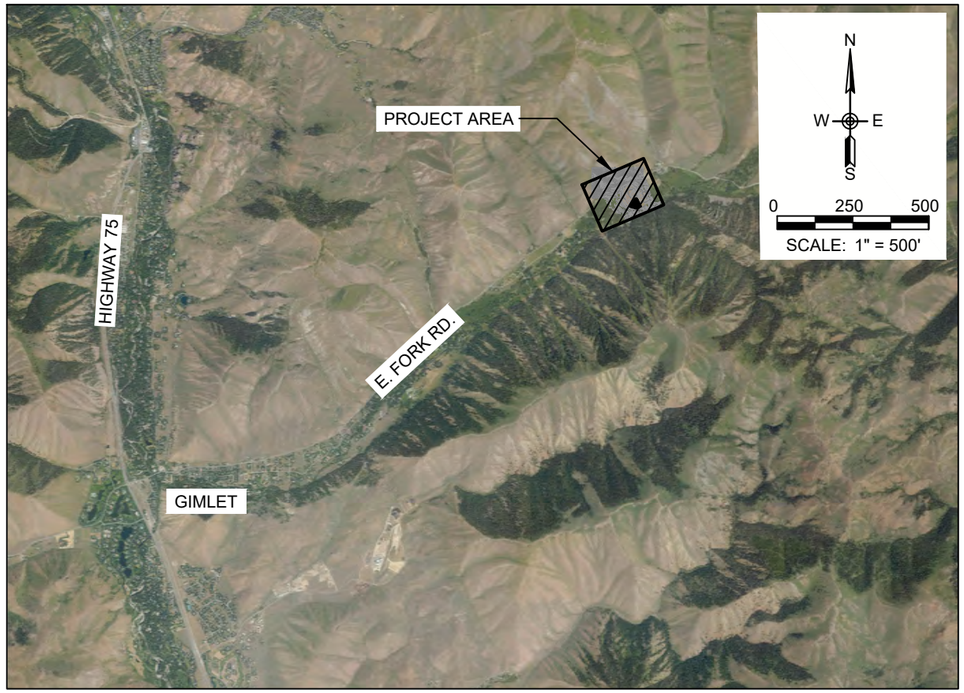
TRIUMPH MINE SITE
BLAINE COUNTY, IDAHO
FINAL DESIGN 2026
MAY 2026



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: 1" = 500'

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

Alta Science & Engineering, Inc.

COVER & GENERAL SHEETS

SHEET #	SHEET NAME	SHEET INDEX	SHEET #	SHEET NAME	SHEET INDEX
1	COVER SHEET	CS	14	SURGE POND IMPROVEMENTS	S8
2 - 3	GENERAL PLAN SET INFORMATION	G1 - G2	15	SURGE POND REVEGETATION	S9
4	SITE MAP	S1	16	PORTAL MAINTENANCE	S10
5	EAST FORK ROAD DITCH	S2	17	PORTAL PIPELINE REHABILITATION	S11
6	WYE RESET & BASIN REPAIR	S3	18	PORTAL SEDIMENTATION	S12
7 - 10	SURGE POND ACCESS ROAD	S4 - S7	19	LTP ACCESS ROAD DITCH	S13
11 - 13	SURGE POND ACCESS ROAD CROSS SECTIONS	X1 - X3	20 - 21	LTP CAP, FILL & COVER PLAN	S14 - S15
			22 - 25	DETAILS	D1 - D4

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: AS NOTED
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

COVER SHEET

SHEET: CS
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 1 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

GENERAL NOTES

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 ISPWC UNLESS OTHERWISE SPECIFIED IN 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 MARKING UP AND MAINTAINING A SET OF AS-BUILT DRAWINGS DURING CONSTRUCTION, TO DOCUMENT ANY CHANGES FROM THE DESIGNED CONDITIONS CONTAINED WITHIN THIS PLAN SET.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SIZING OF EQUIPMENT USED DURING THE PROJECT AND FOR WEIGHT RESTRICTIONS ON EXISTING BRIDGES AND ROADS.
13. 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.
14. 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.
15. ALL EXCAVATED MATERIAL SHALL BE CONSIDERED CONTAMINATED (SEE CONTAMINATED SOILS) AND HAULED TO THE LOWER TAILINGS PILE FOR DISPOSAL.
16. DECONTAMINATION OF EQUIPMENT AND PERSONNEL IS REQUIRED FOR ACTIVITIES THAT INVOLVE CONTACT WITH CONTAMINATED SOILS.
17. 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.
18. FOR AGGREGATE GRADATION INFORMATION REFER TO BLAINE COUNTY 2019 ROAD CONSTRUCTION STANDARDS, SECTION 8 PART 2.

