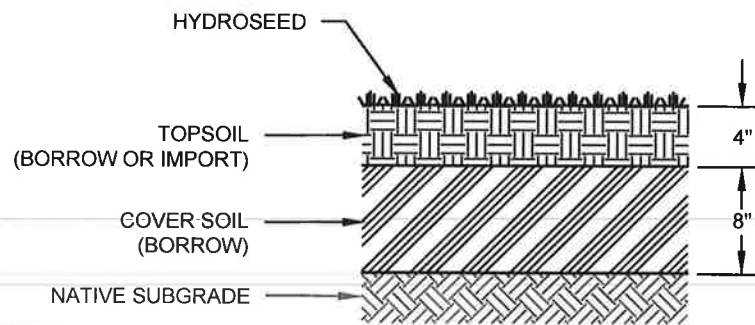
1. INSTALL FIBER ROLL ALONG A LEVEL CONTOUR.
2. TEMPORARY FIBER ROLL SPACING VARIES DEPENDING UPON SLOPE INCLINATION.
3. ROPE SHALL BE A MINIMUM OF 1/4" THICK.



INSTALL A FIBER ROLL 1-2 FT. ABOVE SLOPE WHERE IT TRANSITIONS INTO A STEEPER SLOPE



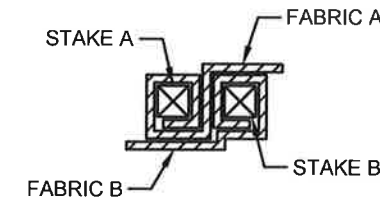
**1** TYPICAL FIBER ROLL INSTALLATION  
NTS



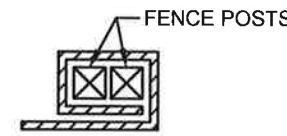
**3** SITE COVER SECTION  
NTS

**NOTES:**

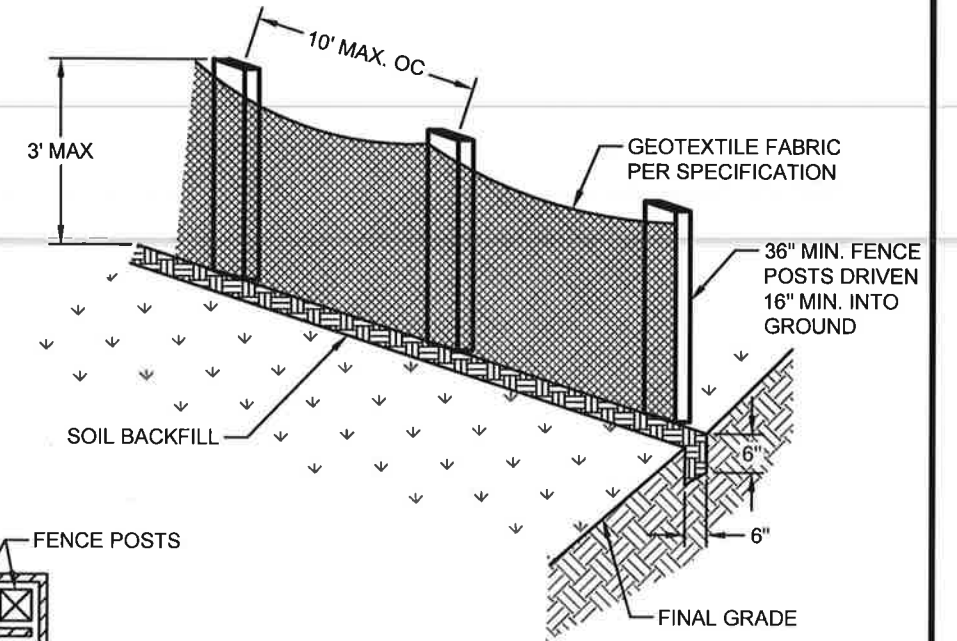
1. FABRIC TO LAY IN BOTTOM OF TRENCH AND PARTIALLY UP OTHER SIDE.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 6" AND FOLDED.



