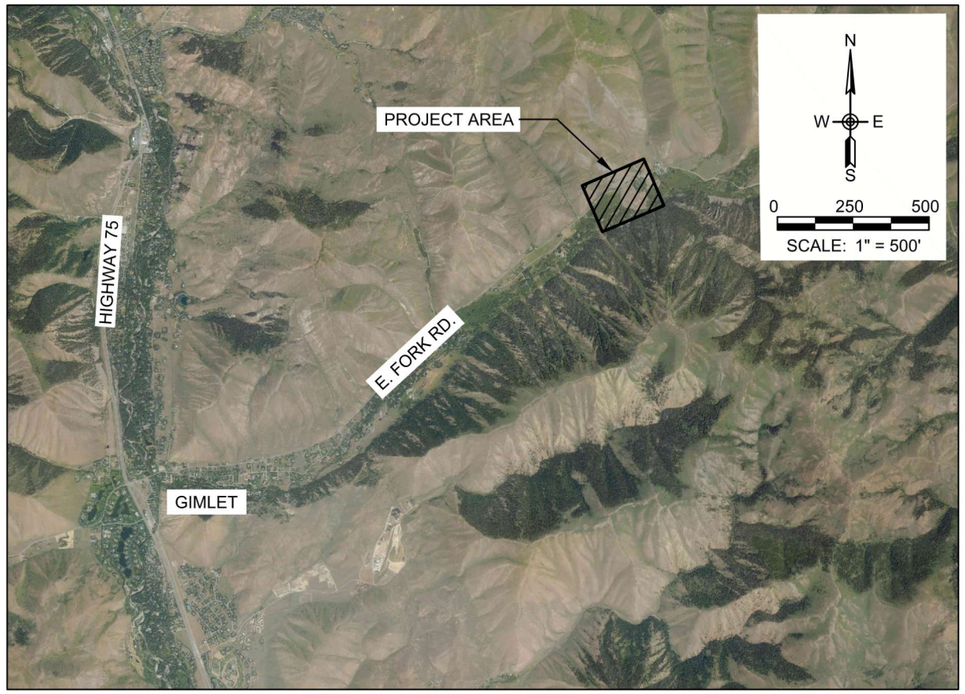
P:\Projects\IDEQ\Triumph Mine\24038 Triumph Mine Sampling & Additional Engineering\Design_CAD\IFC_DESIGN FINALTriumph Waste Pile Addition_20250625.dwg 7/8/2025

TRIUMPH MINE SITE
BLAINE COUNTY, IDAHO
JULY 2025



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: 1" = 500'

COVER & GENERAL SHEETS

SHEET #	SHEET NAME	SCHEDULE*	SHEET INDEX
1	COVER SHEET	A/B	CS
2 - 3	GENERAL PLAN SET INFORMATION	A/B	G1 - G2
4	PORTAL STABILIZATION DESIGN	A	S1
5	PORTAL DRAINAGE RE-LOCATION DESIGN	A	S2
6 - 11	CONTAMINATED MATERIAL REMOVAL DESIGN	A	S3 - S7
12	ROAD MATERIAL STAGING	A	S8
13	TAILINGS PILE - NEW MATERIAL PLACEMENT, CAP & COVER DESIGN	B	S9
14	TAILINGS PILE - REPOSITORY PLAN & SECTIONS	B	S10
15	SITE REPAIRS	A	S11
16	DETAILS	B	D1
17 - 29	INFILTRATION BASIN	A	ATTACHED

SCHEDULE A = 2025 CONSTRUCTION SEASON, SCHEDULE B = 2026 CONSTRUCTION SEASON

SCHEDULE A - WORK TO BE PERFORMED IN 2025 GENERALLY INCLUDES:
PORTAL STABILIZATION, CONTAMINATED MATERIAL REMOVAL, SITE REPAIRS AND INFILTRATION BASIN CONSTRUCTION.

SCHEDULE B - WORK TO BE PERFORMED IN 2026 GENERALLY INCLUDES:
SURGE POND SEDIMENT REMOVAL AND CONTAMINATED MATERIAL PLACEMENT ON LOWER TAILINGS PILE.

PROJECT SPONSORS:

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
1410 N. HILTON STREET
BOISE, IDAHO 83706
TELEPHONE: (208) 373-0550

IDAHO DEPARTMENT OF LANDS
300 N. 6TH STREET, SUITE 103
BOISE, IDAHO 83702
TELEPHONE: (208) 334-0200

ENGINEER:
ALTA SCIENCE & ENGINEERING, INC.
988 SOUTH LONGMONT AVE, SUITE 200
BOISE, IDAHO 83706
TELEPHONE: (208) 336-7080

IN ASSOCIATION WITH:
WSP USA, INC.
33301 NINTH AVE. SOUTH, SUITE 300
FEDERAL WAY, WA 98003-2600
TELEPHONE: (425) 577-2772

Derek Forseth
Digitally signed by Derek Forseth
Date: 2025.07.09 16:09:00 -07'00'
PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: AS NOTED
APPROVED: D. FORSETH
DATE: 06/25/2025

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

COVER SHEET

SHEET: CS
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 1 OF 16

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GENERAL NOTES AND SPECIFICATIONS

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT, AND AS REQUIRED BY THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (IDEQ), IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC), AND ALL OTHER APPLICABLE LOCAL, STATE, AND NATIONAL REQUIREMENTS, UNLESS OTHERWISE NOTED. ALL CONSTRUCTION WORK SHALL COMPLY WITH ISPWC AT A MINIMUM.
2. A COPY OF THESE APPROVED PLANS MUST BE POSTED AT THE JOB SITE FOR PUBLIC VIEWING AT ALL TIMES DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL BE FAMILIAR WITH AND COMPLY WITH ALL CONDITIONS OF THE PERMITS OBTAINED FOR THE PROJECT.
4. THE CONTRACTOR SHALL MEET OR EXCEED ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS FOR ALL WORK ASSOCIATED WITH THIS PROJECT AT ALL TIMES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND IMPLEMENT ALL CURRENT SAFETY REQUIREMENTS AND STANDARDS.
5. THE GENERAL NOTES AND SPECIFICATIONS ADDRESSED HEREIN ARE NOT INCLUSIVE TO THIS PROJECT. THE CONTRACTOR SHALL ALSO ABIDE BY THE PROJECT TECHNICAL SPECIFICATIONS IN THE CONTRACT DOCUMENTS (UNDER SEPARATE COVER).
6. SURVEY CONTROL POINTS ARE SHOWN ON THIS SHEET UNDER SURVEY NOTES. LOCATIONS AND ELEVATIONS ARE LOCALIZED TO EXISTING CONTROL POINTS. 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.
7. LOCATIONS OF EXISTING SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD-VERIFY THE EXACT LOCATION OF FEATURES AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. UNDERGROUND UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO EXCAVATION. CALL THE ONE-CALL UTILITY LOCATE SERVICE AT (800) 398-3285 AT LEAST TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
8. CONTRACTOR SHALL LOCATE, PROTECT, AND IF DAMAGED DURING CONSTRUCTION, REPAIR ALL ABOVE GROUND AND BELOW GROUND UTILITIES INCLUDING GAS, ELECTRIC, SEPTIC, WATER, SANITARY, STORM, COMMUNICATION, SPRINKLERS, IRRIGATION, ETC.
9. CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES AND RIGHTS-OF-WAY FROM DAMAGE AND DEBRIS DURING CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THEY DISCOVER ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS ENCOUNTERED. ALLOW (48) HOURS FOR ENGINEER TO MODIFY THE DESIGN, IF NECESSARY, UNLESS OTHERWISE SPECIFIED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SIZING OF EQUIPMENT USED DURING THE PROJECT AND FOR WEIGHT RESTRICTIONS ON EXISTING BRIDGES AND ROADS.
12. 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.
13. MATERIALS HANDLING: STOCKPILE ALL IMPORTED MATERIALS IN AN APPROVED LOCATION. EXCAVATED MATERIAL THAT IS POTENTIALLY CONTAMINATED SHALL BE DIRECTLY LOADED ONTO TRUCKS FOR DISPOSAL UNLESS OTHERWISE NOTED OR DIRECTED BY ENGINEER.
14. EXCAVATED MATERIAL SHALL BE HAULED TO THE LOWER TAILINGS PILE FOR DISPOSAL.
15. DECONTAMINATION OF EQUIPMENT AND PERSONNEL IS REQUIRED FOR ACTIVITIES THAT INVOLVE CONTACT WITH CONTAMINATED SOILS.
16. EROSION AND SEDIMENT CONTROL IS REQUIRED AND WILL BE EMPLOYED AT ALL TIMES TO ACHIEVE BEST MANAGEMENT PRACTICES FOR STORM WATER MANAGEMENT AND SEDIMENT CONTROL, INCLUDING MATERIAL TRACKING.
17. FOR AGGREGATE GRADATION INFORMATION REFER TO BLAINE COUNTY 2019 ROAD CONSTRUCTION STANDARDS, SECTION 8 PART 2.

IMPORTED MATERIAL GRADATION (NOTE 17)

TYPE-1 ($\frac{3}{4}$" BASE) CRUSHED AGGREGATE:

SIEVE SIZE	% PASSING
1"	100
3/4"	90 - 100
NO. 4	40 - 65
NO. 8	30 - 50
NO. 200	3 - 9

TYPE-2 (2" SUBBASE) CRUSHED AGGREGATE:

SIEVE SIZE	% PASSING
2 1/2"	100
2"	90 - 100
1"	55 - 83
NO. 4	30 - 60
NO. 30	10 - 25
NO. 200	0 - 8

6" (PIT RUN, 6") UNCRUSHED AGGREGATE:

SIEVE SIZE	% PASSING
6"	100
NO. 4	15 - 60
NO. 200	0 - 12

CONTAMINATED SOILS

1. CONTRACTOR SHALL ASSUME ALL EXCAVATED MATERIALS ARE CONTAMINATED. ANY SOIL AND WATER ENCOUNTERED DURING EXCAVATION/REMOVAL ACTIVITIES SHALL BE TREATED AS CONTAMINATED MATERIAL.
2. CONTRACTOR SHALL PROVIDE ACCESS CONTROL, TEMPORARY BARRIERS, DUST CONTROL, AND EROSION AND SEDIMENT BMPS AS NECESSARY TO PREVENT PUBLIC EXPOSURE TO EXCAVATED SOILS. THERE SHALL BE NO TRACKING OR MIGRATION OF SEDIMENT AWAY FROM THE CONSTRUCTION SITE.
3. 40 HR. HAZWOPER TRAINING IS REQUIRED FOR ALL EMPLOYEES ENGAGED IN ANY WORK REGARDING CONTAMINATED SOILS/MATERIALS AND/OR REPOSITORY WORK.

SURVEY NOTES

SOURCE INFORAMTION:

CONTROL POINTS SHOWN CAME FROM THE 2023 BASE SURVEY MAP CREATED BY LR GEO A SURVEYING & MAPPING COMPANY. LR GEO NOTED THAT THEY TIED INTO CONTROL POINTS PROVIDED BY TETRA TECH.

HORIZONTAL DATUM INFORMATION:

NAD 83 (2011) 2010.00, IDAHO SPCS CENTRAL ZONE PROJECTION LOCALIZED TO EXISTING CONTROL POINTS PROVIDED BY TETRA TECH.

VERTICAL DATUM INFORMATION:

LOCALIZED TO EXISTING CONTROL POINTS PROVIDED BY TETRA TECH.

Point_No	X	Y	Z	Desc
540	1571156.69	720215.4	6053.42	Alum Cap
2	1572215.56	719901.52	6066.08	Mag Spike
536	1572396.99	720216.51	6066.2	Brass Cap
461	1573245.86	721307.2	6114.22	Mag in Conc

1. THE MONUMENTS SHOWN ON THIS SET WERE LOCATED IN ACCORDANCE WITH IDAHO STATUTE 55-1613. THIS SET 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.
2. 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.

Derek Forseth

Digitally signed by Derek Forseth
Date: 2025.07.08 16:11:40 -07'00'

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
COORDINATE SYSTEM: GROUND (NAD83 US FT)
DESIGNER: D. FORSETH
SCALE: N/A
CHECKED: D. FORSETH
APPROVED: D. FORSETH
DATE: 06/18/2025
DATE: 06/25/2025

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

GENERAL PLAN SET INFORMATION

SHEET: G1
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 2 OF 16

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LEGEND, SYMBOLS, ABBREVIATIONS

APPROX.	APPROXIMATE
Ø OR DIA.	DIAMETER
E	EASTING
EQUIV.	EQUIVALENT
EX.	EXISTING
ELEV.	ELEVATION
FT	FEET
ISPC	IDAHO STATE PLANE CENTRAL
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION
N	NORTHING
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NTS	NOT TO SCALE
NO.	NUMBER
ROW	RIGHT-OF-WAY
STA	STATION
SPEC	SPECIFICATION
TYP	TYPICAL

NATIVE GROUND/SOIL

CONCRETE

GRAVEL/TYPE-1 CRUSHED AGGREGATE

RIP RAP/TYPE-2 CRUSHED AGGREGATE

WASTE MATERIAL

SURGE POND MATERIAL

BUILDING

CULVERT

FENCE

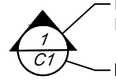
OVERHEAD POWER LINE

ROAD (GRAVEL/DIRT)

WATER

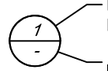
SECTION AND DETAIL DESIGNATION

POINT AT WHICH SECTION OR DETAIL IS TAKEN



NUMBER INDICATES DESIGNATION OF SECTION

INDICATES SHEET WHERE SECTION IS SHOWN. A DASH (-) INDICATES SECTION IS SHOWN ON SAME SHEET AS TAKEN



NUMBER INDICATES DESIGNATION OF DETAIL

INDICATES SHEET WHERE DETAIL IS SHOWN. A DASH (-) INDICATES DETAIL IS SHOWN ON SAME SHEET AS TAKEN

PAGE ON WHICH SECTION OR DETAIL IS SHOWN

NUMBER INDICATES DESIGNATION OF SECTION



NUMBER INDICATES DESIGNATION OF DETAIL



EMERGENCY CONTACT AND UTILITY INFORMATION

BLAINE COUNTY EMERGENCY COMMUNICATIONS
(POLICE, FIRE & MEDICAL NON-EMERGENCY)
1650 AVIATION DRIVE
HAILEY, IDAHO 83333
208-578-3831

BLAINE COUNTY ROAD & BRIDGE
NORTH VALLEY R&B SHOP
186 W GLENDALE ROAD
BELLEVUE, IDAHO 83313
208-788-5580

CALL BEFORE YOU DIG
1-800-342-1585

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.

Digitally signed by Derek Forseth
Derek Forseth Date: 2025.07.08 16:37:29 -07'00'

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

NO.	DATE	REVISIONS	BY	CHK
(A)	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: N/A
APPROVED: D. FORSETH
DATE: 06/25/2025

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

GENERAL PLAN SET INFORMATION

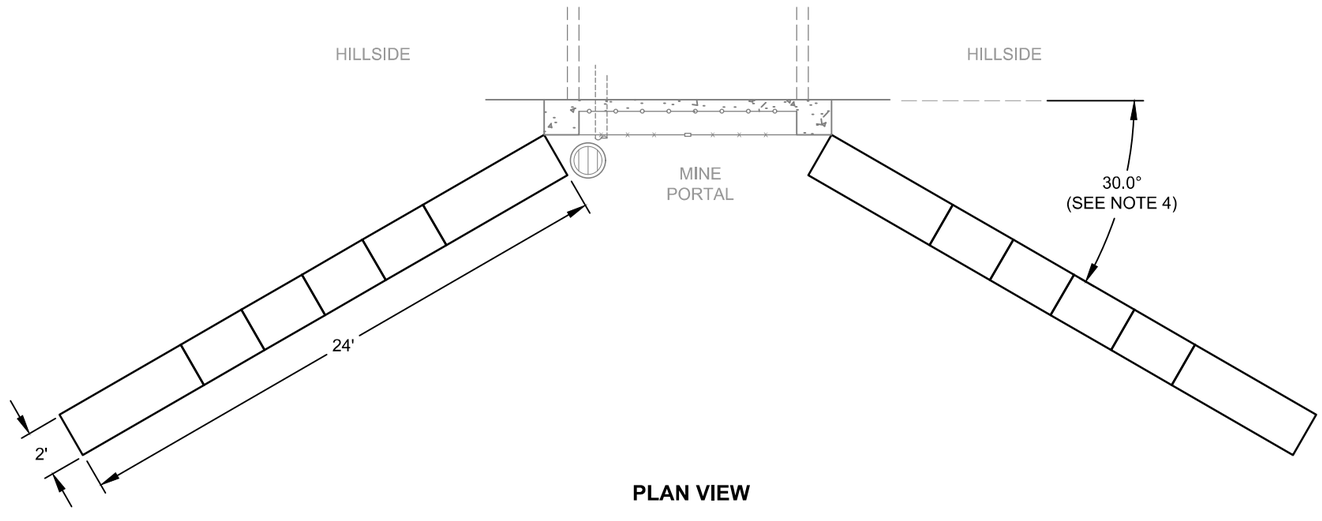
SHEET: G2
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 3 OF 16

NOTES:

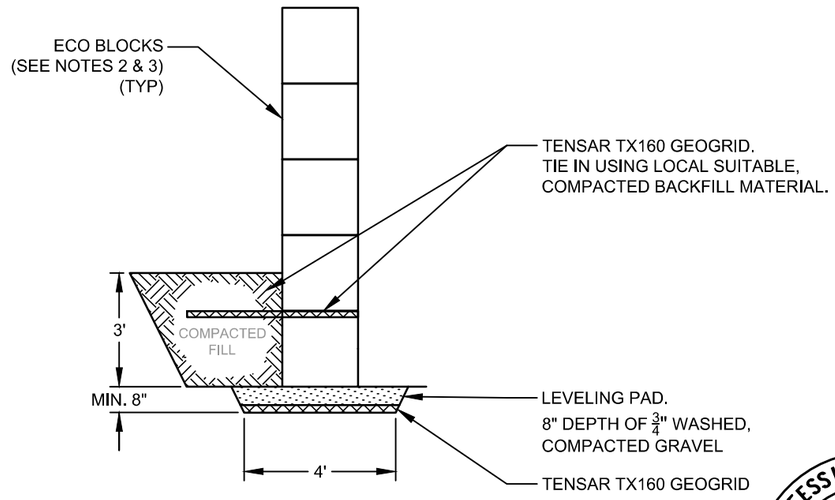
1. RE-GRADE EXISTING SITE AS NEEDED IN ORDER TO BUILD A LEVELING PAD FOR PLACEMENT OF ECO BLOCK WALL.
2. ECO BLOCKS SHALL BE 2' x VARIABLE LENGTH (3' OR 6') x 2'. STACKED STARTING ROW BLOCKS SHALL ALTERNATE BETWEEN 3' AND 6' LENGTHS. BLOCKS SHALL BE STACKED NO MORE THAN 5 BLOCKS TALL.
3.) ECO BLOCKS SHALL BE TONGUE & GROOVE FIT.
4.) ANGLE APPROXIMATELY 30° FROM HILLSIDE. FIELD FIT AS DIRECTED BY OWNER OR ENGINEER.



FRONT VIEW



PLAN VIEW



SIDE VIEW

1 / -- ECO BLOCK WALL (PORTAL AREA)
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH
Derek Forseth
Digitally signed by Derek Forseth
Date: 2025.07.09 16:48:44 -07'00'

NO.	DATE	REVISIONS	BY	CHK
(A)	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 06/25/2025

Alta Science & Engineering, Inc.

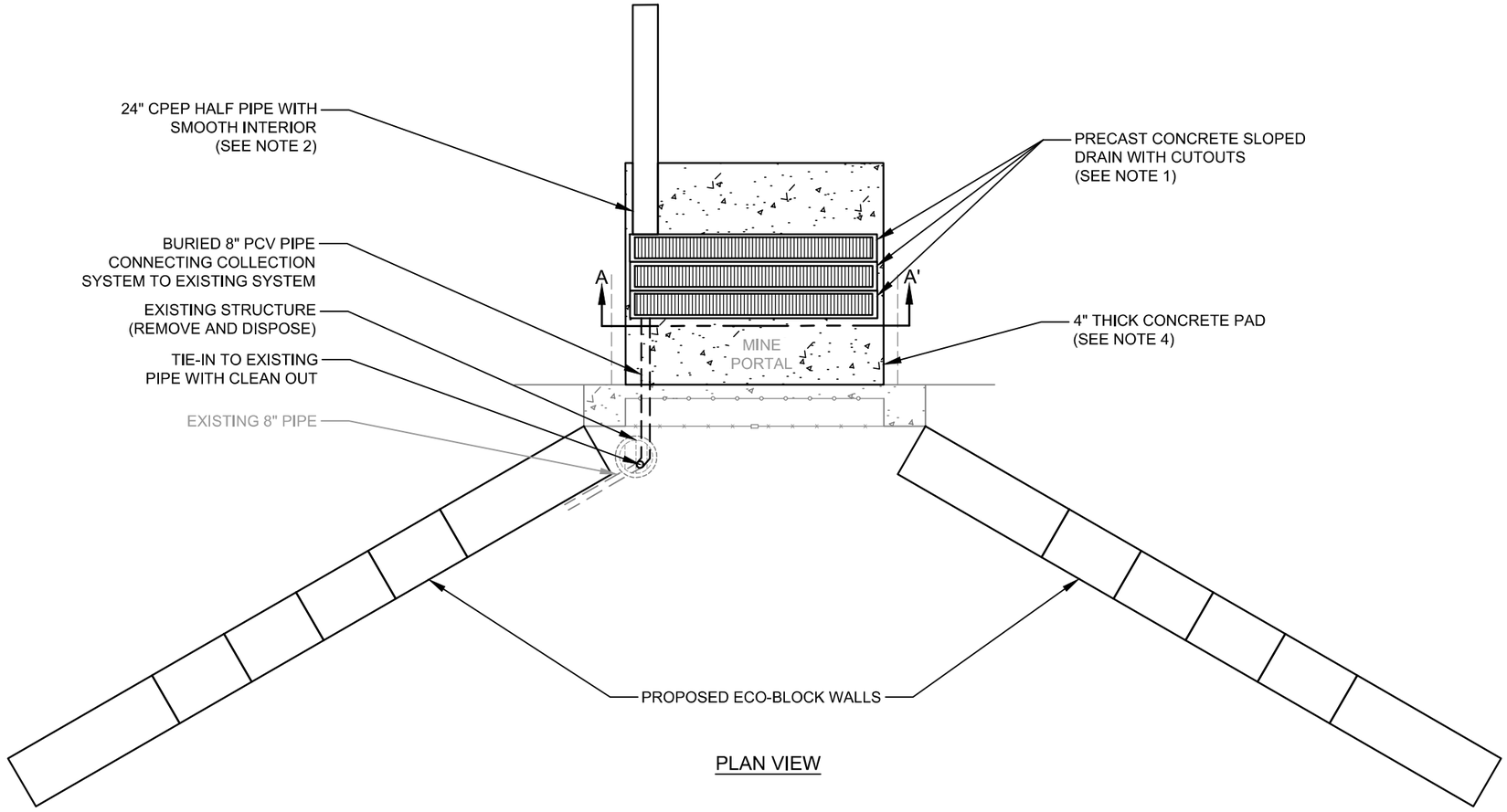
TRIUMPH MINE SITE
BLAINE COUNTY, ID

PORTAL STABILIZATION DESIGN

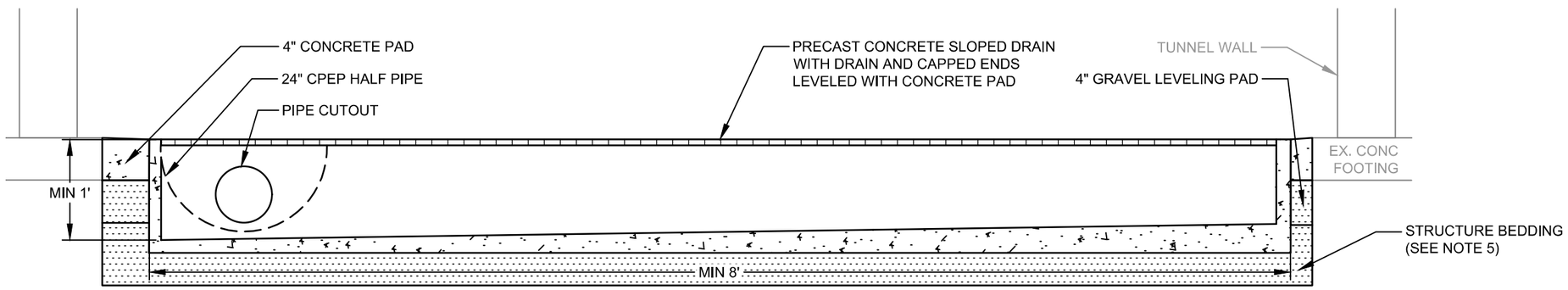
SHEET: S1
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 4 OF 16

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PLAN VIEW



SECTION A - A'

NOTES:

1. PRECAST CONCRETE DRAINS SHALL BE INSTALLED LEVEL WITH 4" CONCRETE PAD, AND SLOPED TOWARDS THE COLLECTION HALF PIPE WITHIN THE TUNNEL. CUTOUT AREAS SHALL BE DETERMINED IN THE FIELD AND BE SUFFICIENT TO ALLOW FOR CONTINUOUS FLOW OF APPROXIMATELY 7 GAL/MIN. CUTOUT IN DRAIN CLOSEST TO PORTAL ENTRY SHALL ALLOW CONNECTION OF 8" PVC PIPE.
2. HALF - PIPE CPEP CULVERT SHALL BE ANCHORED AGAINST FLOATING, AND BE POSITIONED TO CAPTURE AS MUCH PORTAL DRAINAGE AS POSSIBLE.
3. CONTRACTOR RESPONSIBLE FOR DETERMINING SIZE OF CLEAN OUT REQUIRED FOR EXISTING PIPE.
4. BROOM FINISH POURED 4" CONCRETE PAD AFTER PLACEMENT OF PRECAST CONCRETE DRAINS, HALF-PIPE CULVERT AND CONNECTION PIPE. PAD SHALL BE SLIGHTLY SLOPED SO ANY DRAINAGE WILL BE CAPTURED BY DRAINS. PAD SHALL BE BOUNDED BY EXISTING FOUNDATION WALLS (NOT TO EXTEND PAST THE EXISTING ENTRANCE), AND EXTEND AT LEAST 8' INTO TUNNEL FROM PORTAL. DRAINS SHALL BE ROUGHLY CENTERED WITHIN PAD.
5. OVER EXCAVATE TUNNEL FLOOR MATERIAL AS NEEDED IN ORDER TO PLACE DRAIN SYSTEM (LIKELY 24" DEPTH, BUT MAY VARY DEPENDING ON CONDITIONS). PROVIDE MIN. 6" THICK COMPACTED GRAVEL BASE PRIOR TO DRAIN SYSTEM INSTALL.