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 INFORMATION:

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.

IMPORTED MATERIAL GRADATION (NOTE 18)

TYPE-1 (¾" 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

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

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DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: N/A
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

GENERAL PLAN SET INFORMATION

SHEET: G1
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 2 OF 25

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RE-VEGETATION NOTES

1. CONTRACTOR SHALL PROCURE A NATIVE SEED MIX WITH THE RATIOS AS SPECIFIED IN TABLE 1. ANY SUBSTITUTIONS SHALL BE APPROVED BY DEQ PRIOR TO PURCHASING THE SEED MIX.
2. ALL DISTURBED AREAS SHALL BE HYDROSEEDED UNLESS OTHERWISE APPROVED BY OWNER AND BLAINE COUNTY.
3. ALL 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 AND COMPLY WITH THE WEED MANAGEMENT PLAN AS OUTLINED BELOW.

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. SPRAYING 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 BLAINE COUNTY'S NOXIOUS WEED 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**

LEGEND, SYMBOLS, ABBREVIATIONS

APPROX.	APPROXIMATE
BMPs	BEST MANAGEMENT PRACTICES
CMP	CORRUGATED METAL PIPE
CY	CUBIC YARD
Ø OR DIA.	DIAMETER
E	EASTING
EQUIV.	EQUIVALENT
EX.	EXISTING
ELEV.	ELEVATION
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
ISPC	IDAHO STATE PLANE CENTRAL
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION
LF	LINEAR FEET
LTP	LOWER TAILINGS PILE
O.C.	ON CENTER
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
BUILDING
CULVERT
FENCE
OVERHEAD POWER LINE
ROAD (GRAVEL/DIRT)
WATER

EMERGENCY CONTACT AND UTILITY INFORMATION

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

EMERGENCY MEDICAL SERVICE
ST. LIKE'S WOOD RIVER MEDICAL CENTER
100 HOSPITAL DRIVE
KETCHUM, ID 83340
208-727-8800

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.

SECTION AND DETAIL DESIGNATION

POINT AT WHICH SECTION OR DETAIL IS TAKEN

1 / C1
- NUMBER INDICATES DESIGNATION OF SECTION
- INDICATES SHEET WHERE SECTION IS SHOWN. A DASH (-) INDICATES SECTION IS SHOWN ON SAME SHEET AS TAKEN

1 / -
- 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 → 1 / - SECTION SCALE

NUMBER INDICATES DESIGNATION OF DETAIL → 1 / - DETAIL SCALE

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: N/A
APPROVED: D. FORSETH
DATE: 05/26/2026