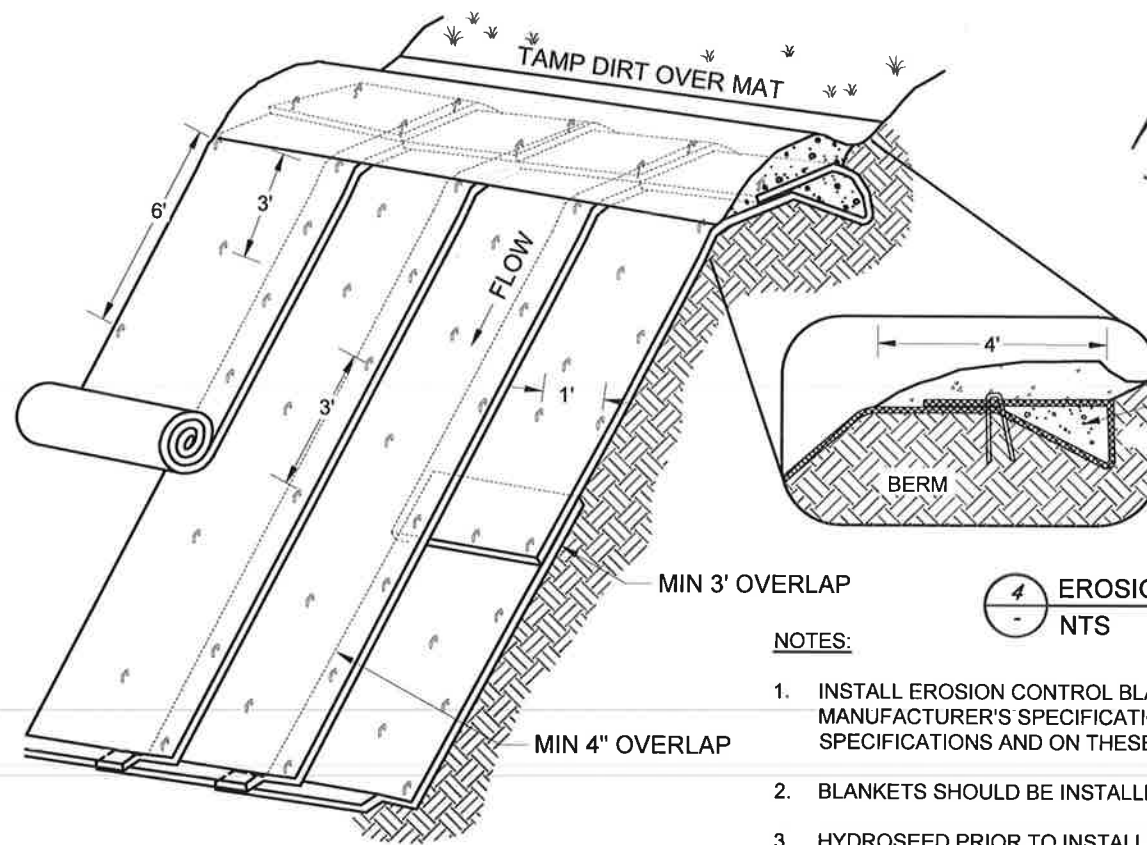
**JOINING SECTION DETAIL**



**END STAKE DETAIL**



**2** SILT FENCE  
NTS



**4** EROSION CONTROL BLANKET  
NTS

**NOTES:**

1. INSTALL EROSION CONTROL BLANKETS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND AS IDENTIFIED IN THE SPECIFICATIONS AND ON THESE DESIGN DRAWINGS.
2. BLANKETS SHOULD BE INSTALLED VERTICALLY DOWN SLOPE.
3. HYDROSEED PRIOR TO INSTALLING EROSION CONTROL BLANKETS PER THE SPECIFICATIONS.



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	
					DRAFTER: B. ROLLINS
					DESIGNER: C. MACPHERSON
					CHECKED: D. FORSETH
					DATE: 06/27/2024
					COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					SCALE: AS NOTED
					APPROVED: D. FORSETH
					DATE: 03/25/2026