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

Derek Forseth

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Date: 2025.07.09 16:39:07 -07'00'

NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 06/25/2025

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

PORTAL DRAINAGE RE-LOCATION PLAN

SHEET: S2
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 5 OF 16

NOTES:

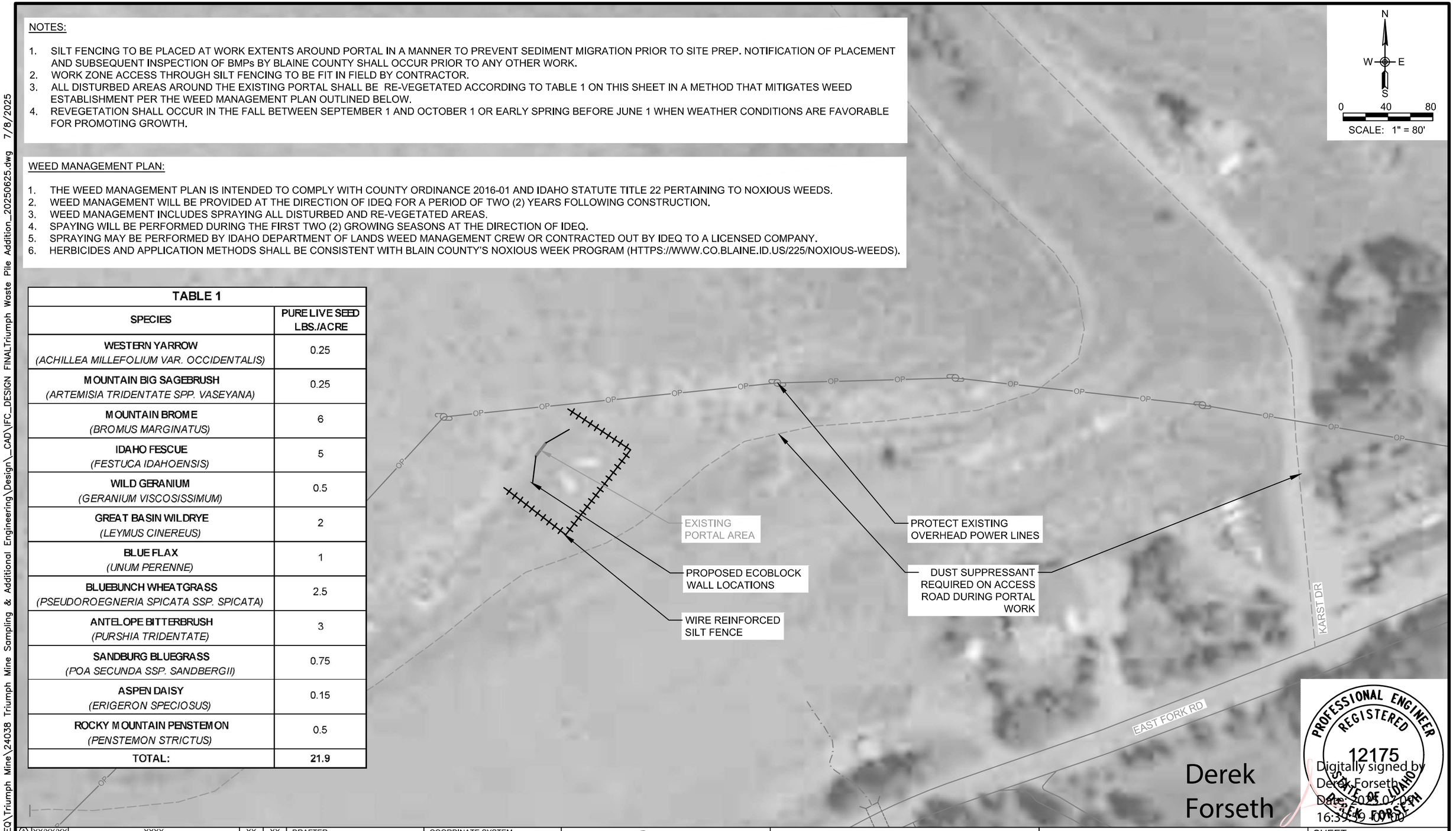
1. SILT FENCING TO BE PLACED AT WORK EXTENTS AROUND PORTAL IN A MANNER TO PREVENT SEDIMENT MIGRATION PRIOR TO SITE PREP. NOTIFICATION OF PLACEMENT AND SUBSEQUENT INSPECTION OF BMPs BY BLAINE COUNTY SHALL OCCUR PRIOR TO ANY OTHER WORK.
2. WORK ZONE ACCESS THROUGH SILT FENCING TO BE FIT IN FIELD BY CONTRACTOR.
3. ALL DISTURBED AREAS AROUND THE EXISTING PORTAL SHALL BE RE-VEGETATED ACCORDING TO TABLE 1 ON THIS SHEET IN A METHOD THAT MITIGATES WEED ESTABLISHMENT PER THE WEED MANAGEMENT PLAN OUTLINED BELOW.
4. REVEGETATION SHALL OCCUR IN THE FALL BETWEEN SEPTEMBER 1 AND OCTOBER 1 OR EARLY SPRING BEFORE JUNE 1 WHEN WEATHER CONDITIONS ARE FAVORABLE FOR PROMOTING GROWTH.

WEED MANAGEMENT PLAN:

1. THE WEED MANAGEMENT PLAN IS INTENDED TO COMPLY WITH COUNTY ORDINANCE 2016-01 AND IDAHO STATUTE TITLE 22 PERTAINING TO NOXIOUS WEEDS.
2. WEED MANAGEMENT WILL BE PROVIDED AT THE DIRECTION OF IDEQ FOR A PERIOD OF TWO (2) YEARS FOLLOWING CONSTRUCTION.
3. WEED MANAGEMENT INCLUDES SPRAYING ALL DISTURBED AND RE-VEGETATED AREAS.
4. SPAYING WILL BE PERFORMED DURING THE FIRST TWO (2) GROWING SEASONS AT THE DIRECTION OF IDEQ.
5. SPRAYING MAY BE PERFORMED BY IDAHO DEPARTMENT OF LANDS WEED MANAGEMENT CREW OR CONTRACTED OUT BY IDEQ TO A LICENSED COMPANY.
6. HERBICIDES AND APPLICATION METHODS SHALL BE CONSISTENT WITH BLAIN COUNTY'S NOXIOUS WEEK PROGRAM (HTTPS://WWW.CO.BLAINE.ID.US/225/NOXIOUS-WEEDS).

TABLE 1

SPECIES	PURE LIVE SEED LBS./ACRE
WESTERN YARROW *(ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)*	0.25
MOUNTAIN BIG SAGEBRUSH *(ARTEMISIA TRIDENTATE SPP. VASEYANA)*	0.25
MOUNTAIN BROME *(BROMUS MARGINATUS)*	6
IDAHO FESCUE *(FESTUCA IDAHOENSIS)*	5
WILD GERANIUM *(GERANIUM VISCOSISSIMUM)*	0.5
GREAT BASIN WILDRYE *(LEYMUS CINEREUS)*	2
BLUE FLAX *(UNUM PERENNE)*	1
BLUEBUNCH WHEATGRASS *(PSEUDOROEGNERIA SPICATA SSP. SPICATA)*	2.5
ANTELOPE BITTERBRUSH *(PURSHIA TRIDENTATE)*	3
SANDBURG BLUEGRASS *(POA SECUNDA SSP. SANDBERGII)*	0.75
ASPEN DAISY *(ERIGERON SPECIOSUS)*	0.15
ROCKY MOUNTAIN PENSTEMON *(PENSTEMON STRICTUS)*	0.5
TOTAL:	**21.9**



PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

Derek Forseth

Digitally signed by Derek Forseth
Date: 2025.07.09 16:39:59 -07'00'

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NO.	DATE	REVISIONS	BY	CHK
<1>	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 80'
APPROVED: D. FORSETH
DATE: 06/25/2025

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TRIUMPH MINE SITE

BLAINE COUNTY, ID

PORTAL MAINTENANCE

SHEET: S3
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 6 OF 16



P:\Projects\IDEQ\Triumph Mine\24038 Triumph Mine Sampling & Additional Engineering\Design_CAD\IFC_DESIGN FINALTriumph Waste Pile Addition_20250625.dwg 7/8/2025

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

Derek Forseth

Digitally signed by Derek Forseth
Date: 2025.07.09 16:40:20 -06'00'

NO.	DATE	REVISIONS	BY	CHK
<A>	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

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SCALE: 1" = 200'
APPROVED: D. FORSETH
DATE: 06/25/2025

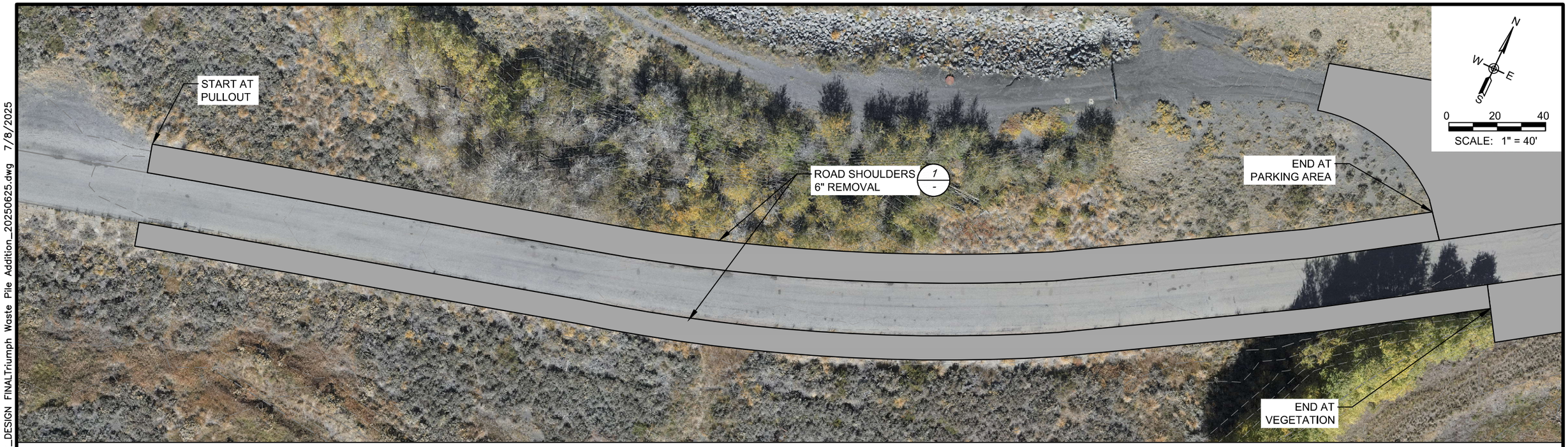
Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

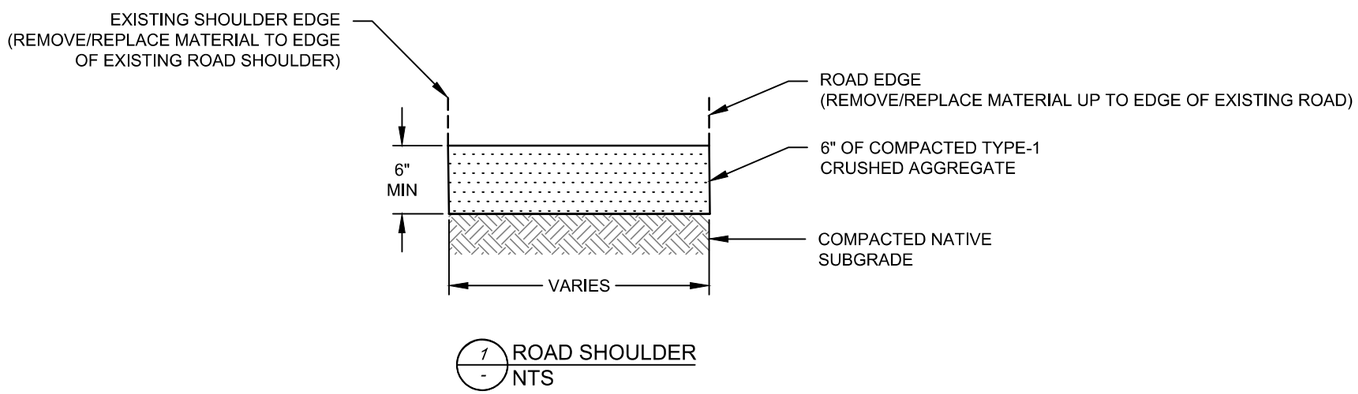
CONTAMINATED MATERIAL

SHEET: S4
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 7 OF 16



NOTES:

1. REMOVE EXISTING TO SHOULDER EDGE, REPLACE TO MATCH EXISTING.



1/- ROAD SHOULDER
NTS

Derek Forseth

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Digitally signed by Derek Forseth
Date: 2025.07.08 10:42:42 -06'00'

NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

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APPROVED: D. FORSETH
DATE: 06/25/2025

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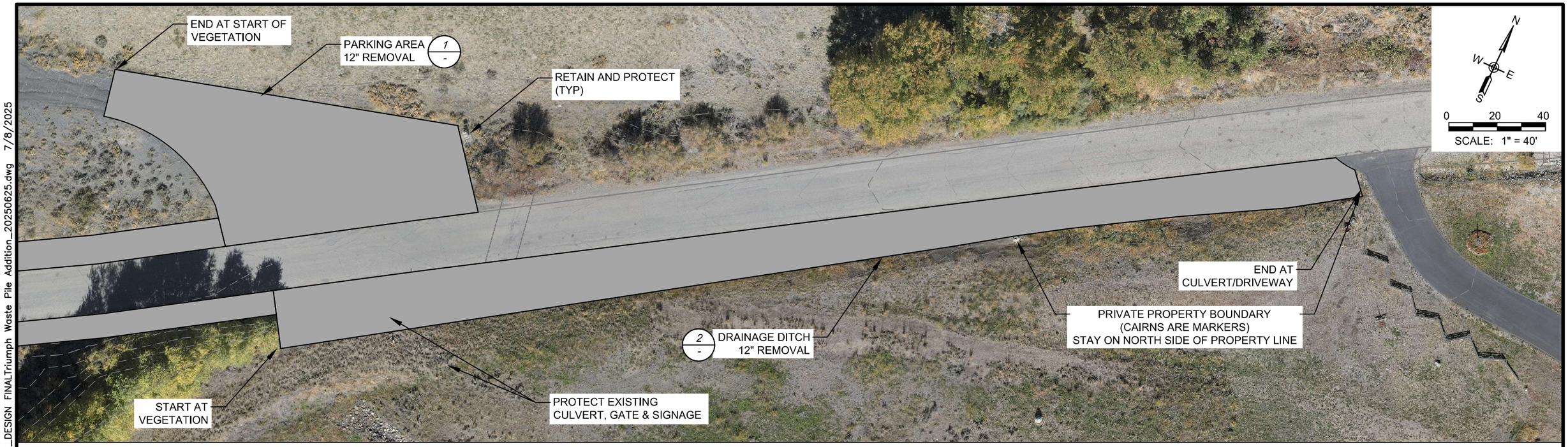
TRIUMPH MINE SITE

BLAINE COUNTY, ID

REMEDIATION PLAN
AREAS 1 & 2

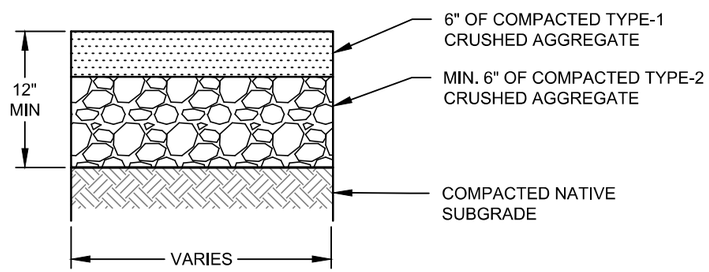
SHEET: S5
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 8 OF 16

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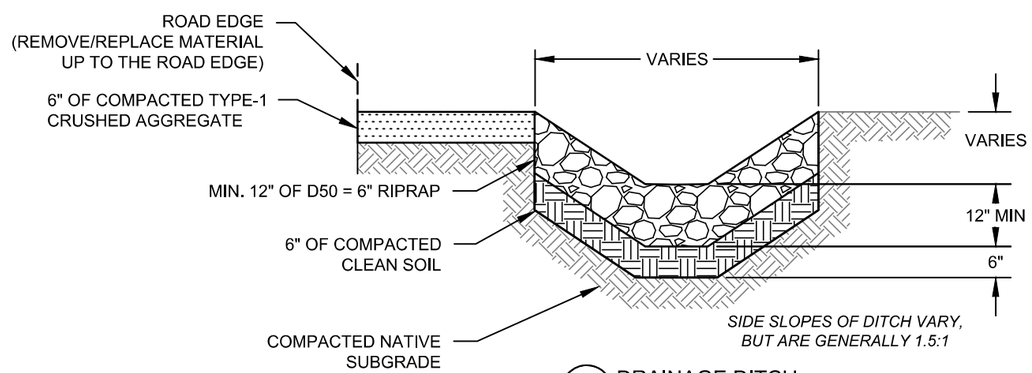


NOTES:

1. REMOVE/REPLACE TO MATCH EXISTING.
2. REMOVE MATERIAL TO EXTENTS OF PARKING LOT OR SOUTHERN CREST OF DRAINAGE DITCH UNLESS OTHERWISE NOTED.
3. TIE DITCHES INTO TO EXISTING CULVERTS TO ALLOW FOR PROPER DRAINAGE. PRESERVE & PROTECT EXISTING CULVERTS.
4. DITCH FINAL GRADE SHALL BE SUFFICIENT TO DISCOURAGE PONDING.



1 - PARKING LOT
NTS



2 - DRAINAGE DITCH
NTS

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Digitally signed by Derek Forseth
Date: 2025.07.09 16:47:07 -07'00'

NO.	DATE	REVISIONS	BY	CHK
(A)	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 40'
APPROVED: D. FORSETH
DATE: 06/25/2025

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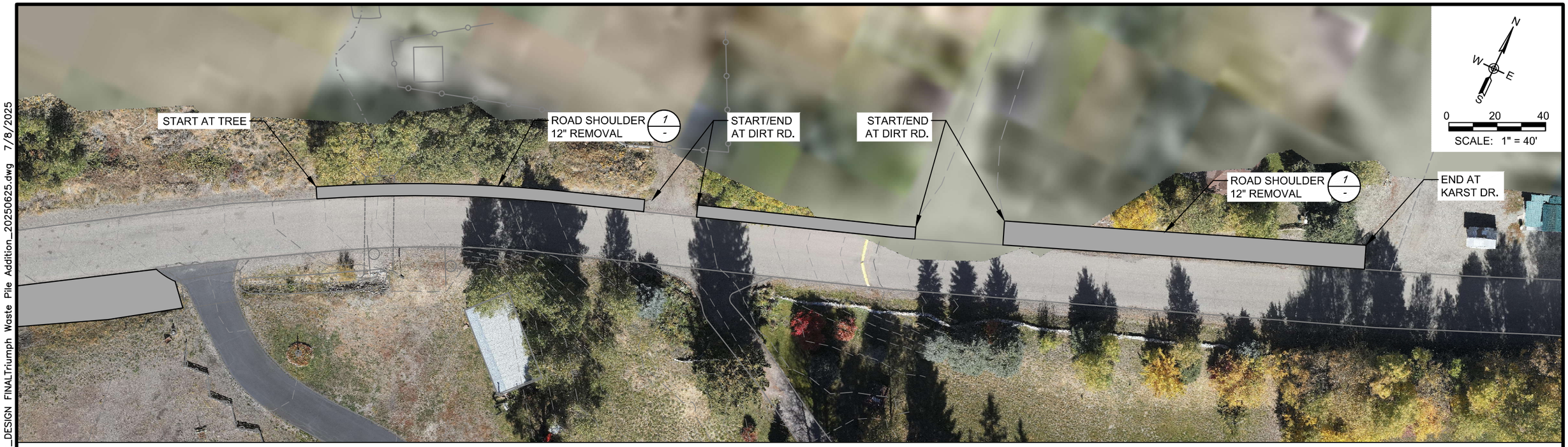
TRIUMPH MINE SITE

BLAINE COUNTY, ID

REMEDIATION PLAN
AREAS 3 & 4

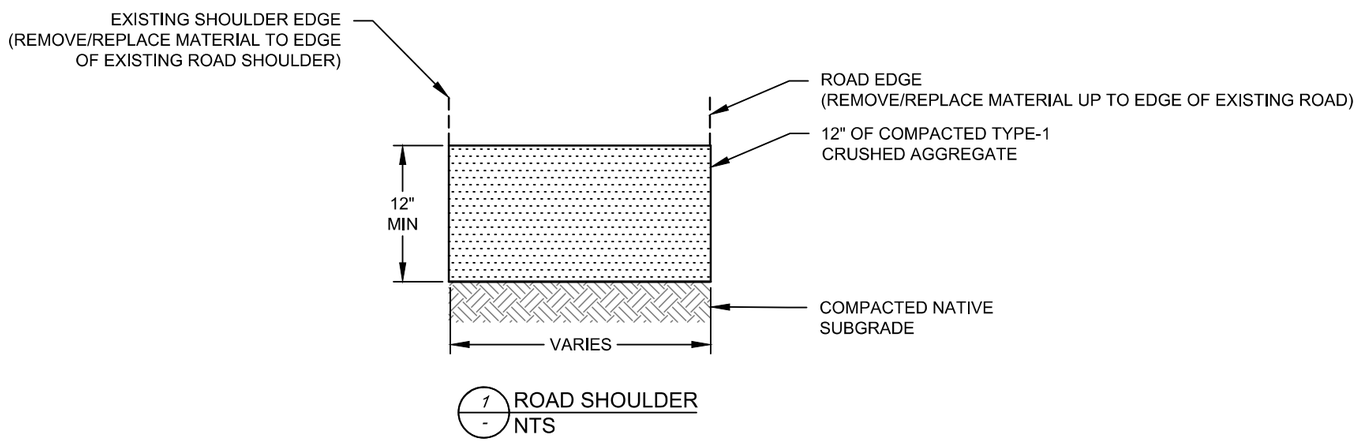
SHEET: S6
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 9 OF 16

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NOTES:

1. REMOVE EXISTING TO SHOULDER EDGE, REPLACE TO MATCH EXISTING.
2. TIE INTO EXISTING CULVERTS TO ALLOW FOR PROPER DRAINAGE. PRESERVE AND PROTECT EXISTING CULVERTS.



1/- ROAD SHOULDER
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

Derek Forseth

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Date: 2025.07.08 10:44:30 -06'00'

⟨A⟩	XX/XX/XX	XXXX	XX	XX
NO.	DATE	REVISIONS	BY	CHK

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 40'
APPROVED: D. FORSETH
DATE: 06/25/2025

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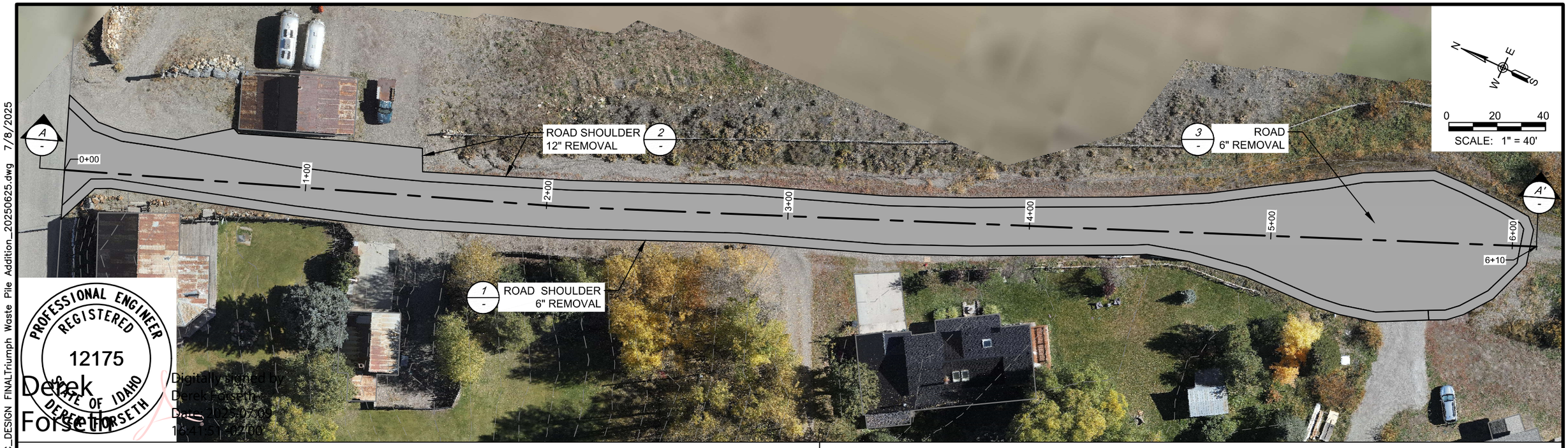
TRIUMPH MINE SITE

BLAINE COUNTY, ID

REMEDIATION PLAN
AREAS 5, 6 & 7

SHEET: S7
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 10 OF 16

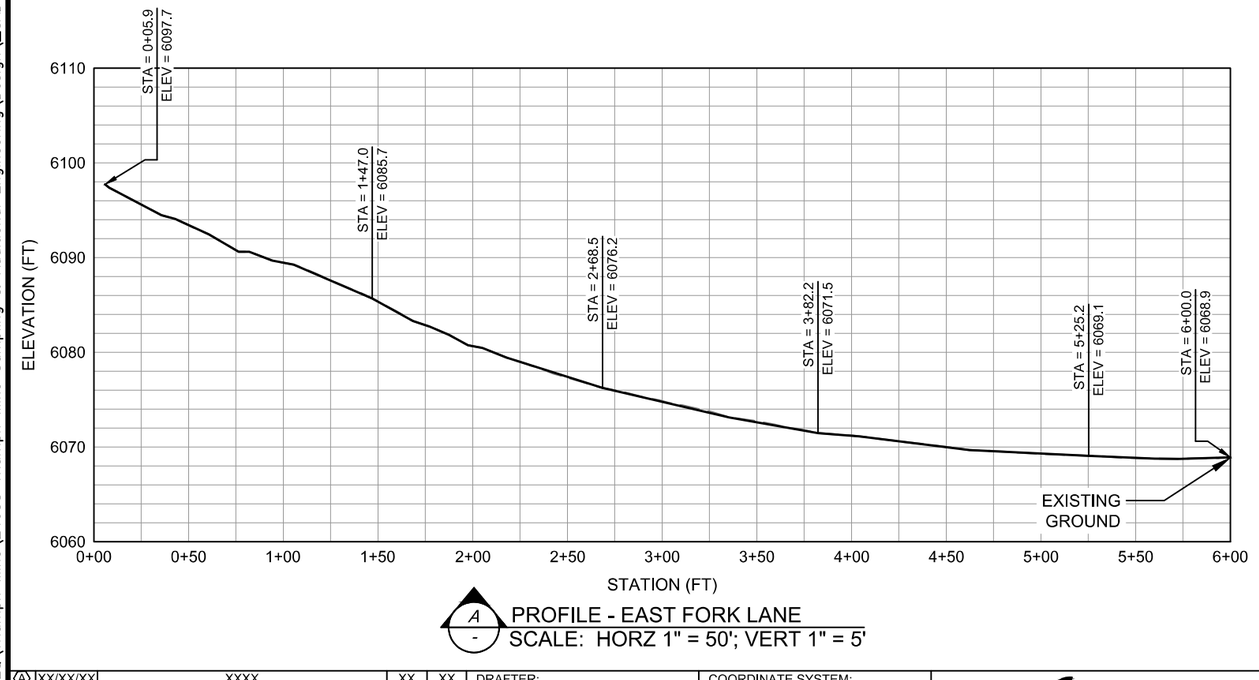
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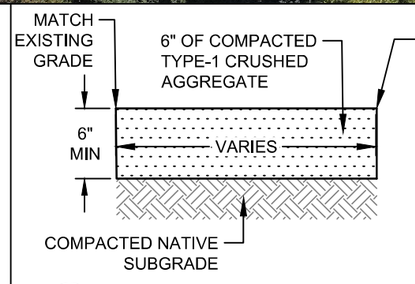
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12175
STATE OF IDAHO
DEREK FORSETH

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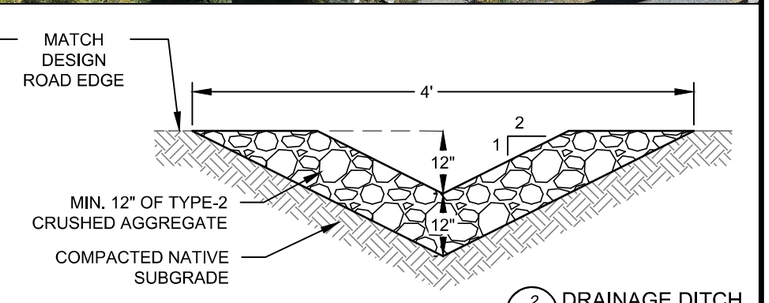
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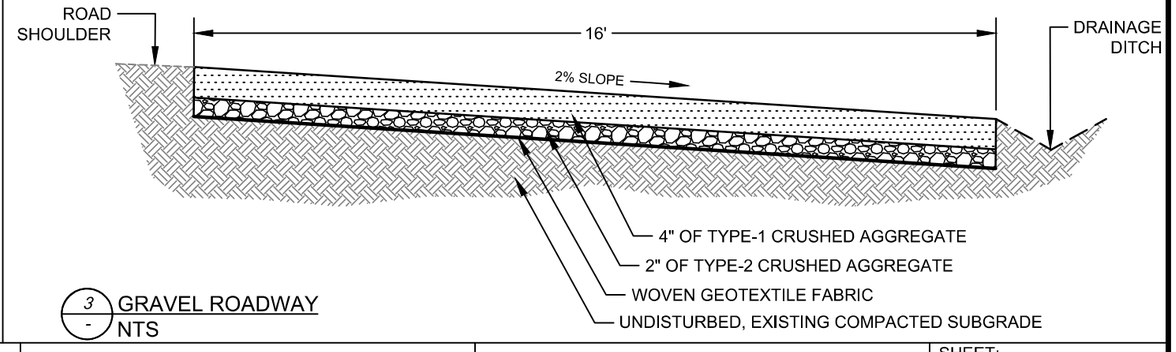
A - PROFILE - EAST FORK LANE
SCALE: HORZ 1" = 50'; VERT 1" = 5'



1 - ROAD SHOULDER
NTS



2 - DRAINAGE DITCH
NTS



3 - GRAVEL ROADWAY
NTS

NO.	DATE	REVISIONS	BY	CHK
⟨A⟩	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 40'
APPROVED: D. FORSETH
DATE: 06/25/2025

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TRIUMPH MINE SITE

BLAINE COUNTY, ID

REMEDIATION PLAN AREAS 8, 9 & 10 EAST FORK LANE

SHEET: S8
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 11 OF 16

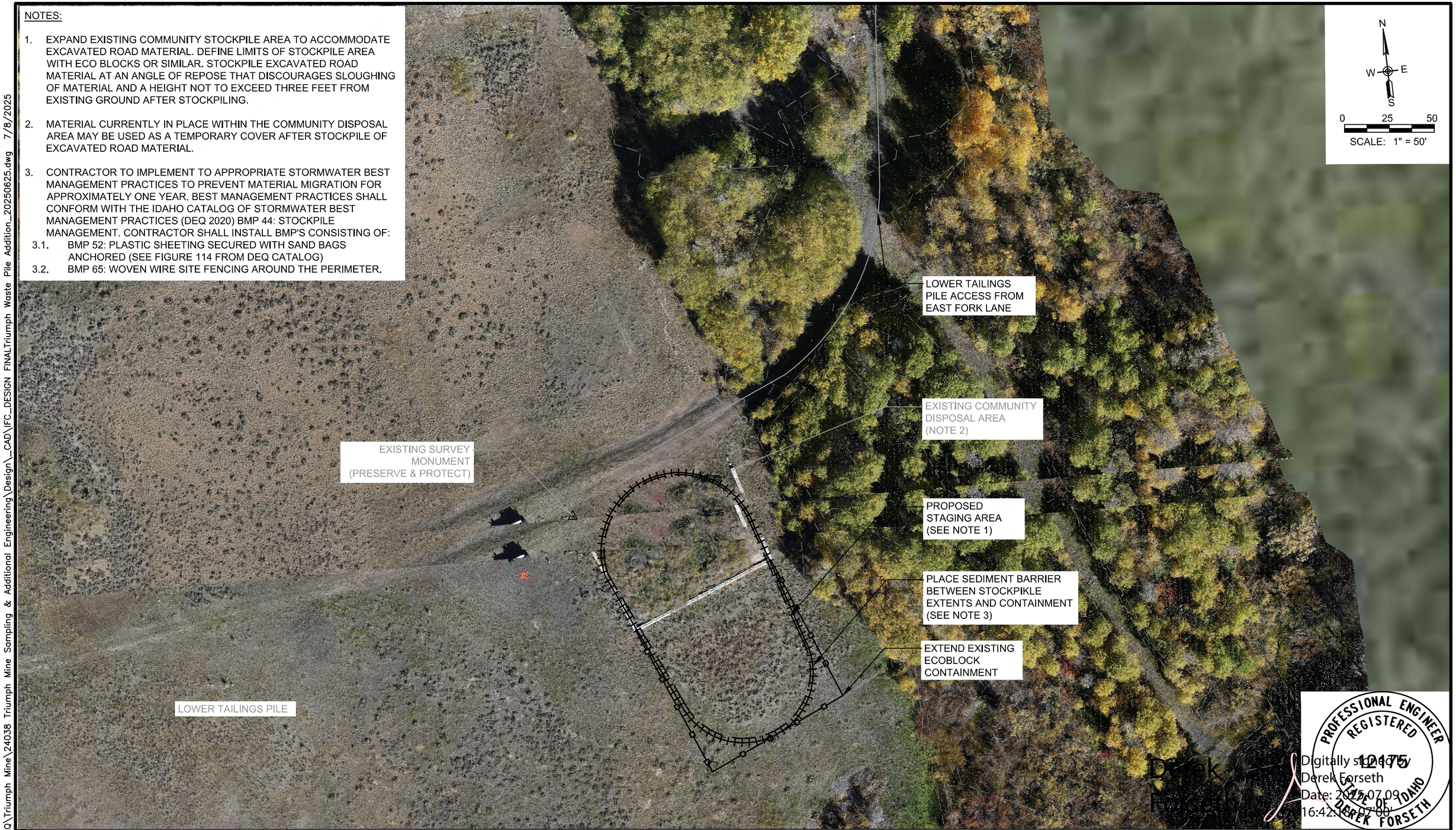
P:\Projects\IDEQ\Triumph Mine\24038 Triumph Mine Sampling & Additional Engineering\Design_CAD\IFC_DESIGN FINALTriumph Waste Pile Addition_20250625.dwg 7/8/2025

NOTES:

1. EXPAND EXISTING COMMUNITY STOCKPILE AREA TO ACCOMMODATE EXCAVATED ROAD MATERIAL. DEFINE LIMITS OF STOCKPILE AREA WITH ECO BLOCKS OR SIMILAR. STOCKPILE EXCAVATED ROAD MATERIAL AT AN ANGLE OF REPOSE THAT DISCOURAGES SLOUGHING OF MATERIAL AND A HEIGHT NOT TO EXCEED THREE FEET FROM EXISTING GROUND AFTER STOCKPILING.

2. MATERIAL CURRENTLY IN PLACE WITHIN THE COMMUNITY DISPOSAL AREA MAY BE USED AS A TEMPORARY COVER AFTER STOCKPILE OF EXCAVATED ROAD MATERIAL.

3. CONTRACTOR TO IMPLEMENT TO APPROPRIATE STORMWATER BEST MANAGEMENT PRACTICES TO PREVENT MATERIAL MIGRATION FOR APPROXIMATELY ONE YEAR. BEST MANAGEMENT PRACTICES SHALL CONFORM WITH THE IDAHO CATALOG OF STORMWATER BEST MANAGEMENT PRACTICES (DEQ 2020) BMP 44: STOCKPILE MANAGEMENT. CONTRACTOR SHALL INSTALL BMP'S CONSISTING OF:
   - 3.1. BMP 52: PLASTIC SHEETING SECURED WITH SAND BAGS ANCHORED (SEE FIGURE 114 FROM DEQ CATALOG)
   - 3.2. BMP 65: WOVEN WIRE SITE FENCING AROUND THE PERIMETER.



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Digitally signed by Derek Forseth
Date: 2025.07.09 16:42:18 -07'00'

NO.	DATE	REVISIONS	BY	CHK
〈A〉	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)
DESIGNER: D. FORSETH	SCALE: 1" = 60'
CHECKED: D. FORSETH	APPROVED: D. FORSETH
DATE: 06/18/2025	DATE: 06/25/2025

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TRIUMPH MINE SITE

BLAINE COUNTY, ID

ROAD MATERIAL STAGING

SHEET:	S9
DATE:	7/8/2025
PROJECT NO.:	24038
SHEET NO.:	12 OF 16

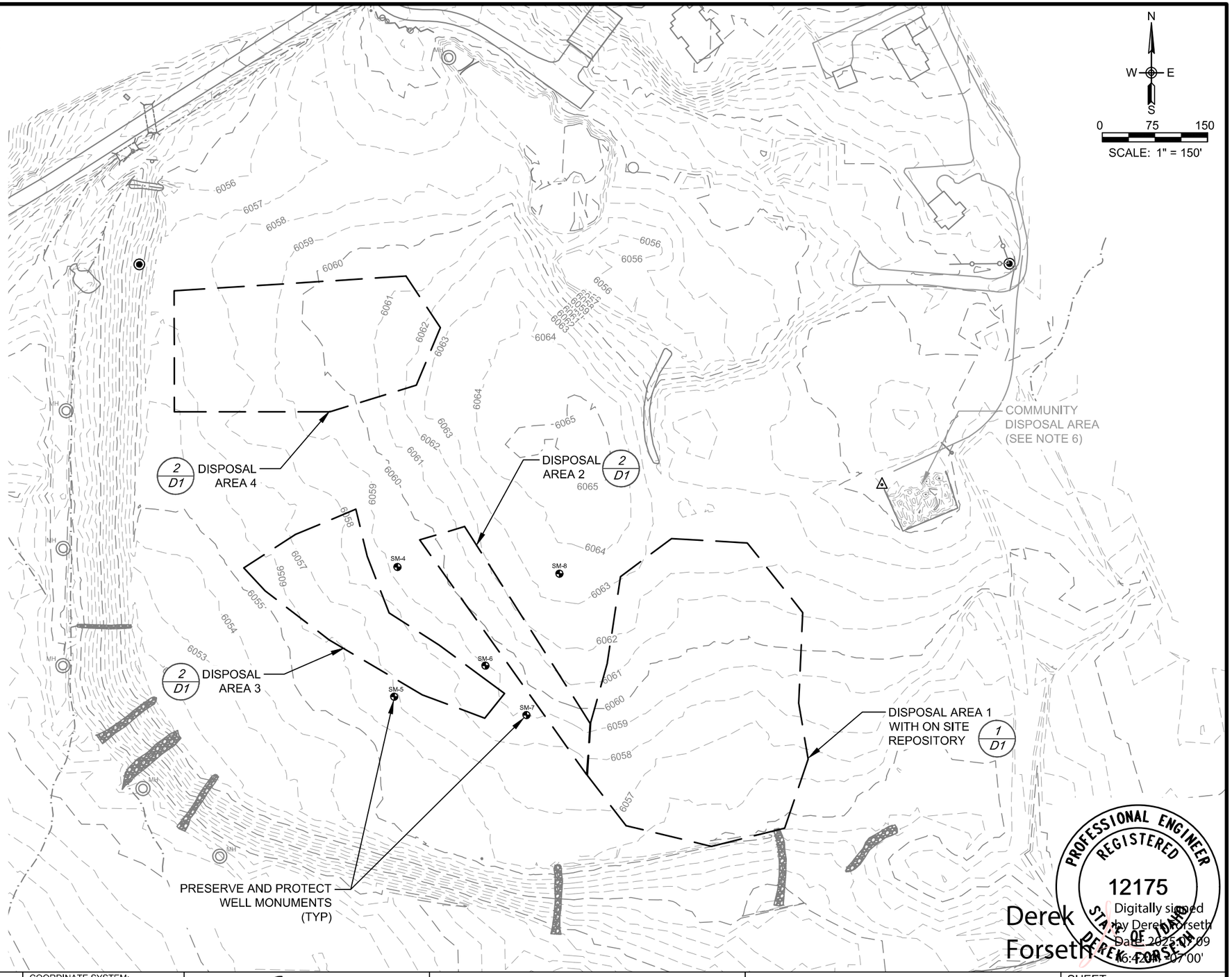
P:\Projects\DEQ\Triumph Mine\24038 Triumph Mine Sampling & Additional Engineering\Design_CAD\IFC_DESIGN FINALTriumph Waste Pile Addition_20250625.dwg 7/8/2025

NOTES:

1. ALL DISTURBED AREAS ON THE LOWER TAILING PILE, INCLUDING WASTE PLACEMENT AREAS & ACCESS ROUTES, SHALL BE COVERED WITH A MINIMUM 6" THICK SOIL CAP AND RE-VEGETATED ACCORDING TO TABLE 1 ON THIS SHEET.
2. SOIL FOR SOIL CAP SHALL BE SOURCED FROM EXISTING BORROW AREA LOCATED ON DEQ PROPERTY NW OF THE SURGE POND OR OHIO GULCH AS DIRECTED BY DEQ.
3. BORROW AREAS SHALL BE RESTORED BY GRADING TO BLEND WITH ADJACENT TERRAIN. MAXIMUM SLOPES OF RESTORED BORROW AREAS IS 2.5H TO 1.0V. RESTORED BORROW AREAS SHALL BE REVEGETATED USING THE SEED MIX SHOWN IN TABLE 1 ON THIS SHEET.
4. REVEGETATION SHALL OCCUR IN THE FALL BETWEEN SEPTEMBER 1 AND OCTOBER 1 OR EARLY SPRING BEFORE JUNE 1 WHEN WEATHER CONDITIONS ARE FAVORABLE FOR PROMOTING GROWTH.
5. DISPOSAL AREAS ARE APPROXIMATE, AREAS OF NOTICEABLE COVER DEGRADATION OR WITH EVIDENCE OF PONDING SHALL RECEIVE ROAD MATERIAL FIRST.
6. MATERIAL IN COMMUNITY DISPOSAL AREA TO BE PLACED WITH OTHER BARROW IN DESIGNATED DISPOSAL AREAS.

TABLE 1

SPECIES	PURE LIVE SEED LBS./ACRE
WESTERN YARROW *(ACHILLEA MILLEFOLIUM VAR. OCCIDENTALIS)*	0.25
MOUNTAIN BIG SAGEBRUSH *(ARTEMISIA TRIDENTATE SPP. VASEYANA)*	0.25
MOUNTAIN BROME *(BROMUS MARGINATUS)*	6
IDAHO FESCUE *(FESTUCA IDAHOENSIS)*	5
WILD GERANIUM *(GERANIUM VISCOSISSIMUM)*	0.5
GREAT BASIN WILDRYE *(LEYMUS CINEREUS)*	2
BLUE FLAX *(UNUM PERENNE)*	1
BLUEBUNCH WHEATGRASS *(PSEUDOROEGNERIA SPICATA SSP. SPICATA)*	2.5
ANTELOPE BITTERBRUSH *(PURSHIA TRIDENTATE)*	3
SANDBURG BLUEGRASS *(POA SECUNDA SSP. SANDBERGII)*	0.75
ASPEN DAISY *(ERIGERON SPECIOSUS)*	0.15
ROCKY MOUNTAIN PENSTEMON *(PENSTEMON STRICTUS)*	0.5
TOTAL:	**21.9**



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NO.	DATE	REVISIONS	BY	CHK
⟨A⟩	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

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APPROVED: D. FORSETH
DATE: 06/25/2025

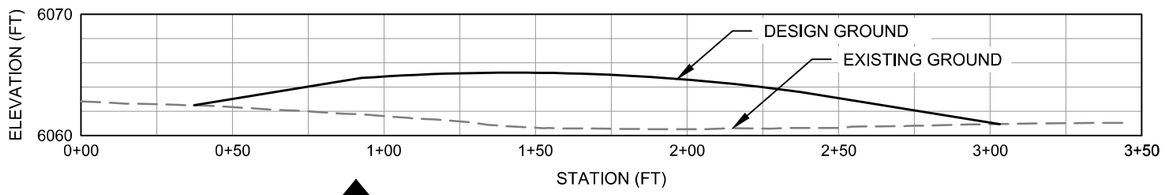
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TRIUMPH MINE SITE

BLAINE COUNTY, ID

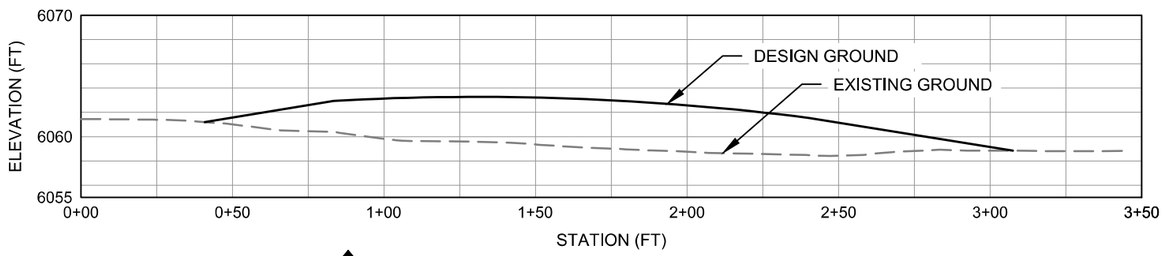
TAILS PILE - NEW MATERIAL FILL, CAP & COVER PLAN

SHEET: S10
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 13 OF 16



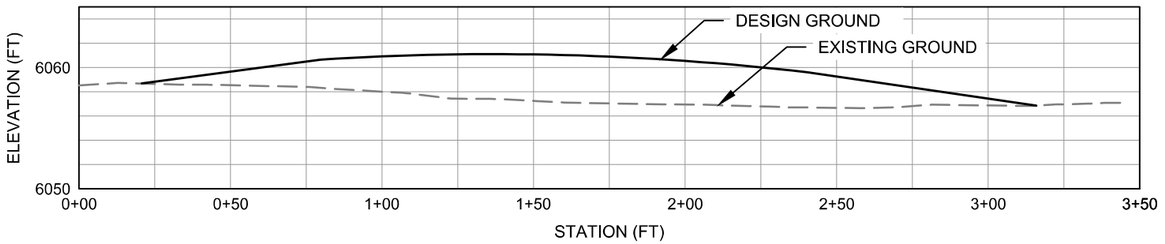
A - PROFILE - REPOSITORY NORTH - WEST TO EAST