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT

BONNER COUNTY, ID

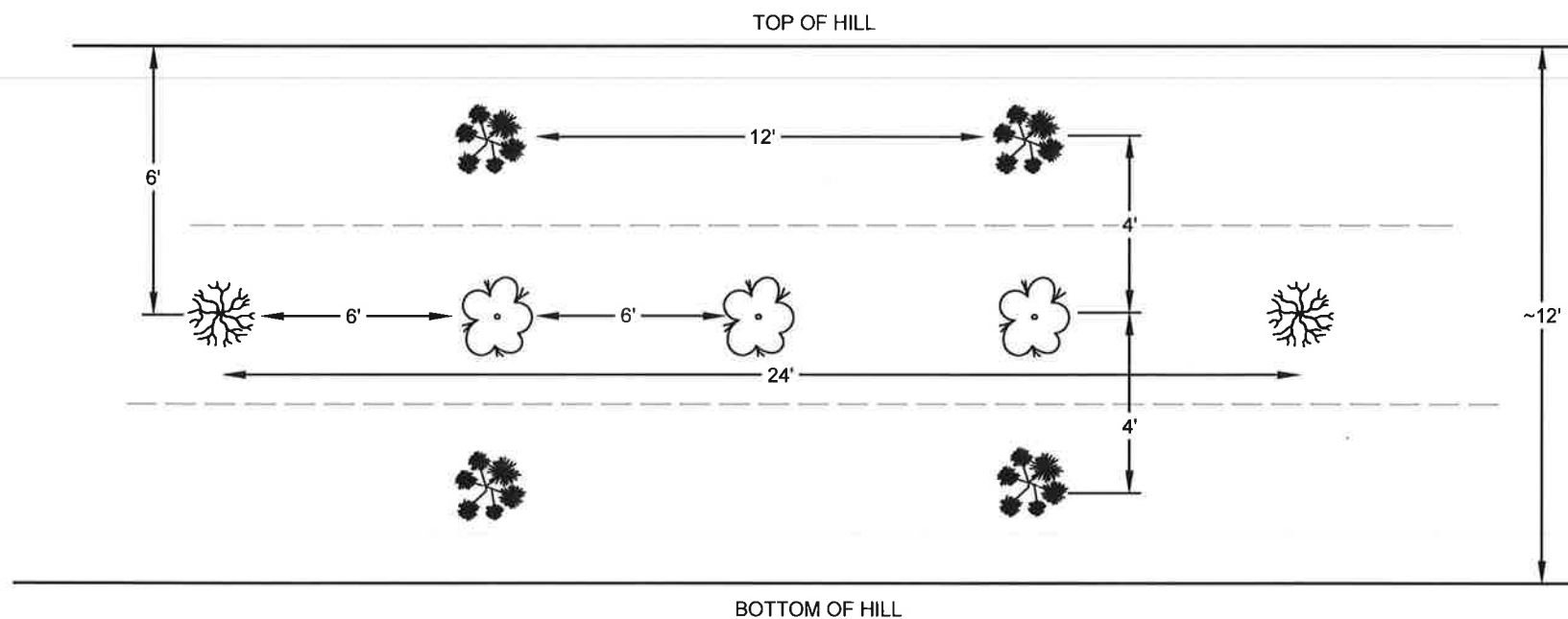
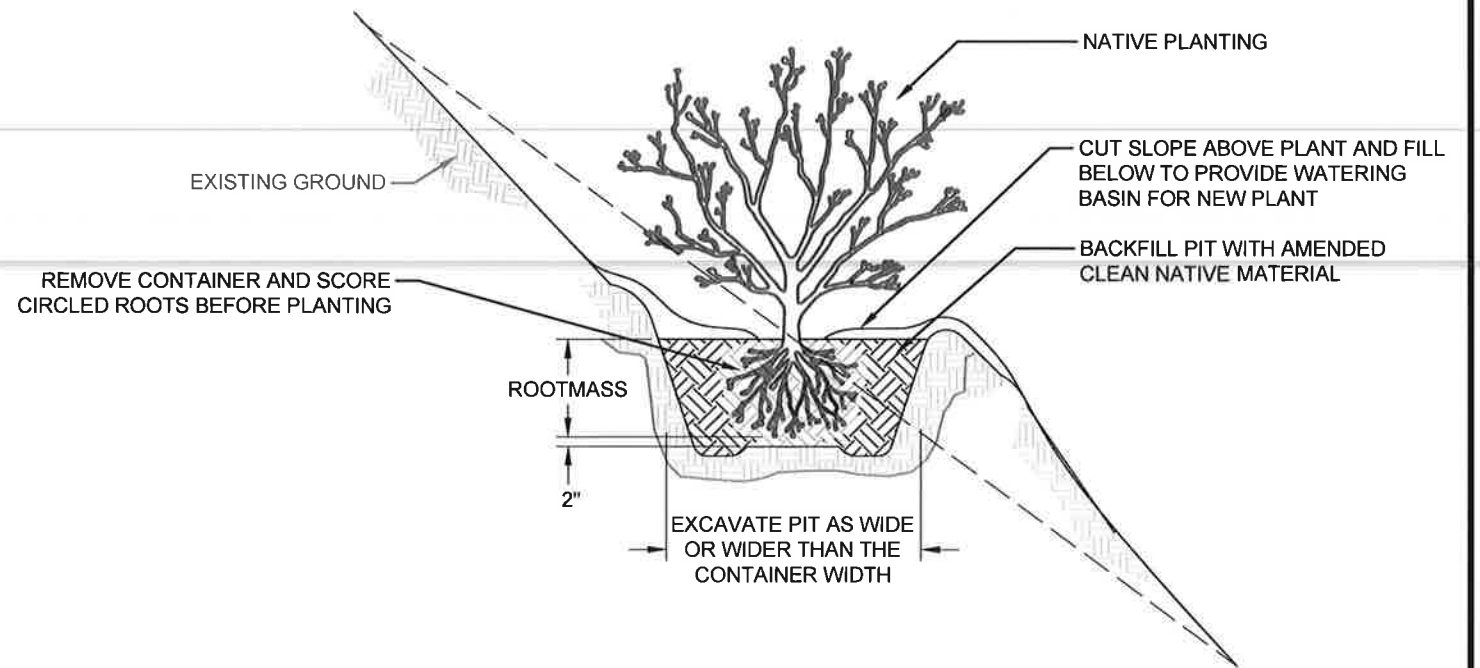
BMP DETAILS