SCALE: HORZ 1" = 50'; VERT 1" = 2'



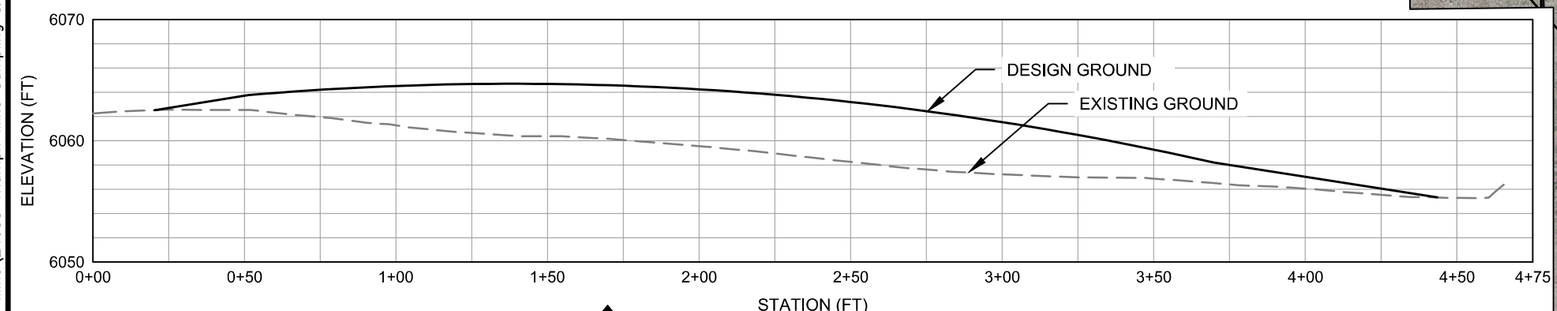
B - PROFILE - REPOSITORY CENTER - WEST TO EAST

SCALE: HORZ 1" = 50'; VERT 1" = 2'



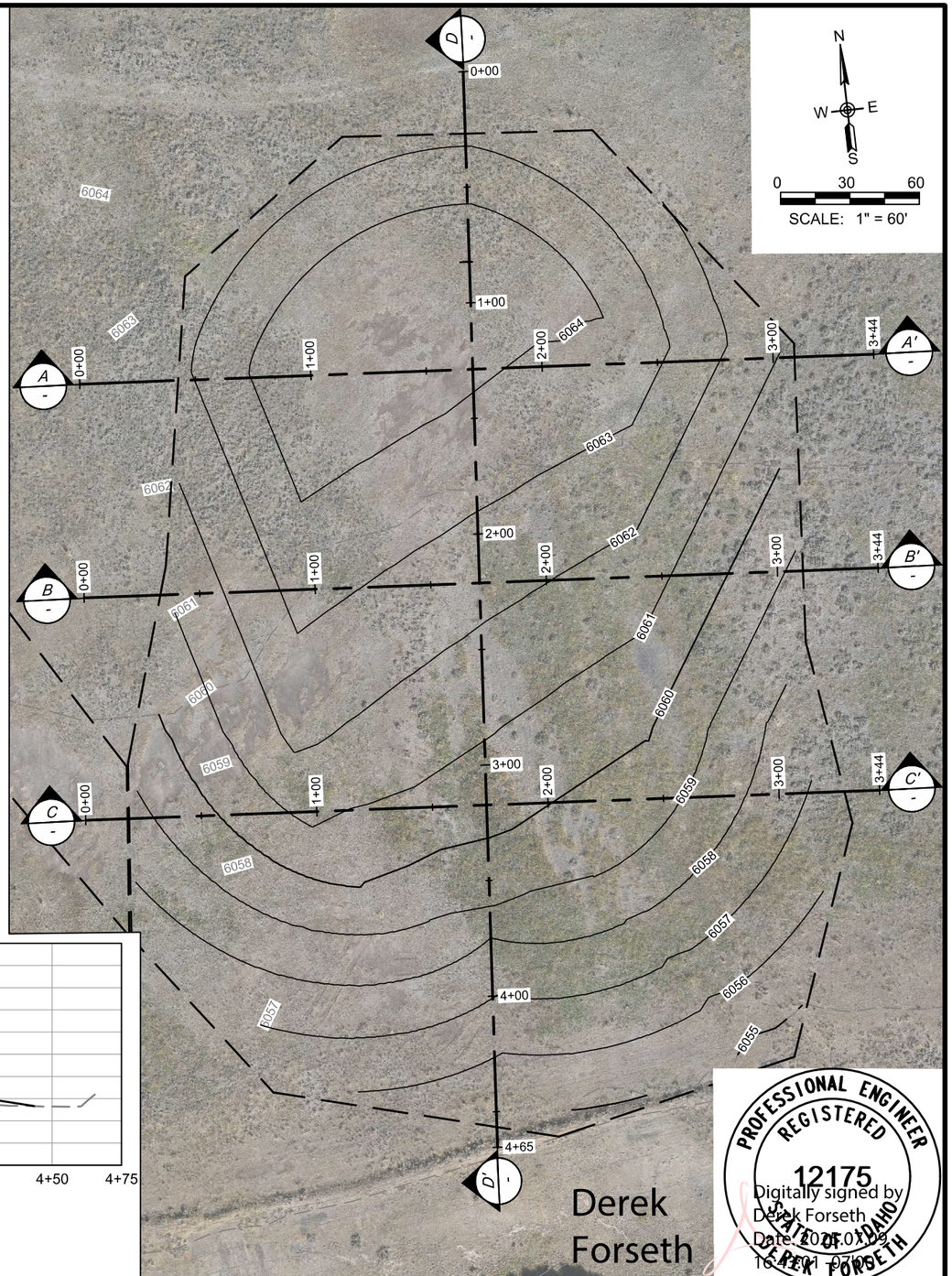
C - PROFILE - REPOSITORY SOUTH - WEST TO EAST

SCALE: HORZ 1" = 50'; VERT 1" = 2'



D - PROFILE - REPOSITORY CENTER - NORTH TO SOUTH

SCALE: HORZ 1" = 50'; VERT 1" = 2'



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Digitally signed by Derek Forseth
Date: 2025.07.09 16:42:07 -07'00'

Derek Forseth

NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 60'
APPROVED: D. FORSETH
DATE: 06/25/2025

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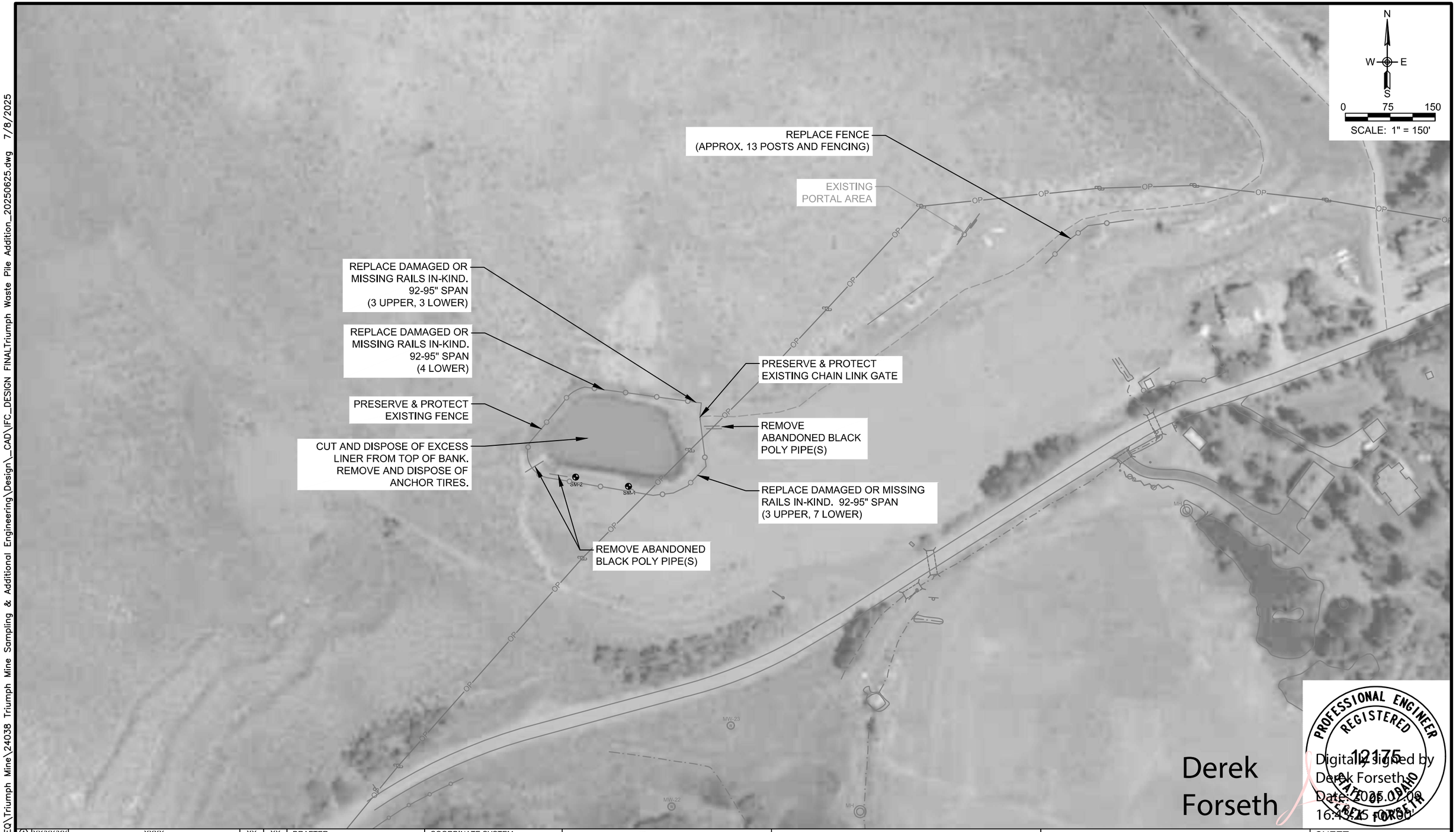
TRIUMPH MINE SITE

BLAINE COUNTY, ID

TAILINGS PILE REPOSITORY

SHEET: S11
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 14 OF 16

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Derek Forseth

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STATE OF IDAHO
DEREK FORSETH

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Date: 2025.07.08 16:43:15 -06'00'

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NO.	DATE	REVISIONS	BY	CHK
A	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025

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APPROVED: D. FORSETH
DATE: 06/25/2025

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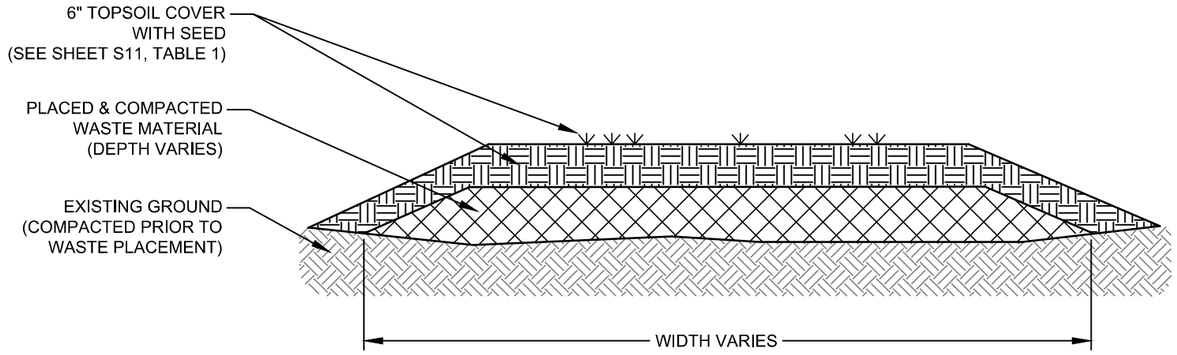
TRIUMPH MINE SITE

BLAINE COUNTY, ID

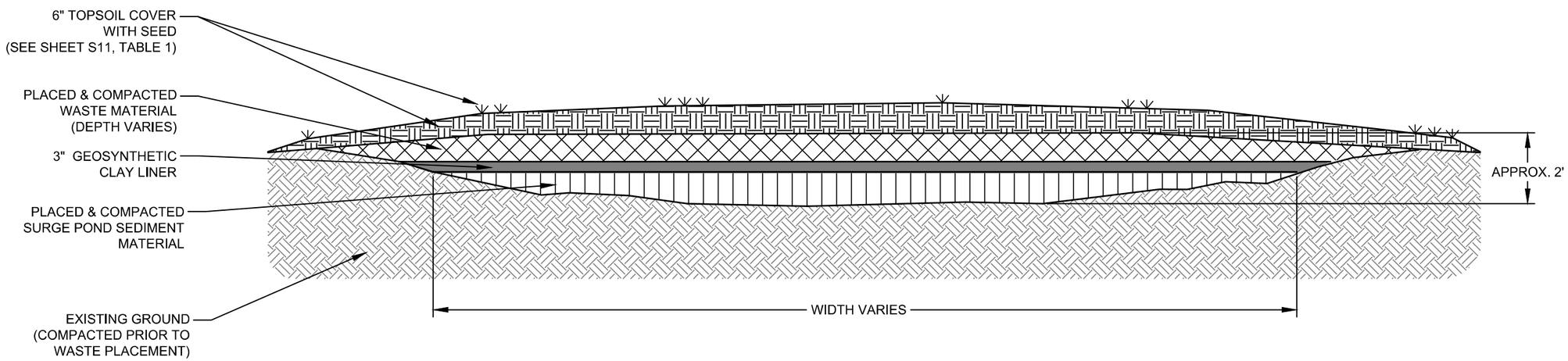
SITE REPAIRS

SHEET: S12
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 15 OF 16

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1 / - DISPOSAL LOCATION SECTION (TYP)
NTS



2 / - CONSTRUCTED TAILINGS PILE REPOSITORY SECTION (TYP)
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 STATE OF IDAHO DEREK FORSETH

Derek Forseth
Digitally signed by Derek Forseth
Date: 2025.07.09 16:43:05 -07'00'

NO.	DATE	REVISIONS	BY	CHK
⟨A⟩	XX/XX/XX	XXXX	XX	XX

DRAFTER: B. ROLLINS/E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 06/18/2025
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 06/25/2025

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

DETAILS

SHEET: D1
DATE: 7/8/2025
PROJECT NO.: 24038
SHEET NO.: 16 OF 16

TRIUMPH MINE
INFILTRATION POND DESIGN
BLAINE COUNTY, IDAHO



PROJECT LOCATION
SCALE: N.T.S.



PROJECT SITE VICINITY MAP
SCALE: 1" = 150'

DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
010	COVER SHEET
020	GENERAL NOTES AND SPECIFICATIONS (1 OF 3)
021	GENERAL NOTES AND SPECIFICATIONS (2 OF 3)
022	GENERAL NOTES AND SPECIFICATIONS (3 OF 3)
030	EXISTING CONDITIONS
040	TEMPORARY EROSION AND SEDIMENT CONTROL
050	INFILTRATION POND PLAN
051	INFILTRATION POND SECTIONS
052	DISCHARGE PIPE PROFILES
060	DETAILS (1 OF 3)
061	DETAILS (2 OF 3)
062	DETAILS (3 OF 3)

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2025-07-03	ISSUED FOR CONSTRUCTION	KMD	REDMOND	CLC	SJS
0	2025-02-07	ISSUED FOR PERMITTING	KMD	REDMOND	CLC	SJS
A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL



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PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

TITLE
COVER SHEET

PROJECT NO.	PHASE	REV.		SHEET
31407131	002	0	1 of 12	010

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SUMMARY OF WORK

A. SUMMARY

1. THE OBJECTIVE OF THE PROJECT IS TO CONSTRUCT TWO INFILTRATION PONDS WITH CONVEYANCE PIPING THAT TIES INTO AN EXISTING PIPING SYSTEM AT THE TRIUMPH MINE SITE. THE INFILTRATION POND AND CONVEYANCE PIPING SYSTEM ARE INTENDED TO INFILTRATE WATER AT THE SITE (SOURCED FROM THE MINE PORTAL SURGE POND AND THE LOWER TAILINGS PILE (LTP) PERMANENT POND) RATHER THAN ALLOWING IT TO DISCHARGE AS SURFACE WATER FLOW OFF-SITE.

B. PROJECT LOCATION AND SITE ACCESS

1. THE SITE IS LOCATED IN BLAINE COUNTY, IDAHO, APPROXIMATELY 12 MILES NORTHEAST OF HAILEY, IDAHO ALONG THE EAST FORK BIG WOOD RIVER ROAD.
2. THE SITE IS IMMEDIATELY NORTH AND SOUTH OF THE EAST FORK BIG WOOD RIVER ROAD AND IS ACCESSIBLE VIA GRAVEL ROADS.

C. WORK ACTIVITIES

1. THE PROJECT CONSISTS OF THE FOLLOWING MAIN WORK ACTIVITIES TO BE PERFORMED BY THE CONTRACTOR:
   a. THE CONTRACTOR IS RESPONSIBLE FOR THE MANAGEMENT OF STORMWATER DURING CONSTRUCTION INCLUDING TEMPORARY EROSION AND SEDIMENT CONTROL.
   b. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ABIDING BY ALL CONSTRUCTION PERMITS APPLICABLE TO THIS WORK.
   c. PERFORM STREET CLEANING, AS NECESSARY.
   d. CLEAR AND GRUB THE PROJECT FOOTPRINT.
   e. REMOVE TOPSOIL AND STOCKPILE IN DESIGNATED STAGING AREA.
   f. PLUG AND ABANDON THE EXISTING OUTLET PIPE THAT WILL NO LONGER BE PART OF THE CONVEYANCE PIPING SYSTEM.
   g. PREPARE SUBGRADE, ACCESS ROAD, EMERGENCY SPILLWAYS, AND ROCK LINED CHANNELS, WHICH INCLUDES APPROXIMATELY 3,600 CUBIC YARDS (CY) OF CUT AND APPROXIMATELY 560 CY OF FILL.
   h. INSTALL PRE-CAST CONCRETE VAULT WITH WEIR, SHEAR GATE VALVES, AND 8-INCH DR 17 HDPE CONVEYANCE PIPING THAT CONNECTS THE PRE-EXISTING PIPING SYSTEM TO THE INFILTRATION PONDS.
   i. INSTALL PEA GRAVEL IN THE BOTTOM OF THE EAST AND WEST INFILTRATION PONDS.
   j. INSTALL 2- TO 4-INCH ROCK IN THE EMERGENCY SPILLWAYS, ROCK LINED CHANNELS, AND ROCK PADS.
   k. INSTALL FINAL GRADING OF ACCESS ROAD TO INCLUDE A 2-FOOT-WIDE SHOULDER, A TURNAROUND, AND TO DRAIN AWAY FROM EAST AND WEST INFILTRATION PONDS.
   l. INSTALL WOOD FENCING, MAINTENANCE ACCESS GATE, AND RE-VEGETATION.
2. LISTING OF ACTIVITIES IS NOT INTENDED TO ESTABLISH A DETAILED CONSTRUCTION SEQUENCE. THE CONTRACTOR SHALL PROVIDE THEIR PROPOSED DETAILED SEQUENCE OF ACTIVITIES IN THE CONSTRUCTION SCHEDULE SUBMITTED WITH THEIR BID.

D. COORDINATION

1. COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (IDEQ) PROJECT MANAGER TO AVOID DISRUPTING OPERATIONS OR OTHER ADVERSE EFFECTS.
2. FAILURE TO COORDINATE IN AN ADEQUATE OR TIMELY MANNER SHALL NOT BE ALLOWED AS A BASIS FOR INCREASED BUDGET OR SCHEDULE.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES RESULTING FROM INTERFERENCE WITH IDEQ OPERATIONS, DAMAGE TO EQUIPMENT, OR OTHER ADVERSE CONSEQUENCES OF CONTRACTOR'S ACTIVITIES.
4. WORKING HOURS OF 6 A.M. TO 6 P.M. SHALL BE ASSUMED. COORDINATE WITH THE IDEQ PROJECT MANAGER TO ADJUST ALLOWABLE WORKING HOURS AS NECESSARY.

E. PROTECTION

1. THE CONTRACTOR SHALL PERFORM A LOCATE TO CONFIRM THE LOCATION OF UTILITIES AND SHALL PROTECT AT ALL TIMES UNDERGROUND OR ABOVE-GROUND UTILITIES THAT ARE PRESENT, EITHER TEMPORARILY OR PERMANENTLY, WITHIN THE WORK LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR SERVICE INTERRUPTIONS TO UTILITIES CAUSED BY WORK PERFORMED BY THE CONTRACTOR, ROUTINE OR OTHERWISE.
2. GROUNDWATER MONITORING WELLS SHALL BE PROTECTED AGAINST DAMAGE. IN THE EVENT OF DAMAGE TO A WELL, THE CONTRACTOR SHALL REIMBURSE THE PROJECT FOR THE FULL COST OF REPLACING THE WELL. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN ACCESS TO GROUNDWATER MONITORING WELLS ON THE SITE.

F. PERMITS

1. THE CONTRACTOR MAY ASSUME THAT THE NECESSARY STORMWATER AND LAND USE PERMITS HAVE BEEN OBTAINED BY IDEQ PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY TRAFFIC CONTROL PERMITS OR ANY OTHER PERMITS REQUIRED FOR THE CONSTRUCTION OF THE INFILTRATION PONDS AND ASSOCIATED WORK. COORDINATE WITH THE IDEQ SITE MANAGER AS NECESSARY.
3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY IF THEY BELIEVE A PERMIT IS REQUIRED AND HAS NOT BEEN OBTAINED.
4. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT CONDITIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND COMPLYING WITH ANY ENVIRONMENTAL REGULATIONS APPLICABLE TO THEIR ACTIVITIES AND NOT INCLUDED IN THE PERMITS FOR THE PROJECT.

G. GOVERNING DOCUMENTS

1. ALL WORK INVOLVED WITH THIS PROJECT SHALL BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE CONTRACT PROVISIONS AND CLAUSES, THESE SPECIFICATIONS, AND THE DRAWINGS.

SUBMITTALS

A. REQUIRED SUBMITTALS ARE IDENTIFIED IN THIS SECTION AND IN OTHER SECTIONS OF THESE SPECIFICATIONS. THE CONSTRUCTION MANAGER MAY AT THEIR DISCRETION DIRECT THE CONTRACTOR TO PROVIDE OTHER SUBMITTALS IF NECESSARY TO DOCUMENT MATERIAL QUALITY, CONSTRUCTION, MEASUREMENT FOR PAYMENT, OR OTHER PURPOSES.

B. SUBMITTAL NUMBERING

1. SUBMITTALS SHALL BE NUMBERED SEQUENTIALLY.
2. RE-SUBMITTALS, IF REQUIRED, SHALL MAINTAIN THE ORIGINAL NUMBER, BUT SHALL ALSO INCLUDE THE SUFFIX "A", FOR FIRST AND RE-SUBMITTALS, "B" FOR SECOND RE-SUBMITTAL, AND SO ON.

C. PROCEDURES

1. DELIVER ALL SUBMITTALS TO THE CONSTRUCTION MANAGER.
2. UNLESS INDICATED OR DIRECTED OTHERWISE, SUBMIT ELECTRONIC FILES OF ALL DOCUMENTS IN AN APPROPRIATE FILE TYPE AS APPROVED BY THE CONSTRUCTION MANAGER.
3. UNLESS INDICATED OR DIRECTED OTHERWISE, SUBMIT REQUIRED INFORMATION, SAMPLES, AND OTHER ITEMS A MINIMUM OF 14 CALENDAR DAYS PRIOR TO PURCHASE OR INTENDED USE. REGARDLESS OF THE MINIMUM REQUIREMENTS IN THE CONTRACT DOCUMENTS, CONTRACTOR SHALL DETERMINE SUBMITTAL DATES TO AVOID ADVERSE IMPACTS TO PROJECT SCHEDULE. FAILURE TO SUBMIT IN A TIMELY MANNER SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT OR EXTENSION OF THE PROJECT SCHEDULE.