SHEET:	D8
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	27 OF 30

V:\Projects\Engineering\City of Ponderay\POBT\_Smelter-Beach Remediation\02\_CAD\For Construction\DESIGN\_100 PERC\_POBT\_20260325.dwg 3/25/2026

**NOTES:**

1. CUT APPROXIMATELY SIZED HOLES IN EROSION CONTROL BLANKETS BEFORE PLANTING.
2. PLANTS SHALL BE PLANTED TO EXISTING ROOT COLLAR OR TOP OF ROOTMASS.
3. SEE SEEDING AND PLANTING SPECIFICATIONS FOR BED PREPARATION AND PLANTING INSTRUCTIONS.
4. ENSURE THAT PLANTINGS HAVE ADEQUATE SPACE FROM FIBER ROLLS AND TRAILS.
5. THE PLAN SHOWN ON THIS DETAIL IS FOR REFERENCE ONLY AND IS INTENDED TO SHOW THE GENERAL SPACING OF PLANTINGS. PLANTINGS SHALL BE PLACED IN A RANDOMIZED MANNER TO CREATE A NATURALIZED LOOK. PLANT CLUSTERS ARE ENCOURAGED IF RECOMMENDED FOR THE TYPE OF PLANT BEING PLANTED.



- 4' OC:**
- BALDHIP ROSE
  - CINQUEFOIL BUSH
  - CRABERRY HIGH BUSH
  - MALLOW NINEBARK BUSH
  - MYRTLE
  - OREGAON GRAPE
  - TIGER LILLIES

- 6' OC:**
- GOLD FORSYNTHIA
  - MOSCK ORANGE/SYRINGA
  - RED TWINBERRY BUSH

- 24' OC:**
- QUAKING ASPEN

1 VEGETATION PLANTING  
SCALE: NTS



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE	DRAFTER: B. ROLLINS	DESIGNER: C. MACPHERSON	CHECKED: D. FORSETH	DATE: 06/27/2024	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT	SCALE: AS NOTED	APPROVED: D. FORSETH	DATE: 03/25/2026
(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF									



**PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT**  
  
BONNER COUNTY, ID

**SEEDING/RE-VEGETATION  
DETAILS**

SHEET:	D9
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	28 OF 30

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POINT NO.	EASTING	NORTHING	DESCRIPTION	SCHEDULE
1A	2,434,202.55	2,419,694.40	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
2A	2,434,323.16	2,419,854.79	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
3A	2,434,453.51	2,420,024.11	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
4A	2,434,519.35	2,420,099.67	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
5A	2,434,616.31	2,420,098.83	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
6A	2,434,704.69	2,420,097.99	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
7A	2,434,703.60	2,420,047.55	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
8A	2,434,641.13	2,420,018.44	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
9A	2,434,627.66	2,419,999.35	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
10A	2,434,642.03	2,419,930.26	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
11A	2,434,601.12	2,419,838.97	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
12A	2,434,616.43	2,419,756.21	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
13A	2,434,562.97	2,419,757.20	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
14A	2,434,556.90	2,419,722.70	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
15A	2,434,531.77	2,419,714.18	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
16A	2,434,485.03	2,419,682.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
17A	2,434,418.62	2,419,662.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
18A	2,434,378.23	2,419,624.07	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
19A	2,434,374.20	2,419,634.51	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
20A	2,434,422.29	2,419,709.17	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
21A	2,434,382.17	2,419,731.99	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
22A	2,434,344.89	2,419,731.09	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A
23A	2,434,219.05	2,419,678.72	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	A

POINT NO.	EASTING	NORTHING	DESCRIPTION
600	2,434,319.58	2,419,846.70	OUTER REPOSITORY BOUNDARY MARKER
601	2,434,520.23	2,420,097.66	OUTER REPOSITORY BOUNDARY MARKER
602	2,434,613.96	2,420,096.82	OUTER REPOSITORY BOUNDARY MARKER
603	2,434,612.55	2,420,040.27	OUTER REPOSITORY BOUNDARY MARKER
604	2,434,470.83	2,419,925.36	OUTER REPOSITORY BOUNDARY MARKER
605	2,434,437.74	2,419,900.80	OUTER REPOSITORY BOUNDARY MARKER
606	2,434,366.32	2,419,811.56	OUTER REPOSITORY BOUNDARY MARKER

POINT NO.	EASTING	NORTHING	DESCRIPTION	SCHEDULE
1B	2,434,382.40	2,419,618.30	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
2B	2,434,378.23	2,419,624.07	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
3B	2,434,418.62	2,419,662.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
4B	2,434,485.03	2,419,682.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
5B	2,434,531.77	2,419,714.18	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
6B	2,434,556.90	2,419,722.70	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
7B	2,434,631.22	2,419,793.56	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
8B	2,434,652.50	2,419,837.57	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
9B	2,434,709.60	2,419,914.97	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
10B	2,434,726.92	2,419,910.41	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
11B	2,434,735.24	2,419,892.75	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
12B	2,434,700.78	2,419,859.24	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
13B	2,434,673.22	2,419,815.88	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
14B	2,434,677.17	2,419,780.64	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
15B	2,434,648.83	2,419,717.17	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
16B	2,434,592.75	2,419,688.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
17B	2,434,552.31	2,419,690.33	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
18B	2,434,508.76	2,419,672.69	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B
19B	2,434,449.71	2,419,651.88	POINTS FOR FIELD FLAGGING CLEARING & GRUBBING BOUNDARY	B

1 CLEARING AND GRUBBING BOUNDARY POINTS  
SCALE: NTS

2 REPOSITORY BOUNDARY POINTS  
SCALE: NTS



**CONSTRUCTION SET**

NO.	DATE	REVISIONS	BY	CHK	DATE
(0)	3/25/2026	ISSUED FOR CONSTRUCTION			

DRAFTER:	B. ROLLINS	COORDINATE SYSTEM:	ISPW NAD83 (2011) US FT
DESIGNER:	C. MACPHERSON	SCALE:	AS NOTED
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	06/27/2024	DATE:	03/25/2026



PONDERAY REMEDIATION AND  
LAKESHORE ENHANCEMENT  
  
BONNER COUNTY, ID

CLEARING & GRUBBING  
BOUNDARY POINTS

SHEET:	T1
DATE:	3/25/2026
PROJECT NO.:	24072.001
SHEET NO.:	29 OF 30

NOTES:

1. QUANTITIES SHOWN ARE APPROXIMATE. REFER TO CONTRACT SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN ON THIS SHEET AND THE BID FORM, THE BID FORM SHALL PREVAIL. MEASUREMENT AND PAYMENT SHALL BE PER THE CONTRACT DOCUMENTS.