D. REVIEW AND DISPOSITION

1. THE CONSTRUCTION MANAGER WILL REVIEW THE SUBMITTALS TO DETERMINE COMPLETENESS, ADEQUACY, AND CONFORMANCE WITH THE PROJECT REQUIREMENT AND WILL THEN DISTRIBUTE EACH SUBMITTAL TO THE APPROPRIATE PARTY FOR REVIEW.
2. ONE COPY OF THE SUBMITTAL WILL BE RETURNED TO THE CONTRACTOR WITH ONE OF THE FOLLOWING DISPOSITIONS:
   a. ACCEPTED AS IS.
   b. WORK MAY PROCEED, RESUBMIT WITH ADDITIONAL INFORMATION.
   c. WORK MAY NOT PROCEED, RESUBMIT WITH ADDITIONAL INFORMATION.
   d. REJECTED.
3. RESUBMITTALS SHALL BE SUBJECT TO THE REQUIREMENTS OF ALL PARAGRAPHS OF THIS ARTICLE.
4. THE CONSTRUCTION MANAGER'S OR ENGINEER'S DETERMINATION OF ACCEPTABILITY OF PLANS, SCHEDULES, SPECIFIED OR ALTERNATIVE PRODUCTS, AND ANY OTHER ITEMS WHERE REVIEW AND APPROVAL IS REQUIRED SHALL BE FINAL.

E. EQUIVALENT PRODUCTS

1. WHERE "OR EQUAL" IS INCLUDED IN THE PRODUCT DESCRIPTION, AND THE CONTRACTOR ELECTS TO SUBMIT AN ALTERNATIVE PRODUCT, SUFFICIENT INFORMATION SHALL BE PROVIDED TO FULLY DOCUMENT THAT THE PROPOSED ALTERNATIVE WILL FUNCTION IN THE SAME MANNER, HAS THE REQUIRED LONGEVITY AND RELIABILITY, IS APPROPRIATE FOR THE ENVIRONMENT, AND IN ALL OTHER WAYS SATISFIES THE CHARACTERISTICS AND PERFORMANCE OF THE SPECIFIED PRODUCT. THE BURDEN OF PROOF FOR EQUIVALENCY SHALL BE UPON THE CONTRACTOR.
2. ACCEPTANCE OF A SUBSTITUTE ITEM SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND FOR ENSURING ADEQUACY OF THE SUBSTITUTE ITEM.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESULTANT CHANGES AND ALL ADDITIONAL COSTS WHICH THE ACCEPTED SUBSTITUTION REQUIRES IN THE CONTRACTOR'S WORK AND THE WORK OF ITS SUBCONTRACTORS, AND SHALL IMPLEMENT SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER.
4. NO SUBSTITUTE ITEM SHALL BE ORDERED, INSTALLED, OR UTILIZED WITHOUT PRIOR WRITTEN ACCEPTANCE BY THE CONSTRUCTION MANAGER OF THE CONTRACTOR'S WRITTEN REQUEST.

F. CONSTRUCTION SCHEDULE

1. PROVIDE A SCHEDULE THAT DETAILS SPECIFIC DATES ON WHICH EACH ITEM OF WORK INCLUDED IN THE LIST OF WORK ACTIVITIES WILL BEGIN AND BE COMPLETED, ALSO INCLUDE WHEN BREAKS IN THE CONSTRUCTION SCHEDULE ARE ANTICIPATED (E.G. HOLIDAYS) AND OVERALL PROJECT DURATION.
2. INITIAL SCHEDULE SUBMITTAL
   a. SUBMIT PRELIMINARY CONSTRUCTION SCHEDULE WITH BID. PRELIMINARY CONSTRUCTION SCHEDULE WILL BE REVIEWED AS PART OF BID EVALUATION. CONTRACTOR MAY BE INTERVIEWED TO DETERMINE CONTRACTOR'S UNDERSTANDING OF WORK AND ABILITY TO COMPLETE WORK IN A TIMELY AND EFFICIENT MANNER.
   b. SUBMIT FINAL CONSTRUCTION SCHEDULE WITHIN 7 DAYS AFTER NOTICE TO PROCEED IS ISSUED.
3. UPDATES
   a. EVERY 7 CALENDAR DAYS AFTER THE FINAL CONSTRUCTION SCHEDULE IS SUBMITTED, REVISE CONSTRUCTION SCHEDULE TO REFLECT PROGRESS OF WORK AND ITEMS COMPLETED.
   b. INDICATE PROGRESS OF EACH ACTIVITY TO DATE.
   c. SHOW CHANGES OCCURRING SINCE PREVIOUS SUBMITTAL, INCLUDING BUT NOT LIMITED TO:
      - MAJOR CHANGES IN SCOPE.
      - ACTIVITIES MODIFIED SINCE PREVIOUS SUBMITTAL.
      - REVISED PROJECTIONS OF PROGRESS AND COMPLETION, INCLUDING DISCUSSION OF MEASURES THAT WILL BE TAKEN TO INCREASE THE RATE OF CONSTRUCTION IF PROGRESS IS LESS THAN ANTICIPATED.
      - OTHER IDENTIFIABLE CHANGES.
   d. FAILURE TO SUBMIT SCHEDULE AND REVISIONS ON A TIMELY BASIS SHALL BE CONSIDERED CAUSE FOR WITHHOLDING PROGRESS PAYMENTS OTHERWISE DUE UNDER THIS CONTRACT.

G. INFORMATION AND SAMPLE SUBMITTALS

1. SUBMITTAL REQUIREMENTS FOR OTHER INFORMATION, SAMPLES, DOCUMENTATION, MEASUREMENTS, AND SIMILAR ITEMS ARE DESCRIBED IN THE PERTINENT TECHNICAL SECTIONS OF THESE SPECIFICATIONS. SUBMIT IN ACCORDANCE WITH THE REQUIREMENTS OF THESE OTHER SECTIONS AND THE GENERAL SUBMITTAL REQUIREMENTS CONTAINED IN THIS SECTION.

H. RECORD AND AS-BUILT DRAWINGS

1. THE CONTRACTOR SHALL KEEP AND MAINTAIN, AT THE JOB SITE, ONE RECORD SET OF DRAWINGS.
2. ON THE RECORD DRAWINGS, MARK ALL PROJECT CONDITIONS, LOCATIONS, CONFIGURATIONS, AND ANY OTHER CHANGES OR DEVIATIONS WHICH VARY FROM THE DETAILS REPRESENTED ON THE ORIGINAL CONTRACT DRAWINGS AND ADDENDA, CHANGE ORDERS AND THE LIKE. THE RECORD DRAWINGS SHALL INCLUDE BURIED OR CONCEALED CONSTRUCTION AND UTILITY FEATURES THAT WERE NOT PREVIOUSLY IDENTIFIED AND ARE REVEALED DURING THE COURSE OF CONSTRUCTION.
3. THE RECORD DRAWINGS SHALL BE SUPPLEMENTED BY ANY DETAILED SKETCHES AS NECESSARY OR DIRECTED TO FULLY INDICATE THE WORK AS ACTUALLY CONSTRUCTED.
4. THE RECORD DRAWINGS SHALL BE MAINTAINED UP-TO-DATE DURING THE PROGRESS OF THE WORK.
5. THE CONTRACTOR SHALL CONTRACT A THIRD PARTY SURVEYOR TO SURVEY THE FINAL SITE CONDITIONS AND ANY INTERMEDIATE PHASE CONDITIONS, AS DEEMED NECESSARY BY THE CONSTRUCTION MANAGER.
6. THE CONTRACTOR SHALL PREPARE AND SUBMIT AS-BUILT MARKED-UP DRAWINGS FOR ALL ASPECTS OF THE WORK WITHIN 6 WEEKS OF PROJECT COMPLETION AND AS A CONDITION OF FINAL PAYMENT.

HEALTH AND SAFETY

A. ALL PERSONNEL WORKING ON SITE SHALL HAVE COMPLETED OSHA 40-HOUR HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE (HAZWOPER) TRAINING AND BE CURRENT IN THEIR ANNUAL REFRESHER TRAINING. THIS REQUIREMENT DOES NOT APPLY TO DELIVERY DRIVERS AND OTHER TEMPORARY VISITORS. IDEQ WILL MAKE THE FINAL DETERMINATION OF WHICH PERSONNEL WILL NEED HAZWOPER TRAINING.

B. SUBMIT A SITE-SPECIFIC HEALTH AND SAFETY PLAN FOR APPROVAL WITHIN 7 CALENDAR DAYS OF AWARD OR NOTICE TO PROCEED.

QUALITY ASSURANCE AND QUALITY CONTROL

A. THE CONSTRUCTION MANAGER WILL BE RESPONSIBLE FOR CONSTRUCTION QUALITY ASSURANCE (CQA). THE CONSTRUCTION MANAGER WILL BE RESPONSIBLE FOR OBSERVING AND DOCUMENTING PERIODIC VERIFICATION, CHECKING, AND TESTING TO CONFIRM AND DOCUMENT THAT THE QUALITY IS IN ACCORDANCE WITH THE APPROVED CONTRACT DOCUMENTS.

B. AT THEIR DISCRETION, THE CONTRACTOR/INSTALLER SHALL PERFORM CONSTRUCTION QUALITY CONTROL (CQC) INSPECTION, SAMPLING, TESTING, OR ANY OTHER ACTION, AS CONSIDERED NECESSARY BY THE CONTRACTOR TO ENSURE THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NOTWITHSTANDING THE RESULTS OF THE CONTRACTOR'S CQC PROGRAM, DETERMINATION OF WHETHER THE WORK IS IN COMPLIANCE WITH THE CONTRACT DOCUMENTS WILL BE MADE BY THE CONSTRUCTION MANAGER.

C. THE CONTRACTOR SHALL ACCOMMODATE AND PROVIDE SUPPORT FOR CQA ACTIVITIES AS REQUIRED AND DIRECTED.

ENVIRONMENTAL PROTECTION

A. SUBMITTALS

1. THE CONTRACTOR SHALL ISSUE A CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (C-SWPPP) FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

B. GENERAL

1. THE CONTRACTOR SHALL PREVENT, ABATE, AND CONTROL ALL ENVIRONMENTAL POLLUTION ARISING FROM CONSTRUCTION ACTIVITIES BY IDENTIFYING AND COMPLYING WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS CONCERNING ENVIRONMENTAL POLLUTION CONTROL AND ABATEMENT, AS WELL AS SITE REQUIREMENTS AND ANY OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. COMPLIANCE BY SUBCONTRACTORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

B. PREVENTION OF WATER POLLUTION

1. TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, EXCAVATION, STOCKPILING OF SOIL MATERIALS ON SITE, OR OTHER GROUND-DISTURBING ACTIVITY THAT COULD INTRODUCE SEDIMENT INTO SURFACE WATER RUNOFF.
2. THE CONTRACTOR'S CONSTRUCTION ACTIVITIES SHALL BE PERFORMED BY METHODS THAT WILL PREVENT ENTRANCE OR ACCIDENTAL SPILLAGE OF SOLID MATTER, CONTAMINANTS, SILTS, DEBRIS, AND OTHER OBJECTIONABLE POLLUTANTS AND WASTES INTO RIVERS, STREAMS, STORM DRAINS, FLOWING OR DRY WATERCOURSES, IRRIGATION DITCHES, LAKES, PONDS, AND UNDERGROUND WATER SOURCES.
3. ALL STORAGE AREAS, STOCKPILES, FUELING AREAS AND OTHER CONSTRUCTION-RELATED ACTIVITY AREAS SHALL BE LOCATED AWAY FROM BOTH NATURAL AND MANMADE WATERCOURSES. RUNOFF FROM SUCH AREAS SHALL BE CONTROLLED TO PREVENT DISCHARGE OF ANY AND ALL POTENTIAL CONTAMINANTS AND/OR POLLUTANTS WHETHER ACCIDENTAL OR NOT.
4. SPILLS, IF ANY, SHALL IMMEDIATELY BE REPORTED TO THE CONSTRUCTION MANAGER AND SHALL BE IMMEDIATELY AND PROPERLY CLEANED UP. MANAGEMENT AND DISPOSAL OF CONTAMINATED MATERIAL CLEAN-UP IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS.
5. SANITARY FACILITIES, SUCH AS CHEMICAL TOILETS, SHALL BE LOCATED FAR ENOUGH FROM BODIES OF WATER, INCLUDING WETLANDS, TO PREVENT POLLUTION OF THE WATER.
6. DEWATERING WORK FOR EXCAVATIONS ADJACENT TO, OR ENCROACHING ON, STREAMS OR WATERCOURSES SHALL BE CONDUCTED IN A MANNER TO PREVENT MUDDY WATER AND ERODED MATERIALS FROM ENTERING THE STREAMS OR WATERCOURSES BY CONSTRUCTION OF INTERCEPTING DITCHES, BYPASS CHANNELS, BARRIERS, SETTLING PONDS, OR BY OTHER APPROVED MEANS. EXCAVATED MATERIAL SHALL NOT BE DEPOSITED OR STORED IN, OR ALONGSIDE, WATERCOURSES WHERE IT CAN BE WASHED AWAY BY HIGH WATER OR STORM RUNOFF.
7. WASTE WATERS FROM CONSTRUCTION OPERATIONS SHALL NOT ENTER STREAMS, WATERCOURSES, IRRIGATION DITCHES, OR OTHER SURFACE WATERS.
8. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF ANY EXISTING STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE SITE.

TEMPORARY FACILITIES

A. GENERAL

1. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY FACILITIES AND UTILITIES DESCRIBED IN THIS SECTION AND AS REQUIRED TO FULLY SUPPORT ALL WORK ACTIVITIES AND COMPLY WITH THE HEALTH AND SAFETY AND ENVIRONMENTAL PROTECTION REQUIREMENTS DESCRIBED IN THESE SPECIFICATIONS AND AS REQUIRED BY APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

B. SUBMITTALS

1. SUBMIT A SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN DESCRIBING EQUIPMENT AND PROCEDURES FOR FUEL STORAGE, FUELING OPERATIONS, SPILL PREVENTION AND CLEANUP, MAINTENANCE OPERATIONS, AND SIMILAR ACTIVITIES. THE SPCC PLAN SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

C. TEMPORARY BUILDINGS

1. AS NECESSARY, PROVIDE PORTABLE OR MOBILE BUILDING(S) FOR CONTRACTOR PERSONNEL, INCLUDING SUBCONTRACTORS, FOR ADMINISTRATION, STORAGE, AND OTHER FUNCTIONS AS REQUIRED FOR PERFORMING THE WORK.
2. PORTABLE BUILDING LOCATION SHALL BE APPROVED WITH IDEQ PRIOR TO PLACEMENT.

D. ELECTRICAL SERVICE

1. IF ELECTRICAL POWER IS REQUIRED TO PERFORM THE WORK, THE CONTRACTOR SHALL PERFORM THE ELECTRICAL HOOKUPS TO THE DESIGNATED POWER SOURCE (TBD SOURCE).
2. IF GENERATORS ARE USED TO SUPPLY ELECTRICAL POWER AT REMOTE WORK LOCATIONS, THEY SHALL BE EQUIPPED WITH SUITABLE NOISE AND EXHAUST LIMITING DEVICES AND LOCATED SO AS TO PREVENT NOISE OR EXHAUST DISTURBANCE TO ANY PERSONNEL WORKING IN THE FACILITIES AREA AND COMPLY WITH APPLICABLE NOISE LIMITS AT THE PROPERTY BOUNDARY.

E. COMMUNICATIONS

1. THE CONTRACTOR SHALL PROVIDE THEIR OWN COMMUNICATION FACILITIES AS NECESSARY.

F. FUELING AND MAINTENANCE AREAS

1. FUELING AND MAINTENANCE FACILITIES SHALL BE DESIGNED, LOCATED, EQUIPPED, AND OPERATED IN ACCORDANCE WITH THE PROVISIONS OF CONTRACTOR'S APPROVED SPCC PLAN.
2. PROVIDE APPROPRIATE FIRE EXTINGUISHERS AT THE FUELING AND MAINTENANCE AREAS AND ANY LOCATIONS WHERE FUELING, WELDING, TORCH CUTTING, OR OTHER SIMILAR ACTIVITIES WILL BE PERFORMED.

G. WATER

1. THE CONTRACTOR SHALL PROVIDE POTABLE BOTTLED WATER FROM A COMMERCIAL SOURCE NORMALLY ENGAGED IN PROVIDING SUCH WATER. WATER STATIONS SHALL BE PROVIDED AT CONVENIENT LOCATIONS IN OR ADJACENT TO THE WORK AREAS.
2. THE CONTRACTOR SHALL PROVIDE NON-POTABLE WATER FOR DUST CONTROL, MOISTURE CONDITIONING, AND OTHER USES. CONTRACTOR SHALL COORDINATE SOURCING WITH THE IDEQ SITE MANAGER FOR APPROVAL.

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SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYMORE 7/3/2025

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PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

TITLE
GENERAL NOTES AND SPECIFICATIONS (1 OF 3)

PROJECT NO.	PHASE	REV.	2 of 12	SHEET
31407131	002	0		020

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TEMPORARY FACILITIES (CONTINUED)

H. SANITARY FACILITIES

1. AS NECESSARY, THE CONTRACTOR SHALL PROVIDE A SUFFICIENT NUMBER OF PORTABLE TOILET FACILITIES FOR ALL PERSONNEL ON SITE TO ALLOW EFFICIENT OPERATIONS AND SATISFY THE MINIMUM REGULATORY REQUIREMENTS.
2. SEPARATE TOILET FACILITIES SHALL BE REQUIRED FOR MEN AND WOMEN.
3. THE CONTRACTOR SHALL CLEAN, EMPTY, SUPPLY, AND MAINTAIN ALL PORTABLE TOILET FACILITIES AS REQUIRED TO KEEP THEM IN A FUNCTIONAL AND SANITARY CONDITION, BUT IN NO CASE AT INTERVALS GREATER THAN ONCE PER WEEK, UNLESS APPROVED OTHERWISE BY THE CONSTRUCTION MANAGER.

I. SECURITY

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THEIR EQUIPMENT AND MATERIAL ON SITE. THE CONTRACTOR SHALL PROVIDE SECURED STORAGE SPACE AS NECESSARY AND SHALL PROVIDE ANY SECURITY FENCING THEY DEEM NECESSARY TO CONTROL UNAUTHORIZED ACCESS, VANDALISM, AND THEFT.
2. THE CONTRACTOR SHALL PROVIDE SECURE, LOCKABLE STORAGE FACILITIES AS NECESSARY FOR TOOLS, MATERIALS, EQUIPMENT, SUPPLIES, AND THE LIKE. STORAGE FACILITIES SHALL COMPLY WITH ALL APPLICABLE REGULATORY AND SAFETY REQUIREMENTS.

J. REMOVAL

1. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE TEMPORARY FACILITIES, SUPPORTS/FOUNDATIONS, TEMPORARY FENCING, AND ALL EQUIPMENT, MATERIALS, AND DEBRIS FROM THE SITE.

SURVEYING

A GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL PROVIDE ALL SURVEYING REQUIRED FOR THE PROJECT, INCLUDING BUT NOT LIMITED TO MONUMENTATION, STAKING, LAYOUT, AND ALL OTHER NECESSARY ACTIVITIES AS REQUIRED DURING CONSTRUCTION TO CONTROL THEIR ACTIVITIES, TO ACHIEVE LINES AND GRADES, AND OTHERWISE COMPLETE THE WORK AS SHOWN ON THE DRAWINGS.
2. ALL SURVEYING ACTIVITIES SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF IDAHO.
3. "SURVEY POINT" AS DEFINED IN THIS SECTION MEANS DETERMINATION OF NORTHING, EASTING, AND ELEVATION AT THE SUBJECT POINT.
4. PROVIDE ELECTRONIC FILES IN AUTOCAD 2019 OR HIGHER VERSION AND, IF REQUESTED, HARD COPY TO THE CONSTRUCTION MANAGER.
5. DATA SHALL INCLUDE AS A MINIMUM THE DATE OF THE SURVEY, PERSONNEL PERFORMING THE SURVEY, EQUIPMENT USED, A UNIQUE IDENTIFIER FOR EACH SURVEY POINT, AND THE X, Y, AND Z COORDINATES OF THAT POINT IN THE PROJECT COORDINATE SYSTEM.
6. FINAL DETERMINATION OF THE ACCEPTABILITY OF THE CONTRACTOR'S SURVEY DATA SHALL BE MADE BY THE CONSTRUCTION MANAGER.

B. REFERENCE DATUM

SURVEY POINTS SHALL BE REFERENCED TO THE SAME HORIZONTAL DATUM AND VERTICAL DATUM AS SHOWN ON THE DRAWINGS FOR THIS PROJECT.

C. EQUIPMENT

THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, SUPPLIES, AND SUPPORTING MATERIAL REQUIRED FOR SURVEY ACTIVITIES. SUCH EQUIPMENT SHALL BE STANDARD COMMERCIALLY AVAILABLE EQUIPMENT SUITABLE FOR THE INTENDED PURPOSE OF THIS SECTION.

D. ACCURACY

1. ALL SURVEYING ACTIVITIES SHALL BE PERFORMED USING METHODS AND EQUIPMENT WITH SUFFICIENT ACCURACY TO MEASURE TO THE TOLERANCES LISTED IN THESE SPECIFICATIONS.
2. UNLESS OTHERWISE SPECIFIED OR INDICATED, THE MINIMUM REQUIRED ACCURACY FOR BOTH VERTICAL AND HORIZONTAL MEASUREMENTS SHALL BE ± 0.1 FOOT.

E. CONTROL

1. PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL VERIFY THE LOCATIONS, CONDITION, AND ACCURACY OF EXISTING MONUMENTS AND ESTABLISH ANY OTHER REFERENCE POINTS OR MONUMENTS THAT MAY BE REQUIRED.
2. LOCATIONS OF EXISTING SURVEY MONUMENTS ARE SHOWN ON THE DRAWINGS.

F. SURVEY FOR MEASUREMENT

1. SURVEY POINTS TO MEASURE AREA SHALL BE AT INTERVALS OF 1-FEET OR LESS AROUND THE PERIMETER OF THE SUBJECT AREA.
2. SURVEY FOR LINEAR FOOT MEASUREMENTS SHALL BE AT INTERVALS OF 1-FEET OR LESS ALONG THE CENTERLINE OF THE SUBJECT FEATURE.
3. WHEN "BEFORE" AND "AFTER" SURVEYS ARE PERFORMED FOR THICKNESS MEASUREMENT, POINTS AT THE SAME HORIZONTAL COORDINATES SHALL BE USED FOR MEASUREMENT, UNLESS APPROVED OTHERWISE IN ADVANCE BY THE CONSTRUCTION MANAGER. THE GRID SPACING FOR SUCH MEASUREMENT SHALL BE 0.5 FEET, UNLESS APPROVED OR DIRECTED OTHERWISE BY THE CONSTRUCTION MANAGER.
4. WHERE THE MEASUREMENT METHOD IS BY TAPING, THE CONTRACTOR SHALL PERFORM THE MEASUREMENT WITH A HIGH-QUALITY SURVEYOR'S TAPE.
5. THE CONTRACTOR SHALL SURVEY THE LOCATIONS OF ANY "POTHOLES" OR OTHER FEATURES USED FOR MEASUREMENT, AS DIRECTED BY THE CONSTRUCTION MANAGER.

MOBILIZATION

A. SUMMARY

1. MOBILIZATION WILL INCLUDE ASSEMBLY OF ALL EQUIPMENT, ESTABLISHMENT OF TEMPORARY FACILITIES ON THE SITE, AS NECESSARY, SITE ACCESS INCLUDING ANY REQUIRED ROAD IMPROVEMENTS, EMPLOYEE TRAINING, PREPARATION OF WORK PLAN AND SCHEDULE, AND FURNISHING INSURANCE.

B. GENERAL

1. CONTRACTOR SHALL HAVE A THIRD-PARTY SURVEYOR COMPLETE CONSTRUCTION STAKING INCLUDING THE NECESSARY OFFSET.

TRAFFIC CONTROL

A. SUBMITTALS

1. PRIOR TO BEGINNING WORK, SUBMIT TRAFFIC CONTROL PLAN (IN ACCORDANCE WITH IDT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - SECTION 656 "TEMPORARY TRAFFIC CONTROL") FOR APPROVAL BY IDEQ AND JURISDICTIONAL AUTHORITY.
2. SUBMIT COPY OF APPROVED TRAFFIC CONTROL PLAN AND PERMIT(S) TO CONSTRUCTION MANAGER.
3. CONTRACTOR SHALL KEEP TRAFFIC CONTROL PLAN UP-TO-DATE AND RE-SUBMIT FOR APPROVAL AS NECESSARY.

B. GENERAL

1. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR HAULING OF SOIL AND DEBRIS, MOVING OF OVERSIZE EQUIPMENT, AND OTHER REGULATED ACTIVITIES.
2. TRAFFIC CONTROL PLAN SHALL ADDRESS TRUCKS ENTERING AND LEAVING SITE AND SHALL COMPLY WITH ALL CITY, COUNTY, AND STATE REQUIREMENTS.

EROSION AND SEDIMENT CONTROL

A. SUBMITTALS

1. PRIOR TO BEGINNING ANY GROUND-DISTURBING ACTIVITIES, SUBMIT A TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) PLAN FOR APPROVAL. THE TESC PLAN SHALL DESCRIBE IN DETAIL THE MATERIALS, LOCATION, AND OPERATION \ MAINTENANCE OF ALL CONTROL MEASURES PROPOSED TO ACHIEVE THE REQUIREMENTS OF THIS SECTION.

C. GENERAL

1. THE CONTRACTOR SHALL PREVENT SEDIMENT ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM LEAVING THE WORK AREA.
2. THE CONTRACTOR MAY ELECT TO USE OTHER BEST MANAGEMENT PRACTICES (BMPS) NOT LISTED IN THESE SPECIFICATIONS, FOR EXAMPLE STRAW WATTLES OR PLASTIC SHEETING, IF APPROPRIATE FOR THEIR OPERATIONS. DESCRIBE ALL SUCH BMPS IN THE TESC PLAN.
3. FAILURE TO LIST A PARTICULAR EROSION CONTROL METHOD OR REQUIREMENT IN THESE SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR COMPLYING WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. ALSO COMPLY WITH ALL PERTINENT REQUIREMENTS OF THE CONSTRUCTION STORMWATER GENERAL PERMIT \ SWPPP.

B. CONSTRUCTION ENTRANCE

1. CONSTRUCTION ENTRANCE SHALL CONFORM TO IDT STANDARD DRAWING NUMBER 212-6 "STABILIZED CONSTRUCTION ENTRANCE AND VEHICLE WASHDOWN".

C. SILT FENCE

1. SILT FENCE MATERIAL SHALL CONFORM TO ITD 718.09 "TEMPORARY SILT-FENCE GEOTEXTILE PROPERTY REQUIREMENTS" INCLUDING TABLE 718.09.1 "TEMPORARY SILT FENCE GEOTEXTILE CRITERIA".

D. FIBER WATTLES/STRAW BALE BARRIER

1. FIBER WATTLES SHALL CONFORM TO ITD 711.20 "FIBER WATTLES".

E. STREET CLEANING

1. IF UNAVOIDABLE TRACK-OUT OR OFF-SITE SEDIMENT RELEASE OCCURS, CLEAN STREETS AS SOON AS PRACTICABLE.

CLEARING AND GRUBBING

A. CUT AND DISPOSE OF TREES WITH DIAMETERS OF LESS THAN 6 INCHES, BRUSH, SHRUBS, LOGS, AND WINDFALLS AND REMOVE AND DISPOSE OF STUMPS, INCLUDING ROOTS AND DEBRIS FROM THE DESIGNATED AREAS.

B. AREAS TO BE CLEARED AND GRUBBED ARE DESCRIBED BY A LINE DRAWN 2 FEET OUTSIDE THE PERIMETER OF THE WORK AREA. OTHER AREAS TO BE CLEARED AND GRUBBED WILL BE AS SPECIFIED OR AS DIRECTED.

C. PRESERVE AND PROTECT TREES WITHIN THE CONSTRUCTION AREA NOT REQUIRING REMOVAL.

TOPSOIL STRIPPING AND STOCKPILING

A. AFTER CLEARING AND GRUBBING HAS BEEN COMPLETED AND APPROVED BY THE CONSTRUCTION MANAGER, REMOVE TOPSOIL TO A NOMINAL DEPTH OF 0.5 FEET, UNLESS OTHERWISE INDICATED BY THE CONSTRUCTION MANAGER BASED ON FIELD CONDITIONS.

B. THE CONSTRUCTION MANAGER WILL MONITOR TOPSOIL REMOVAL ACTIVITIES TO VERIFY THAT NO UNSUITABLE MATERIAL IS BEING REMOVED WITH THE TOPSOIL. EXAMPLES OF UNSUITABLE MATERIALS INCLUDE INORGANIC SOILS, MINE WASTE, OR OTHER MATERIALS WHICH IN THE JUDGEMENT OF THE CONSTRUCTION MANAGER WOULD ADVERSELY IMPACT THE REVEGETATION PROCESS. IF UNSUITABLE MATERIALS ARE ENCOUNTERED, THE CONSTRUCTION MANAGER MAY MODIFY THE DEPTH OF REMOVAL OR DIRECT THAT OTHER MEASURES BE TAKEN TO PREVENT MIXING OF TOPSOIL AND UNSUITABLE MATERIALS.

C. STOCKPILE TOPSOIL SEPARATELY FROM OTHER EXCAVATED MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE EARTHWORKS SECTION OF THESE SPECIFICATIONS.

EARTHWORKS

A. SUBMITTALS

1. EXISTING PARTICLE SIZE DATA FOR ALL SOIL MATERIALS PURCHASED FROM COMMERCIAL ENTITIES.
2. WEIGH TICKETS FOR SOIL MATERIALS PURCHASED FROM OFF-SITE SOURCES.
3. SURVEY DATA AND OTHER DATA REQUIRED FOR MEASUREMENT.

B. EXCAVATION

1. EXCAVATE TO THE LIMITS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
2. COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS WITH RESPECT TO SLOPES, SAFETY, ENVIRONMENTAL PROTECTION, AND OTHER DESIGN AND CONSTRUCTION REQUIREMENTS. SAFE TEMPORARY CONSTRUCTION SLOPES, BOTH EXCAVATION AND FILL, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE EXCAVATION GRADE AND LINES UNTIL COMPLETION AND ACCEPTANCE OF THE WORK.

B. ON-SITE TEMPORARY STOCKPILES

1. STOCKPILE LOCATION(S) SHALL BE WITHIN THE WORK AREA UNLESS APPROVED OTHERWISE. APART FROM THIS, LOCATION AND SEQUENCING SHALL BE AT THE CONTRACTOR'S DISCRETION TO FACILITATE THEIR CONSTRUCTION ACTIVITIES, SUBJECT TO THE CONSTRAINTS OF THESE SPECIFICATIONS.
2. SOIL MATERIALS SHALL BE TEMPORARILY STOCKPILED ON-SITE ONLY WITHIN THE LIMITS OF DISTURBANCE/CLEARING LIMITS AS INDICATED ON THE DRAWINGS, OR OTHERWISE APPROVED IN ADVANCE BY THE CONSTRUCTION MANAGER.
3. DO NOT STOCKPILE MATERIALS IN SURFACE WATER DITCHES, ACROSS ACCESS ROADS, OR AT OTHER LOCATIONS THAT WOULD INTERFERE WITH SITE OPERATIONS OR CAUSE ADVERSE IMPACTS TO THE ENVIRONMENT. COORDINATE WITH IDEQ AS NECESSARY WHEN LOCATING AREAS FOR STOCKPILE PLACEMENT.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR STABILITY OF ALL STOCKPILES. THE REQUIREMENTS OF THIS SECTION ARE GENERAL IN NATURE AND SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR MAINTAINING STABLE STOCKPILES. THESE REQUIREMENTS MAY BE MODIFIED BY THE CONTRACTOR AT THEIR DISCRETION TO INCREASE STABILITY AS NECESSARY. SUCH MODIFICATIONS SHALL IN ALL CASES BE CONSISTENT WITH OTHER PROJECT REQUIREMENTS.
5. ON-SITE TEMPORARY STOCKPILES SHALL HAVE A MAXIMUM SLOPE OF 2H:1V AND A MAXIMUM HEIGHT OF 40 FEET.
6. STOCKPILES SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AT ALL LOCATIONS.
7. ON-SITE STOCKPILES SHALL NOT BE DISTURBED BY CONSTRUCTION ACTIVITIES, AND SHALL BE PROTECTED FROM WIND AND WATER EROSION, UNNECESSARY COMPACTION, AND CONTAMINATION.
8. INSTALL SILT FENCE COMPLETELY AROUND THE BASE OF STOCKPILES TO CONTAIN SEDIMENT. SILT FENCE MATERIALS, INSTALLATION, AND MAINTENANCE SHALL CONFORM TO THE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL SECTION OF THESE SPECIFICATIONS.

C. GENERAL FILL

1. GENERAL FILL SHALL CONSIST OF CLEAN, INORGANIC, GRANULAR SOIL FREE OF ROOTS, RUBBISH, DEBRIS, FROZEN SOIL, ICE, AND OTHER DELETERIOUS MATERIAL.
2. GENERAL FILL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 4 INCHES IN MAXIMUM DIMENSION, UNLESS SUCH PARTICLES WILL BREAK DOWN DURING COMPACTION.
3. EXECUTION
   a. PLACE AND COMPACT GENERAL FILL IN MAXIMUM 8-INCH-THICK LOOSE LIFTS.
   b. GENERAL FILL SOILS THAT ARE TOO WET OR DRY TO BE ADEQUATELY COMPACTED, AS DETERMINED BY THE CONSTRUCTION MANAGER, SHALL BE MOISTURE CONDITIONED APPROPRIATELY TO ACHIEVE ADEQUATE COMPACTION.
   c. PRIOR TO PLACING THE NEXT LAYER OF OVERLYING MATERIAL, PROTECT THE SURFACE OF EACH LIFT FROM EROSION, PRECIPITATION, DESICCATION, FREEZING, OR OTHER CONDITIONS THAT COULD AFFECT THE INTEGRITY OF THE LIFT.

D. PIPE BEDDING

1. PROVIDE COARSE AGGREGATE FOR CONCRETE SIZE NO. 1, NO. 2A, OR NO. 2B FOLLOWING THE CRITERIA OF ITD TABLE 703.02-8 AND MEETING THE GRADATION IN ITD TABLE 703.02-7 (APPLICABLE SECTION OF TABLE SHOWN BELOW).

PERCENT PASSING			
SIEVE SIZE	1	2A	2B
1 INCH	-	100	100
3/4 INCH	100	90-100	80-100
1/2 INCH	90-100	-	-
#4 INCH	40-70	20-55	10-40
NO. 4	0-15	0-10	0-4
NO. 8	0-5	0-5	-

2. THE NATIVE MATERIAL MAY BE APPROPRIATE TO USE AS BEDDING MATERIAL. THE CONSTRUCTION MANAGER ON SITE SHALL DETERMINE IF THIS IS AN ALLOWABLE SUBSTITUTE FOR USE AROUND THE PIPE AND BELOW THE CONCRETE VAULT.

E. ROCK LINING

1. PROVIDE UNCRUSHED, HARD, DURABLE GRAVEL OR FRAGMENTS OF STONE, FROM APPROVED SOURCE FOR ROCK LINING MATERIAL THAT IS IN ACCORDANCE WITH BLAINE COUNTY ROAD CONSTRUCTION STANDARDS TABLE 2.2D "UNCRUSHED AGGREGATE GRADATION" FOR DRAIN ROCK (SHOWN BELOW).
2. ROCK LINING SHALL HAVE 35% MINIMUM AIR VOIDS, AS DETERMINED BY ASTM C29; WASHED FREE OF CLAY, SHALE AND ORGANIC MATTER

SIEVE SIZE	PRECENT PASSING
3 INCH	100
1 INCH	25-60
#4 INCH	0-4
NO. 200	0-2

G. CRUSHED ROCK SURFACING

1. PROVIDE CLEAN, ANGULAR, CRUSHED QUARRY OR ALLUVIAL ROCK, FREE OF CLAY COATINGS, LUMPS, AND SOFT OR FLAKY PARTICLES MATERIAL FOR OPEN GRADED BASE CLASS 3 (CRUSHED ROCK SURFACING) AND MEETING THE QUALITY REQUIREMENTS OF ITD TABLE 703.08-1 "AGGREGATE GRADATION REQUIREMENTS" FOR CLASS 3.

SIEVE SIZE	PRECENT PASSING
1 INCH	100
3/4 INCH	80-98
1/2 INCH	60-85
#4 INCH	30-65

D. PEA GRAVEL

1. PROVIDE CLEAN, WELL ROUNDED, UNCRUSHED GRAVEL MEETING THE QUALITY REQUIREMENTS OF IDT TABLE 703.02-1 AND MEETING THE GRADATION IN ITD TABLE 703.09-1 (SHOWN BELOW):

SIEVE SIZE	PRECENT PASSING
1/2 INCH	100
#8 INCH	85-100
NO. 8	0-15

GEOTEXTILES

A. SUBMITTALS

1. SUBMIT FOR APPROVAL INFORMATION ON PROPOSED GEOTEXTILE MATERIAL, INCLUDING BUT NOT LIMITED TO MANUFACTURER, STANDARD PROPERTIES SHEET, AND TEST DATA TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.

B. GENERAL

1. GEOTEXTILE SHALL BE NON-WOVEN POLYPROPYLENE AND CONFORM TO THE REQUIREMENTS OF ITD 718.07 "SUBGRADE SEPARATION GEOTEXTILE PROPERTY REQUIREMENTS", TABLE 718.07-1 - "SUBGRADE SEPARATION GEOTEXTILE CRITERIA".
2. OVERLAP GEOTEXTILE PANELS AS RECOMMENDED BY THE MANUFACTURER.
3. GEOTEXTILES SHALL BE CONTINUOUSLY SEWN (I.E., SPOT SEWING IS NOT ALLOWED). ALTERNATIVELY, SINGLE OR DOUBLE WEDGE FUSION WELDING WILL BE ACCEPTABLE. LEISTER WELDING (SPOT OR CONTINUOUS) WILL NOT BE ACCEPTED AS A SEAMING METHOD. ALL SEWING SHALL BE DONE USING A SEWING MACHINE WHICH CREATES A CHAIN STITCH. WHEN ENTERING A SEAM, THE STITCHES SHALL BE OVERLAPPED TO PREVENT UNRAVELING.

PIPING

A. SUBMITTALS

1. MANUFACTURER'S PRODUCT INFORMATION AND SPECIFICATIONS FOR PIPE, FITTINGS, AND APPURTENANCES IN SUFFICIENT DETAIL TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.

B. DELIVERY, STORAGE, AND HANDLING

1. PIPE SHALL BE DELIVERED, HANDLED, AND STORED IN SUCH A MANNER AS TO ENSURE A SOUND, UNDAMAGED CONDITION. PIPE SHALL BE DELIVERED TO THE JOB SITE AND HANDLED BY MEANS THAT PROVIDE ADEQUATE SUPPORT TO THE PIPE AND DO NOT SUBJECT IT TO UNDUE STRESSES OR DAMAGE. WHEN HANDLING AND PLACING PLASTIC PIPE, CARE SHALL BE TAKEN TO PREVENT IMPACT BLOWS, ABRASION DAMAGE, AND GOUGING OR CUTTING BY METAL EDGES AND/OR SURFACE OR ROCKS. FOLLOW MANUFACTURER'S SPECIAL HANDLING AND STORAGE REQUIREMENTS. AVOID IMPACTS WHEN HANDLING PLASTIC PIPE AT TEMPERATURES LESS THAN 40 DEGREES FAHRENHEIT. PIPE SHALL BE STORED ON A RELATIVELY FLAT SURFACE SO THAT THE BARRELS ARE EVENLY SUPPORTED. UNLESS THE PIPE IS SPECIFICALLY MANUFACTURED TO WITHSTAND EXPOSURE TO ULTRAVIOLET RADIATION AS CERTIFIED BY THE MANUFACTURER, ALL PIPE SHALL BE COVERED WITH AN OPAQUE MATERIAL WHEN STORED OUTDOORS FOR MORE THAN 15 DAYS.

C. HIGH DENSITY POLYETHYLENE (HDPE) PIPE

1. PIPE AND FITTINGS SHALL BE 8-INCH HDPE DR 17 PIPE UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.
2. PIPES SHALL BE THE SIZE AS SHOWN ON THE DRAWINGS.
3. MATERIAL: HDPE PIPE AND FITTINGS SHALL MEET ASTM D4976 ASTM D3350.
4. FITTINGS: UNLESS OTHERWISE SPECIFIED, FITTINGS SHALL BE MADE BY THE SAME MANUFACTURER AS THE CONNECTING PIPE, UTILIZE THE JOINING METHOD DESCRIBED IN THIS SECTION, AND MAINTAIN THE SAME QUALITY REQUIREMENTS INCLUDING DURABILITY AND STRENGTH OF THE PIPE MATERIAL.
5. QUALITY: THE PIPE SHALL HAVE UNIFORM THICKNESS AND SHALL BE UNIFORM IN COLOR, OPACITY, DENSITY, AND OTHER PHYSICAL PROPERTIES. PIPE SHALL BE HOMOGENEOUS THROUGHOUT AND FREE OF VISIBLE CRACKS, HOLES, BLISTERS, BUBBLES, UNDISPERSED RAW MATERIALS, OR ANY CONTAMINATION BY FOREIGN MATTER, ANY PIPE WITH NICKS, SCRAPES, OR GOUGES DEEPER THAN 10 PERCENT OF THE NOMINAL WALL THICKNESS SHALL BE REJECTED.

E. PIPE INSTALLATION

1. PIPING DIMENSIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPING OF THE PROPER DIMENSIONS, WHICH WILL PROPERLY FIT WITH THE CONNECTING ELEMENTS, FITTINGS, ETC. TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
2. PIPE SHALL BE CUT IN A NEAT, WORKMANLIKE MANNER USING AN APPROVED MECHANICAL CUTTER THAT WILL NOT DAMAGE THE PIPE.
3. JOINING OF HDPE PIPE TO HDPE PIPE SHALL BE ACCOMPLISHED BY THERMAL BUTT OR SOCKET FUSION; NO SOLVENT OR ADHESIVE WELDING SHALL BE ALLOWED. PIPE SHALL BE JOINED PER ASTM D2657 AND MANUFACTURER'S RECOMMENDATIONS. INSTALLATION PERSONNEL WHO JOIN HDPE PIPE SHALL BE EXPERIENCED AND CERTIFIED IN ACCORDANCE WITH 49 CFR 192.285. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF PROPOSED JOINING PERSONNEL AND THEIR QUALIFICATIONS.
4. DURING INSTALLATION, THE PIPE SHALL NOT BE PULLED ACROSS SHARP PROJECTIONS THAT COULD CAUSE GOUGES, KINKS, OR OTHER TYPES OF DAMAGE.
5. THE PIPE SHALL NOT BE DROPPED INTO THE TRENCH. EXERCISE CARE WHEN LOWERING PIPE INTO TRENCH TO PREVENT TWISTING OR DAMAGE TO PIPE.
6. TEMPORARILY CLOSE PIPE ENDS AS REQUIRED TO AVOID INTRODUCING DIRT OR OTHER FOREIGN MATERIAL INTO THE PIPE.

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2025-07-03	ISSUED FOR CONSTRUCTION	KMD	REDMOND	CLC	SJS
0	2025-02-07	ISSUED FOR PERMITTING	KMD	REDMOND	CLC	SJS
A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYWOOD 7/3/2025

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PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

TITLE
GENERAL NOTES AND SPECIFICATIONS (2 OF 3)

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	3 of 12 021

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1 in

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PRE-CAST CONCRETE VAULT

A. SUBMITTALS
   1. SUBMIT FOR APPROVAL INFORMATION ON PROPOSED PRE-CAST CONCRETE VAULT, INCLUDING BUT NOT LIMITED TO MANUFACTURER PRODUCT SHEET, STANDARD PROPERTIES SHEET, AND TEST DATA TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.
   2. SUBMIT FOR APPROVAL THE PROPOSED PLAN FOR CONNECTION OF THE FLANGED VALVE TO A PIPE OR THE WEIR.

B. GENERAL
   1. PRE-CAST CONCRETE VAULT SHALL BE A MINIMUM 4-FT X 4-FT X 4-FT VAULT MANUFACTURED BY OLDCASTLE INFRASTRUCTURE, OR APPROVED EQUAL, AND INCLUDE OPENINGS SITUATED APPROPRIATELY TO CONNECT INTO CONVEYANCE PIPING.
   2. CONTRACTOR TO CONNECT THE CONVEYANCE PIPING INTO THE PRE-CAST CONCRETE VAULT TO MEET DESIGN INTENT, A SEALANT OR GROUT MUST BE INCLUDED TO PREVENT LEAKAGES AND MUST MEET THE REQUIREMENTS OF THE VAULT MANUFACTURER.
   3. PRE-CAST CONCRETE VAULT SHALL BE EQUIPPED WITH A SPRING ASSISTED GALVANIZED STEEL OR ALUMINUM TRAFFIC RATED COVER, OR APPROVED EQUAL.
   4. PRE-CAST CONCRETE VAULT SHALL INCLUDE A CONCRETE WEIR WALL RATED TO A MINIMUM OF 4,500 PSI. THE WEIR WALL SHALL BE MINIMUM 3-INCH THICK AND SHALL INCLUDE THE PENETRATION FOR THE PIPE/VALVE CONNECTION. CONNECTION OF THE FLANGED VALVE TO A PIPE OR THE WEIR SHALL BE PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

SHEAR GATE VALVES AND APPURTENANCES

A. SUBMITTALS
   5. SUBMIT FOR APPROVAL INFORMATION ON PROPOSED SHEAR GATE VALVES AND APPURTENANCES, INCLUDING BUT NOT LIMITED TO MANUFACTURER PRODUCT SHEET AND TEST DATA TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.

B. SHEAR GATE VALVE
   1. SHEAR GATE VALVE SHALL BE 8-INCH SHEAR GATE VALVE SYTLE 44-02 MANUFACTURED BY M&H VALVE COMPANY, OR APPROVED EQUAL.
   2. SHEAR GATE VALVE SHALL INCLUDE ALL APPURTENANCES IN THE ASSOCIATED DESIGN DRAWINGS (NOTE, THE LIFT HANDLE WILL NEED TO BE SHORTENED TO ACCOMMODATE THE VAULT DIMENSIONS), OR THE CONTRACTOR MUST SUBMIT AN ALTERNATIVE ASSEMBLY TO THE CONSTRUCTION MANAGER FOR APPROVAL.

MONITORING WELL DECOMMISSIONING

A. MONITORING WELLS WILL BE DECOMMISSION AT LOCATIONS SHOWN ON THE DRAWINGS PRIOR TO THE BEGINNING OF THIS CONSTRUCTION WORK.
B. DECOMMISSION OF WELLS WILL BE DONE IN ACCORDANCE WITH IDAHO DEPARTMENT OF WATER RESOURCES IDAPA 37.03.09 - WELL CONSTRUCTION STANDARDS RULES SECTION ON "DECOMMISSIONED (ABANDONED) WELL".
C. DECOMMISSIONING SHALL BE PERFORMED BY A QUALIFIED WELL CONTRACTOR.
D. REMOVE AND DISPOSE OF BOLLARDS, CONCRETE PADS, WELL CASING, AND OTHER STRUCTURES AND RESTORE THE GROUND SURFACE TO CONDITIONS TO MATCH THE SURROUNDING GROUND SURFACE.

PLUG AND ABANDON EXISTING PIPE

A. THE EXISTING 10-INCH HDPE PIPE NOT PART OF THE CONVEYANCE PIPING SYSTEM SHALL BE PROPERLY CUT, PLUGGED, AND ABANDONED. PIPE PLUG AND ABANDONMENT SHALL MEET BLAINE COUNTY ROAD CONSTRUCTION STANDARDS SECTION 24 - SELECTIVE DEMOLITION FOR "UTILITY SERVICES".

RESEEDING

A. RESEED DISTURBED AREAS FOLLOWING THE PROTOCOLS OUTLINED IN ITD SECTION 621 "SEEDING".
B. SEED MIX SHALL CONFORM TO THE REQUIRMENTS OF ITD SECTION 711.05 "SEED".
   1. SEED MIX MAY CONTAIN A MIX OF SEEDS FROM THE ITD IDAHO ROADSIDE REVEGETATION HANDBOOK THAT ACCOMODATES AN AVERAGE ANNUAL RAINFALL OF APPROXIMATELY 20 INCHES AND ACCOMODATES THE PROJECT SITE ELEVATION.
   2. SEED MIX SHOULD PRIORITIZE SEEDS OF NATIVE ORIGIN AND THAT ESTABLISH QUICKLY.
   3. CONTRACTOR SHALL SUBMIT SEED MIX AND SUPPLIER FOR APPROVAL.
C. IN ALL AREAS TO BE BROADCAST OR HYDROSEEDED, RAKE OR MECHANICALLY ROUGHEN THE SOIL AT LEAST 2 INCHES DEEP AND LEAVE IN A ROUGH CONDITION IMMEDIATELY BEFORE APPLYING SEED.
D. RESEED ANY AREAS THAT FAIL TO ESTABLISH GREATER THAN OR EQUAL TO 50% COVER AS DETERMINED BY VISUAL INSPECTION BY THE OWNER AFTER 3 MONTHS OF ACTIVE GROWTH FOLLOWING GERMINATION DURING THE INITIAL GROWING SEASON.
E. DO NOT RESEED DRAINAGE DITCHES, ACCESS ROADS, OR OTHER AREAS WHERE RESEEDING WOULD BE DETRIMENTAL TO THE FUNCTION OF THE AREA.