SCH.	CLEARING AND GRUBBING	UNIT	QTY
A	CONSTRUCTION ENTRANCE/EXIT + UPPER BENCHES	ACRES	3.1
B	SHORELINE PROTECTION	ACRES	0.4
A	TOTAL	ACRES	3.1
B	TOTAL	ACRES	0.4

SCH.	PEA GRAVEL	UNIT	QTY
A	CONCRETE CAP TOE DRAIN	CY	1.2
A	TOTAL	CY	1.2

SCH.	EXCAVATION	UNIT	QTY
A	CONSTRUCTION ENTRANCE/ACCESS	CY	296
B	CONTAMNATED SOIL	CY	3600
B	APPROXIMATE BORROW FOR COVER	CY	3203
A	TOTAL	CY	296
B	TOTAL	CY	6803

SCH.	GEOTEXTILE	UNIT	QTY
A	CONSTRUCTION ENTRANCE/ACCESS	SY	293
A	CONCRETE SLAB TOE	SY	61
B	SHORELINE PROTCTION (TOP/TRAIL)	SY	782
B	SHORELINEPROTECTION (BOTTOM/GROUND)	SY	2249
B	VEGETATED BIOINFILTRATION ZONES	SY	49
B	TRAILS	SY	922
B	FRENCH MATRESS	SY	150
A	TOTAL	SY	354
B	TOTAL	SY	4152

SCH.	CLEAN SOIL (NOT FROM SITE BORROW)	UNIT	QTY
B	CLEAN TOPSOIL	CY	1026
B	TOTAL	CY	1026

SCH.	FRACTURED ROCK (2" - 8")	UNIT	QTY
A	FRACTURED ROCK	CY	13
A	TOTAL	CY	13

SCH.	3/4" MINUS GRAVEL	UNIT	QTY
A	CONSTRUCTION ENTRANE/EXIT ROAD	CY	49
A	RE-GRAVEL ACCESS ROAD (POBT)	CY	519
A	FUTURE TRAIL (FORMER CONSTRUCTION ENTRANCE/EXIT	CY	16
B	SHORELINE PROTECTION	CY	81
B	NEW TRAILS	CY	254
B	RE-GRAVEL ACCESS ROAD (POBT)	CY	519
B	FUTURE TRAIL (FORMER CONSTRUCTION ENTRANCE/EXIT	CY	16
B	REPOSITORY BIO-INFILTRATION ZONES	CY	4
A	TOTAL	CY	584
B	TOTAL	CY	874

SCH.	3/4" WASHED AGGREGATE	UNIT	QTY
B	REPOSITORY UNDERDRAINS	CY	92

SCH.	8" DRAIN ROCK	UNIT	QTY
B	RUNN-ON DITCH	CY	128
B	FRENCH MATTRESS	CY	20
B	REPOSITORY BIO-INFILTRATION ZONES	CY	7.5
B	TOTAL	CY	148

SCH.	RIPRAP	UNIT	QTY
B	SHORELINE PROTECTION (LAKE SIDE)	CY	914
B	SHORELINE PROTECTION (LAND SIDE)	CY	56
B	TOTAL	CY	971

SCH.	QUARRY SPALL	UNIT	QTY
B	SHORELINE PROTECTION	CY	1973
B	TOTAL	CY	1973

SCH.	1/2" MINUS AGGREGATE	UNIT	QTY
A	CONCRETE CAP SUBBASE	CY	26.5
A	TOTAL	CY	26.5



CONSTRUCTION SET

(0)	3/25/2026	ISSUED FOR CONSTRUCTION	CM	DF	DRAFTER: B. ROLLINS	COORDINATE SYSTEM: ISPW NAD83 (2011) US FT
					DESIGNER: C. MACPHERSON	SCALE: AS NOTED
					CHECKED: D. FORSETH	APPROVED: D. FORSETH
NO.	DATE	REVISIONS	BY	CHK	DATE: 06/27/2024	DATE: 03/25/2026



PONDERAY REMEDIATION AND LAKESHORE ENHANCEMENT  
BONNER COUNTY, ID

APPROXIMATE QUANTITIES

SHEET:	T2
DATE:	3/26/2026
PROJECT NO.:	24072.001
SHEET NO.:	30 OF 30

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