WOOD FENCE

A. WOOD FENCE SHALL CONSIST OF PRESSURE TREATED WOOD POSTS AND BRACING AND SHALL MEET THE STANDARD SPECIFICATIONS FOR ITD SECTION 710.08 "POSTS FOR BARBED OR WOVEN WIRE FENCE" AND 710.09 "PRESERVATION TREATMENT", OR APPROVED EQUAL. STANDARD DETAILS FOR THE WOOD FENCE ARE FOUND UNDER ITD 2024 STANDARD DRAWINGS 610-1 "FENCES" AND 610-3 "FENCE BRACES".

MAINTENANCE ACCESS GATE- AND

A. A MAINTENANCE VEHICLE ACCESS GATE SHALL BE INSTALLED AND MEET THE -STANDARD SPECIFICATIONS AND DRAWING NOTES FOR ITD "GATE TYPE 1A", OR APPROVED EQUAL.

VISUAL BARRIER

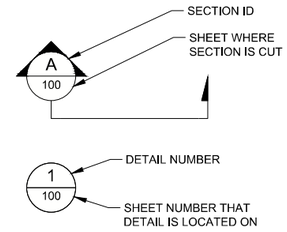
A. A VISUAL BARRIER SUCH AS TREES, SHRUBS, OR OTHER GROUND COVER MAY BE ELECTED TO BE ADDED AT A LATER DATE BY IDEQ.
B. MATERIALS, MEASUREMENTS, AND PAYMENTS TBD BY IDEQ.

LEGEND

- EXISTING MAJOR CONTOURS (5 FT)
- EXISTING MINOR CONTOURS (1FT)
- PROPOSED MAJOR CONTOURS (5 FT)
- PROPOSED MINOR CONTOURS (1FT)
- PROPOSED 8" HDPE PIPE
- PARCEL BOUNDARY
- EXISTING DISCHARGE PIPE
- EXISTING CULVERT
- EXISTING ROAD
- EXISTING TREE LINE
- PROPOSED ACCESS ROAD
- ROCK LINING
- MW-22 — MONITORING WELL LOCATIONS TO BE PROTECTED/RETAINED
- MW-23 — MONITORING WELL LOCATIONS TO BE DECOMMISSIONED (NOTE 6 ON SHEET 030)
- CLEAN OUT LOCATIONS
- TEST PIT LOCATIONS
- PIEZOMETER LOCATION TO BE PROTECTED/RETAINED
- PIPE FLOW DIRECTION

REFERENCES

1. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM), VERSIONS CURRENT AT TIME OF BID.
2. ASTM D2657: PRACTICE FOR HEAT FUSION JOINING OF POLYOLEFIN PIPE AND FITTINGS.
3. ASTM D3350: STANDARD SPECIFICATION FOR POLYETHYLENE PLASTICS PIPE AND FITTING MATERIALS.
4. ASTM D4976: SPECIFICATION FOR POLYETHYLENE PLASTICS MOLDING AND EXTRUSION MATERIALS.
5. BLAINE COUNTY 2019 ROAD CONSTRUCTION STANDARDS, JANUARY 2019 VERSION.
6. IDAHO DEPARTMENT OF WATER RESOURCES. IDAPA 37.03.09 - WELL CONSTRUCTION STANDARDS RULES, 2023 VERSION.
7. IDAHO TRANSPORTATION DEPARTMENT (ITD) IDAHO ROADSIDE REVEGETATION HANDBOOK. JULY, 2014.
8. ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2023 VERSION.
9. ITD STANDARD DRAWINGS, APRIL 2024 VERSION.
10. SITE TOPOGRAPHY OBTAINED FROM GEOTERRA, COLLECTED IN 2019.
11. WETLAND DELINEATION PERFORMED BY ALTA SCIENCE & ENGINEERING (ALTA), OCTOBER 2, 2024.
12. SURVEY OF EXISTING SITE FEATURE PERFORMED BY ACCURATE SURVEYING & MAPPING, MAY 16-17, 2024.
13. HORIZONTAL DATUM: NAD83 IDAHO STATE PLANE, CENTRAL ZONE, US FOOT.
14. VERTICAL DATUM: NAVD88.



REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2025-07-03	ISSUED FOR CONSTRUCTION	KMD	REDMOND	CLC	SJS
0	2025-02-07	ISSUED FOR PERMITTING	KMD	REDMOND	CLC	SJS
A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYMOR 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT

REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

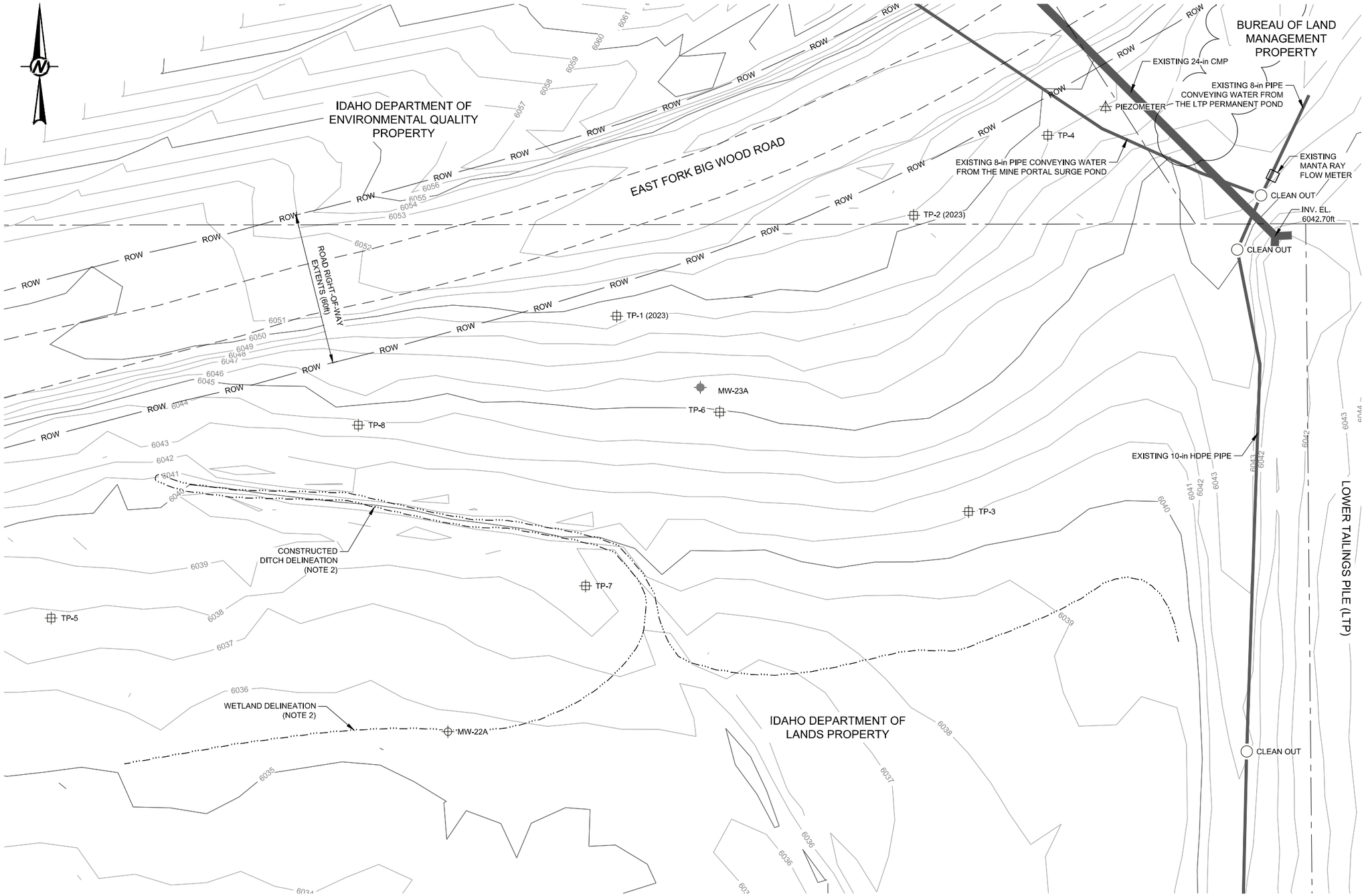
TITLE
GENERAL NOTES AND SPECIFICATIONS (3 OF 3)

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	4 of 12 — 022

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1 in

Path: \\corp.pbwan.net\US\Central\Data\USXLC300\gismaps\Idaho_Dept_of_Lands\Triumph_Mine\99_PROJECTS\31407131_200_TriumphMine\Infiltration\03_PRODUCTION\31407131_200_InfiltrationPondDesign\DWG\ | File Name: 31407131_012.dwg | Last Edited By: uskd7701463 Date: 2025-07-03 Time:11:56:32 AM | Printed By: USKD7701463 Date: 2025-07-03 Time:12:02:02 PM



LEGEND

- EXISTING MAJOR CONTOURS (5 FT)
- EXISTING MINOR CONTOURS (1FT)
- PARCEL BOUNDARY
- EXISTING DISCHARGE PIPE
- EXISTING CULVERT
- EXISTING ROAD
- EXISTING TREE LINE
- MW-22 — MONITORING WELL LOCATIONS TO BE PROTECTED/RETAINED
- MW-23 — MONITORING WELL LOCATIONS TO BE DECOMMISSIONED (NOTE 6)
- CLEAN OUT LOCATIONS
- TEST PIT LOCATIONS
- PIEZOMETER LOCATION TO BE PROTECTED/RETAINED

NOTE(S)

1. SITE TOPOGRAPHY OBTAINED FROM GEOTERRA, COLLECTED IN 2019.
2. WETLAND DELINEATION PERFORMED BY ALTA SCIENCE & ENGINEERING (ALTA), OCTOBER 2, 2024.
3. SURVEY OF EXISTING SITE FEATURE PERFORMED BY ACCURATE SURVEYING & MAPPING, MAY 16-17, 2024.
4. HORIZONTAL DATUM: NAD83 IDAHO STATE PLANE, CENTRAL ZONE, US FOOT.
5. VERTICAL DATUM: NAVD88.
6. MONITORING WELL(S) TO BE DECOMMISSIONED PRIOR TO BEGINNING THE CONSTRUCTION OF INFILTRATION PONDS. WELL TO BE DECOMMISSIONED UNDER A SEPARATE CONTRACT.

0 20 40
1" = 20' FEET

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1	2025-07-03	ISSUED FOR CONSTRUCTION	KMD	REDMOND	CLC	SJS
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A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CALWOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT
wsp
REDMOND
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REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

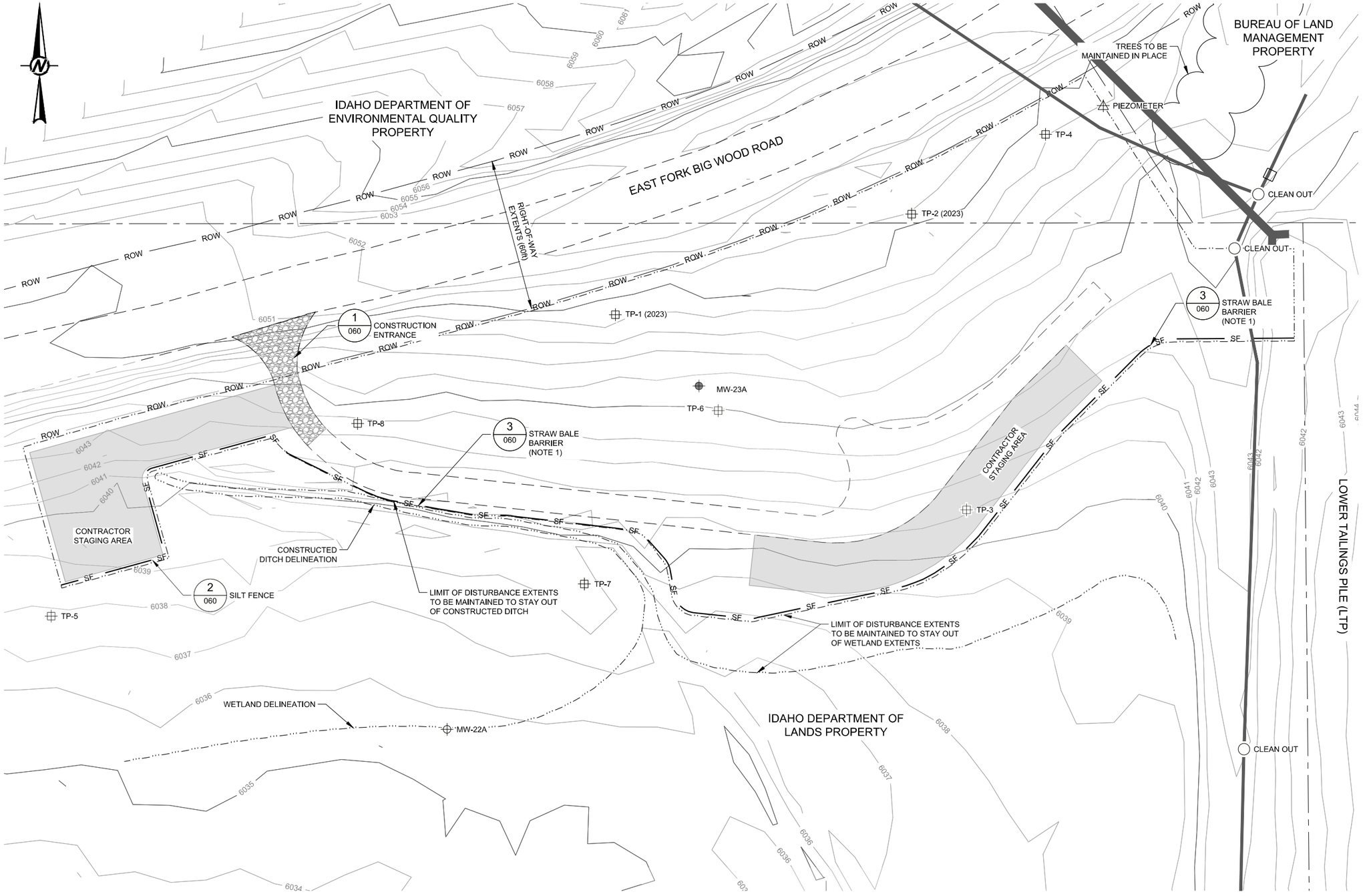
TITLE
EXISTING CONDITIONS

PROJECT NO.	PHASE	REV.	5 of 12	SHEET
31407131	002	0		030

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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LEGEND

- EXISTING MAJOR CONTOURS (5 FT)
- EXISTING MINOR CONTOURS (1FT)
- PARCEL BOUNDARY
- EXISTING DISCHARGE PIPE
- EXISTING CULVERT
- EXISTING ROAD
- EXISTING TREE LINE
- PROPOSED ACCESS ROAD
- SF — SILT FENCE
- LIMITS OF DISTURBANCE
- ROCK LINING
- MW-22 — MONITORING WELL LOCATIONS TO BE PROTECTED/RETAINED
- MW-23 — MONITORING WELL LOCATIONS TO BE DECOMMISSIONED (NOTE 6 ON SHEET 030)
- CLEAN OUT LOCATIONS
- TEST PIT LOCATIONS
- PIEZOMETER LOCATION TO BE PROTECTED/RETAINED

NOTE(S)

1. POTENTIAL STRAW BALE BARRIERS TO BE PLACED AS NEEDED OR AS DIRECTED BY THE CONSTRUCTION MANAGER.

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
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SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CATMOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

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wsp
REDMOND
18300 REDMOND WAY, SUITE 200
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USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

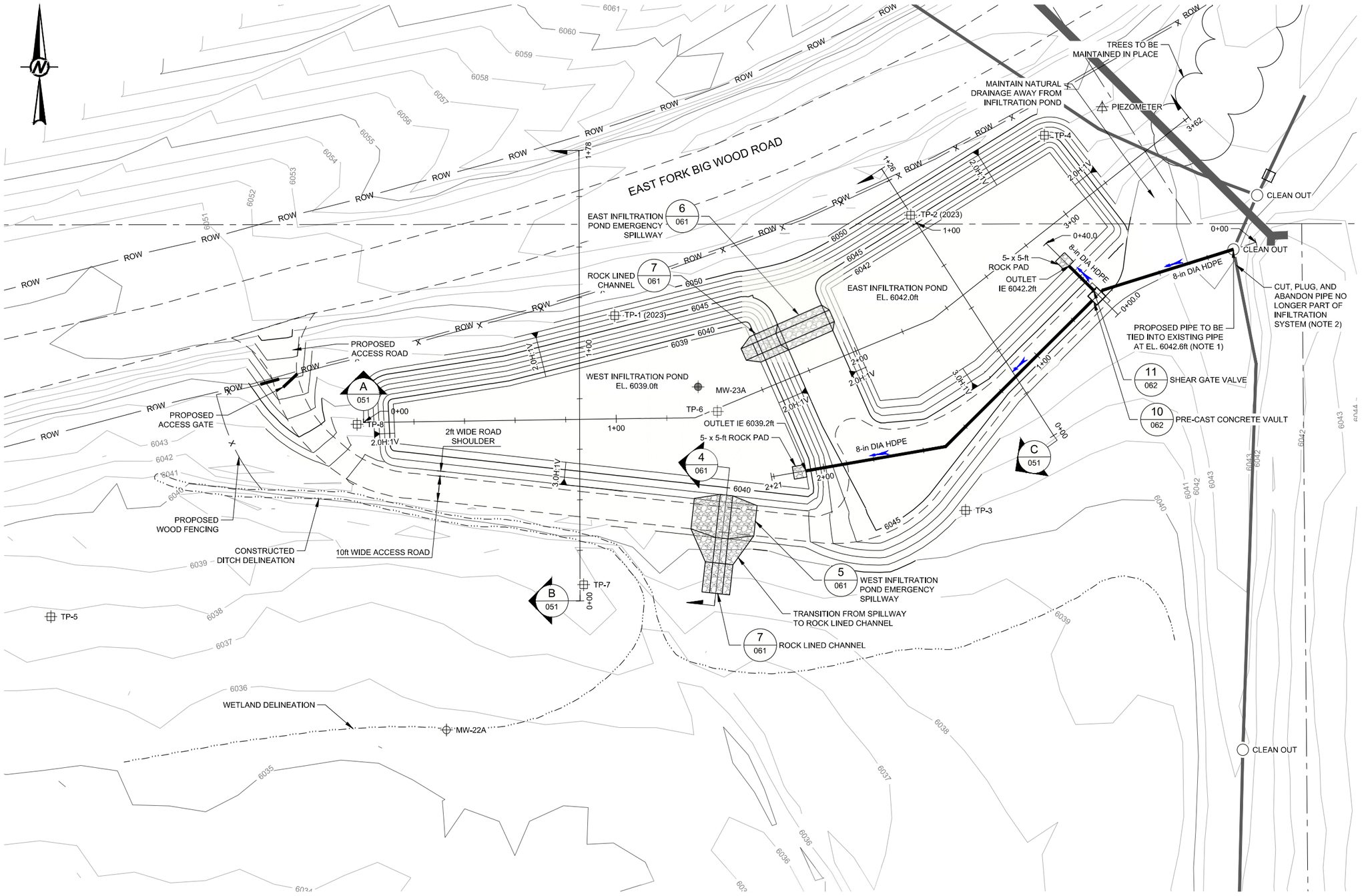
TITLE
TEMPORARY EROSION AND SEDIMENT CONTROL

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	6 of 12 040

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1in

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LEGEND

- EXISTING MAJOR CONTOURS (5 FT)
- EXISTING MINOR CONTOURS (1FT)
- PROPOSED MAJOR CONTOURS (5 FT)
- PROPOSED MINOR CONTOURS (1FT)
- PROPOSED 8" HDPE PIPE
- PARCEL BOUNDARY
- EXISTING DISCHARGE PIPE
- EXISTING CULVERT
- EXISTING ROAD
- EXISTING TREE LINE
- PROPOSED ACCESS ROAD
- ROCK LINING
- MW-22 — MONITORING WELL LOCATIONS TO BE PROTECTED/RETAINED
- MW-23 — MONITORING WELL LOCATIONS TO BE DECOMMISSIONED (NOTE 6 ON SHEET 030)
- CLEAN OUT LOCATIONS
- TEST PIT LOCATIONS
- PIEZOMETER LOCATION TO BE PROTECTED/RETAINED
- PIPE FLOW DIRECTION

NOTE(S)

1. THE PROPOSED 8-in DIAMETER HDPE PIPE WILL BE CONNECTED INTO THE EXISTING 10-in DIAMETER HDPE PIPE DIRECTLY UPSTREAM OR DOWNSTREAM OF THE CLEANOUT AT ELEVATION 6042.6 ft.
2. ONCE THE EXISTING PIPE IS CUT AND THE NEW PIPE TIED-IN, THE REMAINDER OF THE EXISTING PIPE EXTENTS DRAINING TO THE SOUTH WILL NO LONGER BE PART OF THE INFILTRATION SYSTEM AND SHALL BE PLUGGED AND ABANDONED.

0 20 40
1" = 20' FEET

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SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CATMOR 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT
wsp
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18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

TITLE
INFILTRATION POND PLAN

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	7 of 12 050

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

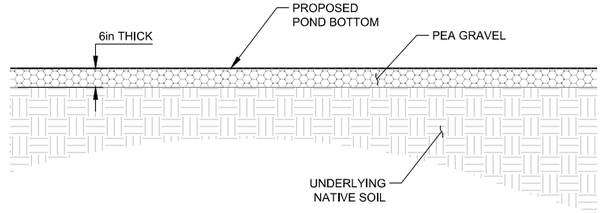
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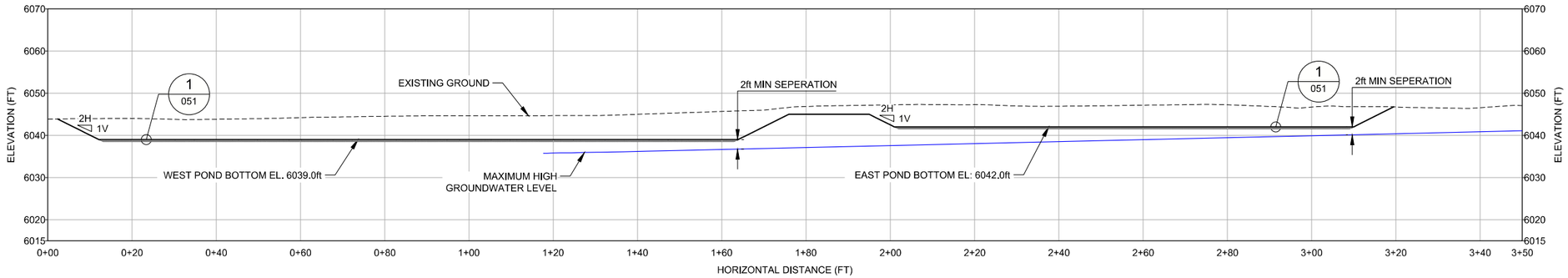
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LEGEND

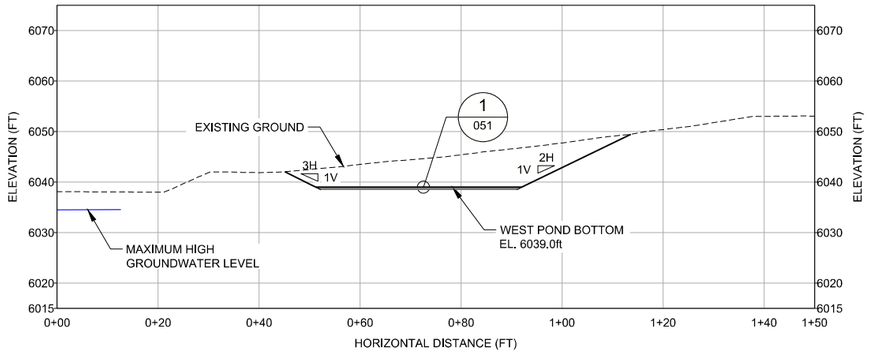
- EXISTING GROUND
- PROPOSED POND BOTTOM
- MAXIMUM HIGH GROUNDWATER LEVEL
- PEA GRAVEL



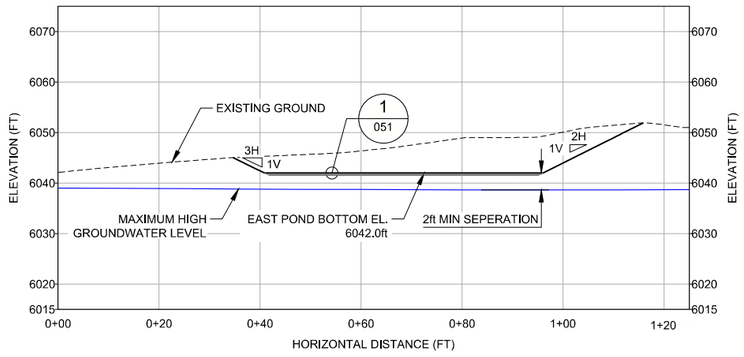
SCALE 1" = 2' — 1 / - — INFILTRATION POND BOTTOM DETAIL



SCALE 1" = 15' / VERT. SCALE 1:1 — A / 050 — INFILTRATION PONDS PROFILE VIEW



SCALE 1" = 15' / VERT. SCALE 1:1 — B / 050 — WEST INFILTRATION POND SECTION VIEW



SCALE 1" = 15' / VERT. SCALE 1:1 — C / 050 — EAST INFILTRATION POND SECTION VIEW

0 2 4 — 1" = 2' FEET

0 15 30 — 1" = 15' FEET

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SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYWOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT

REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

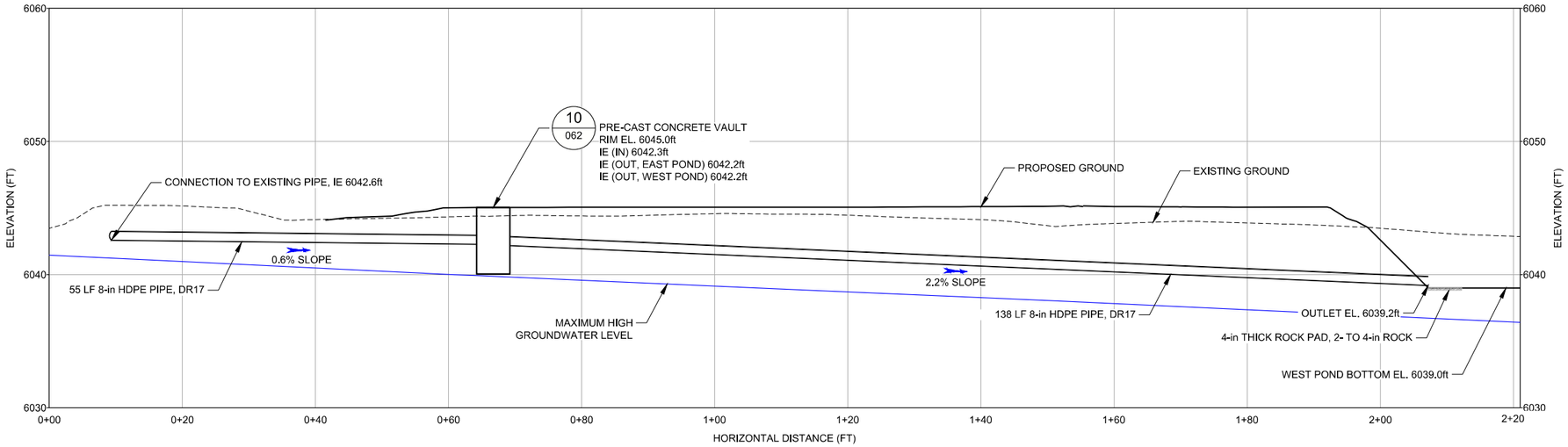
TITLE
INFILTRATION POND SECTIONS

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	051

8 of 12

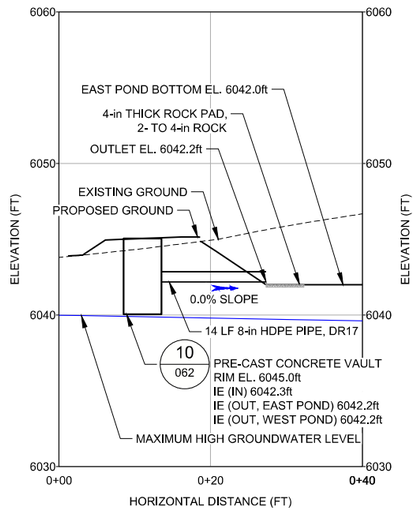
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1in



PROPOSED PIPE ALIGNMENT TO WEST POND

SCALE 1" = 10'
VERT. SCALE 1:2



PROPOSED PIPE ALIGNMENT TO EAST POND

SCALE 1" = 10'
VERT. SCALE 1:2

0 2 4
1" = 2' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
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SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CATWOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT
wsp
REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

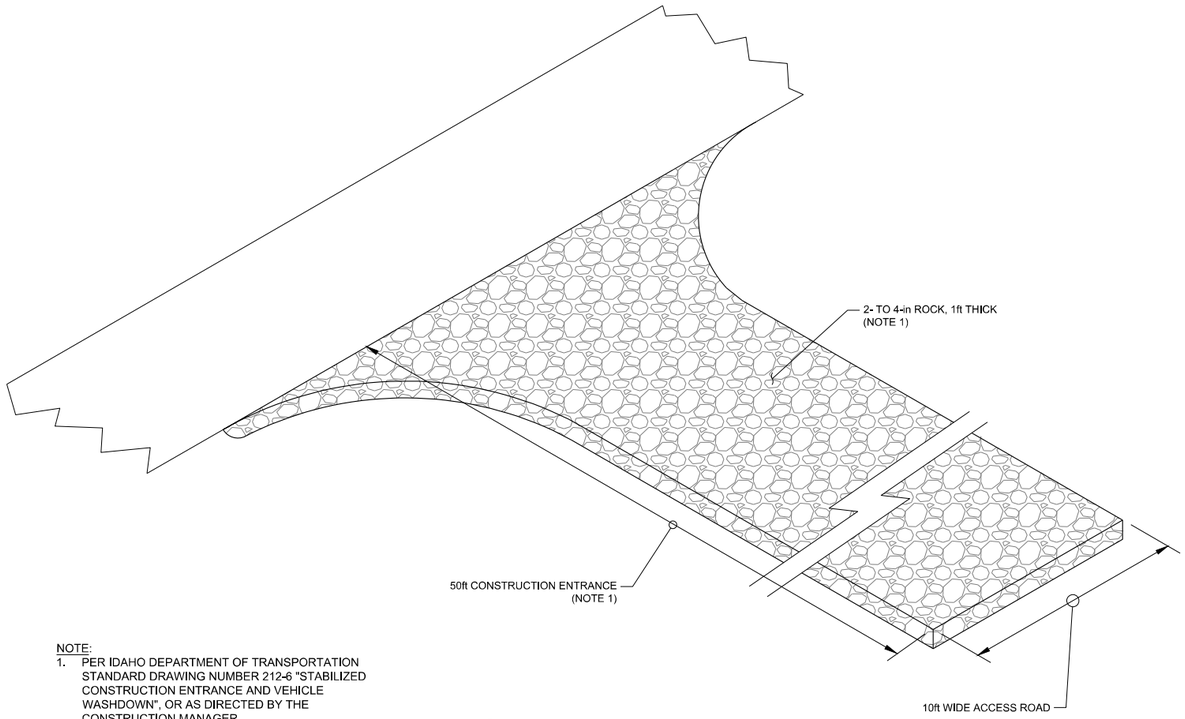
TITLE
DISCHARGE PIPE PROFILES

PROJECT NO.	PHASE	REV.	SHEET
31407131	002	0	9 of 12 052

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

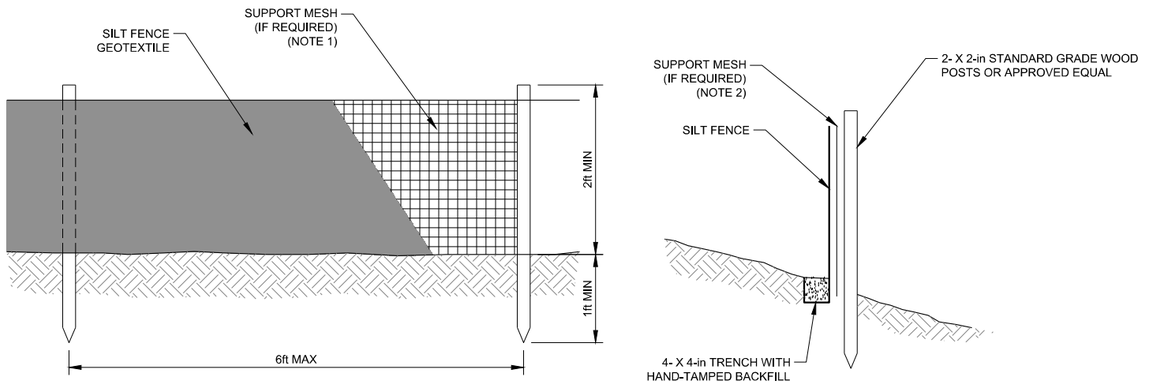
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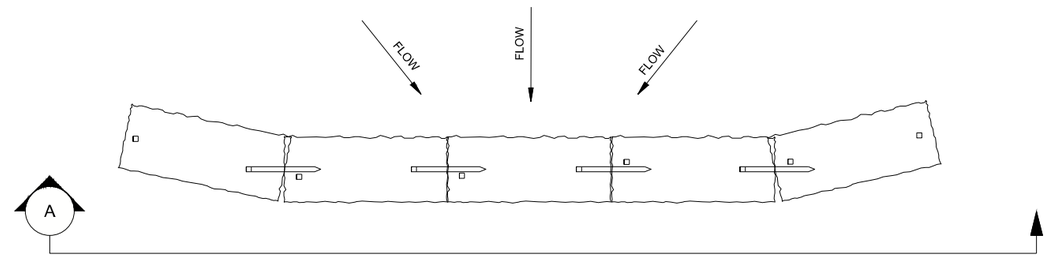
NOTE:
1. PER IDAHO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING NUMBER 212-6 "STABILIZED CONSTRUCTION ENTRANCE AND VEHICLE WASHDOWN", OR AS DIRECTED BY THE CONSTRUCTION MANAGER.

N.T.S. 1 - CONSTRUCTION ENTRANCE

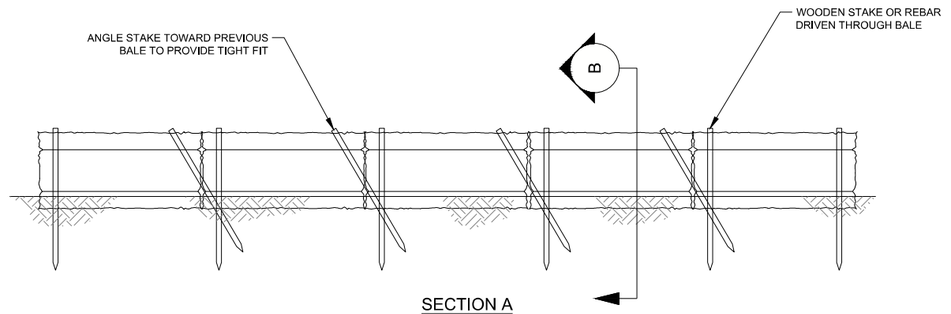


NOTES:
1. SUPPORT MESH SHALL BE REQUIRED IF SPACING BETWEEN POSTS IS INCREASED OR IF IN THE OPINION OF THE CONSTRUCTION MANAGER, THE SILT FENCE IS NOT ADEQUATELY SUPPORTED TO FUNCTION AS INTENDED.
2. EXTEND SUPPORT MESH AT LEAST 3-in INTO TRENCH.

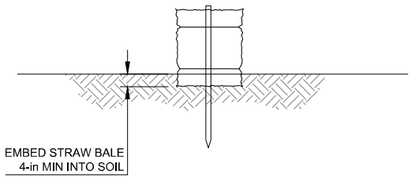
N.T.S. 2 - SILT FENCE



PLAN



SECTION A



SECTION B

NOTES:
1. STRAW BALES SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING.
2. KEY IN BALES TO PREVENT EROSION OR FLOW UNDER BALES.
3. LOCATION AND NUMBER OF BALES IN EACH BARRIER TO BE DETERMINED BY THE CONSTRUCTION MANAGER.
4. STRAW BALE BARRIERS TO BE INSTALLED UPSTREAM OF SILT FENCE.

N.T.S. 3 - STRAW BALE BARRIER

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A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYWOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT
wsp
REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

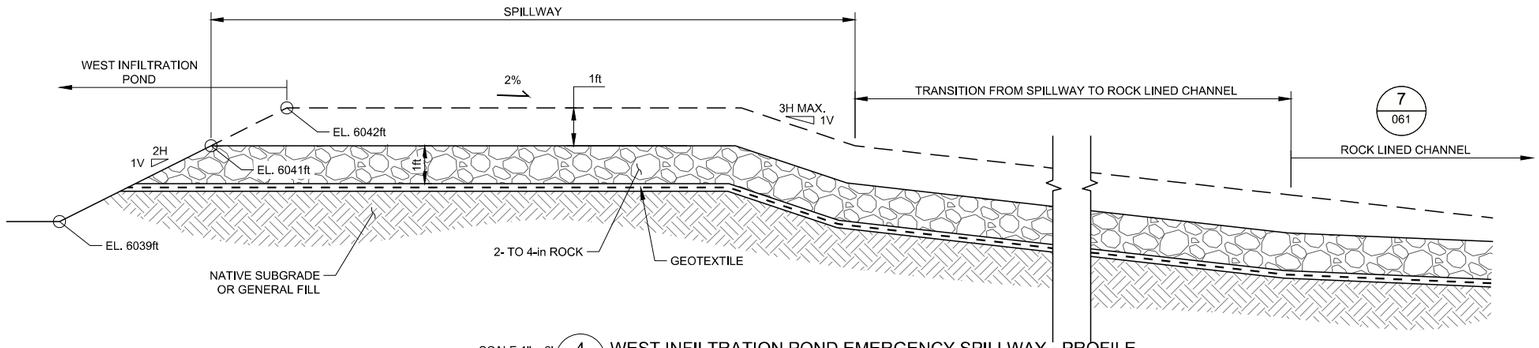
TITLE
DETAILS (1 OF 3)

PROJECT NO.	PHASE	REV.	10 of 12	SHEET
31407131	002	0		060

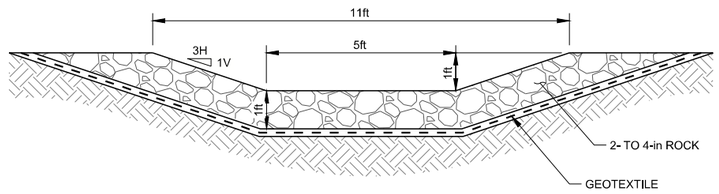
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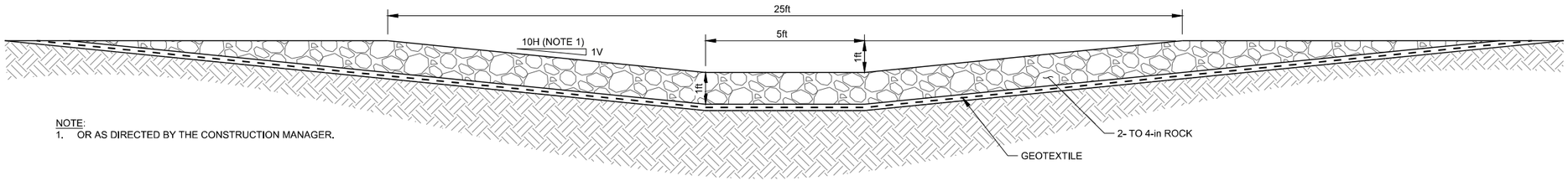
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SCALE 1" = 2' 4 - WEST INFILTRATION POND EMERGENCY SPILLWAY - PROFILE

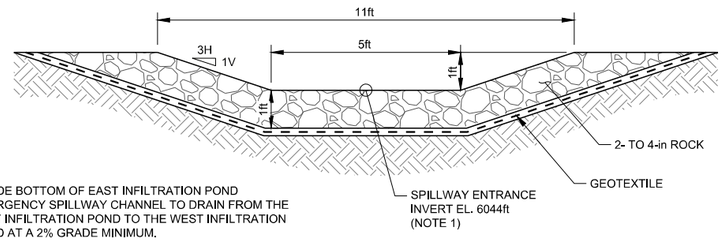


SCALE 1" = 2' 7 - ROCK LINED CHANNEL - SECTION



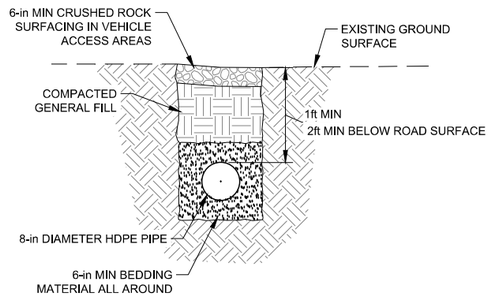
NOTE:
1. OR AS DIRECTED BY THE CONSTRUCTION MANAGER.

SCALE 1" = 2' 5 - WEST INFILTRATION POND EMERGENCY SPILLWAY - SECTION

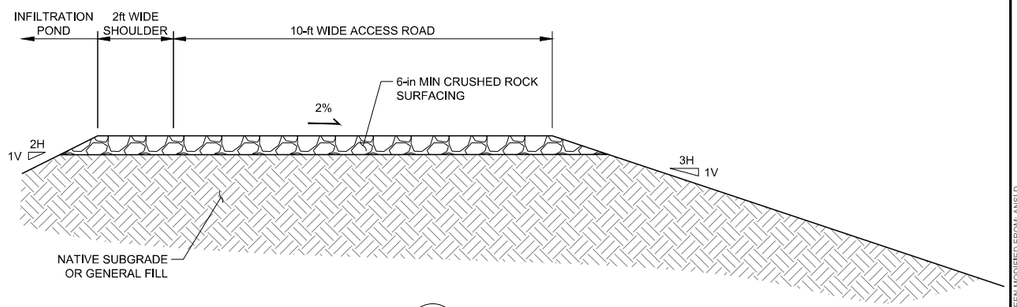


NOTE:
1. GRADE BOTTOM OF EAST INFILTRATION POND EMERGENCY SPILLWAY CHANNEL TO DRAIN FROM THE EAST INFILTRATION POND TO THE WEST INFILTRATION POND AT A 2% GRADE MINIMUM.

SCALE 1" = 2' 6 - EAST INFILTRATION POND EMERGENCY SPILLWAY - SECTION



SCALE 1" = 2' 8 - PIPE TRENCH



SCALE 1" = 2' 9 - ACCESS ROAD

0 2 4
1" = 2' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2025-07-03	ISSUED FOR CONSTRUCTION	KMD	REDMOND	CLC	SJS
0	2025-02-07	ISSUED FOR PERMITTING	KMD	REDMOND	CLC	SJS
A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CAYWOOD 7/3/2025

CLIENT
ALTA SCIENCE & ENGINEERING, INC.

CONSULTANT
wsp
REDMOND
18300 REDMOND WAY, SUITE 200
REDMOND, WA 98052
USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

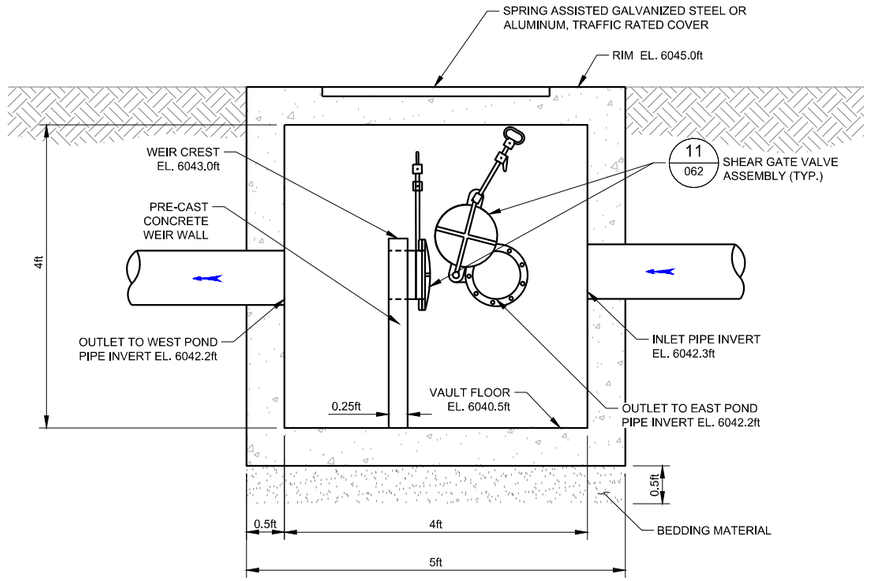
TITLE
DETAILS (2 OF 3)

PROJECT NO.	PHASE	REV.	11 of 12	SHEET
31407131	002	0		061

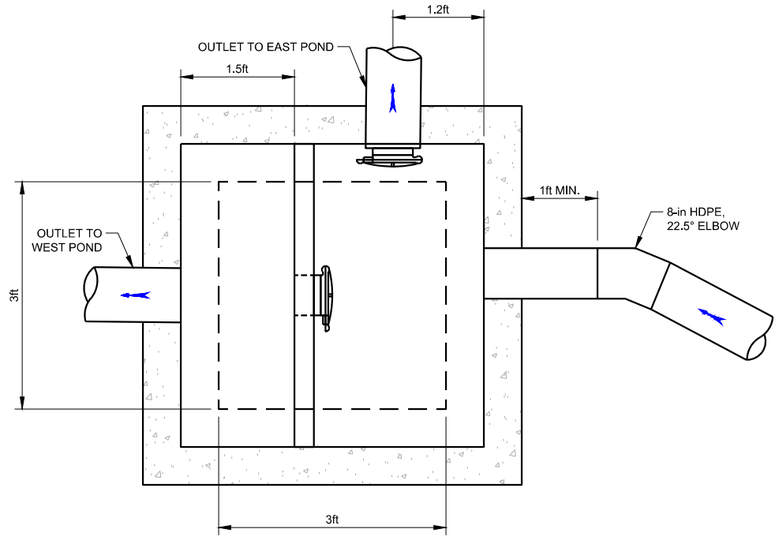
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 1 in

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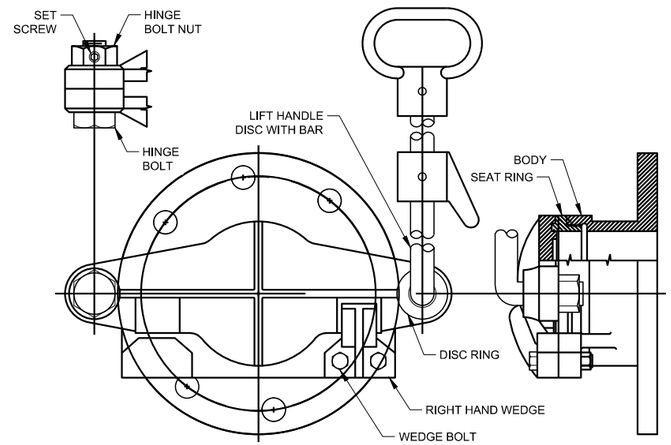


SECTION VIEW
SCALE 1" = 1'



PLAN VIEW
SCALE 1" = 1'

SCALE 1" = 1' 10 - PRE-CAST CONCRETE VAULT



SCALE 1" = 5' 11 - SHEAR GATES VALVE ASSEMBLY

0 1 2
1" = 1' FEET

0 5 10
1" = 5' FEET

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
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A	2024-08-06	DRAFT - ISSUED FOR REVIEW	KMD	REDMOND	SJS	SJS

SEAL

PROFESSIONAL ENGINEER LICENSED 16005 STATE OF IDAHO COLBY L. CATWOOD 7/3/2025

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USA
[+1] (425) 833 0777

PROJECT
INFILTRATION POND DESIGN
TRIUMPH MINE
BLAINE COUNTY, IDAHO

TITLE
DETAILS (3 OF 3)

PROJECT NO.	PHASE	REV.		SHEET
31407131	002	0	12 of 12	062

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0 1 in

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