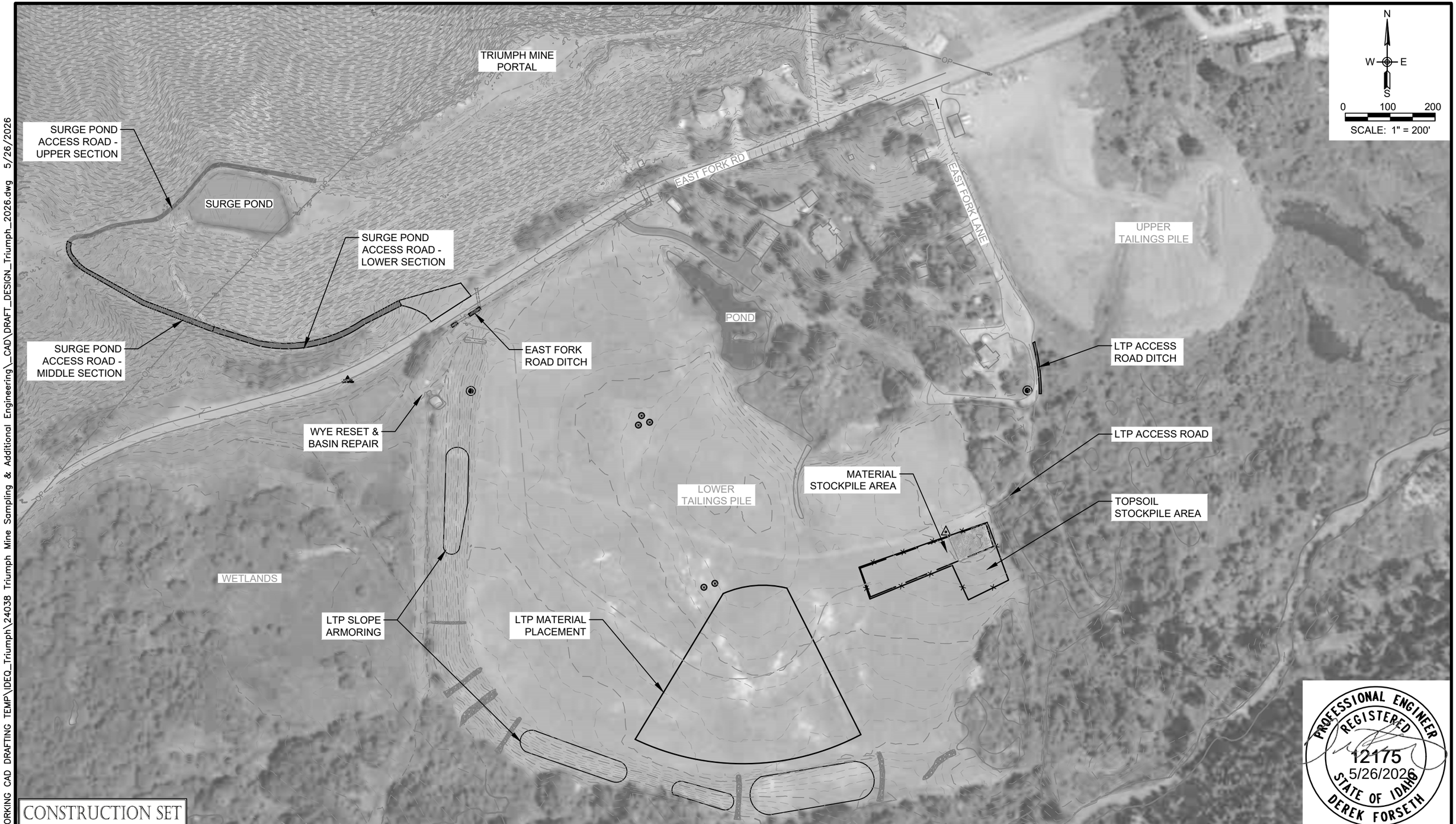
Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

GENERAL PLAN SET INFORMATION

SHEET: G2
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 3 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026



PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)
DESIGNER: D. FORSETH	SCALE: 1" = 200'
CHECKED: D. FORSETH	APPROVED: D. FORSETH
DATE: 05/26/2026	DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

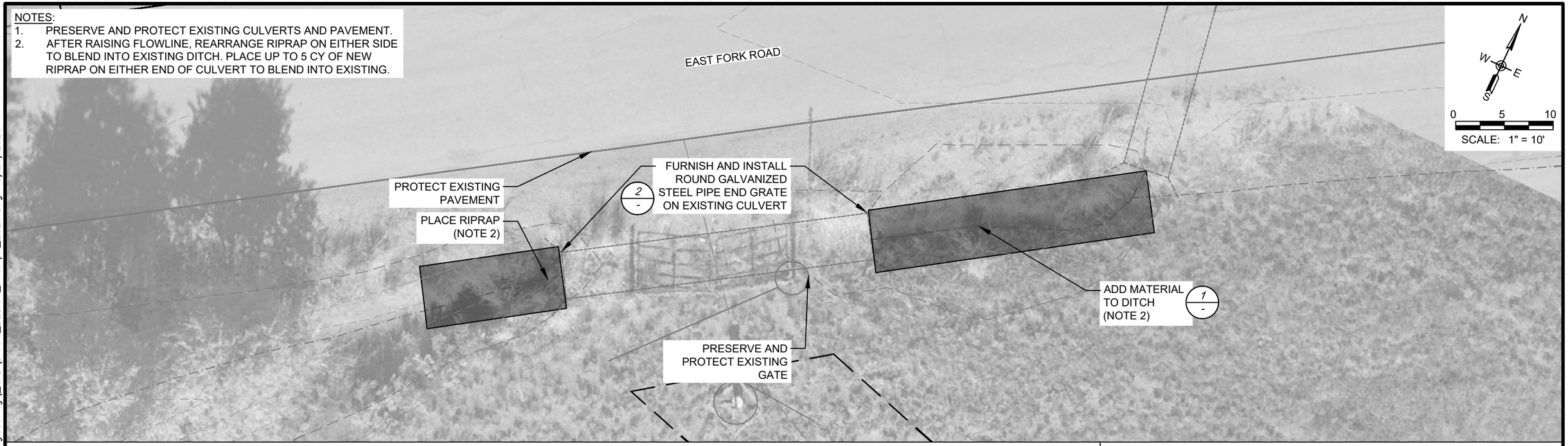
BLAINE COUNTY, ID

SITE MAP

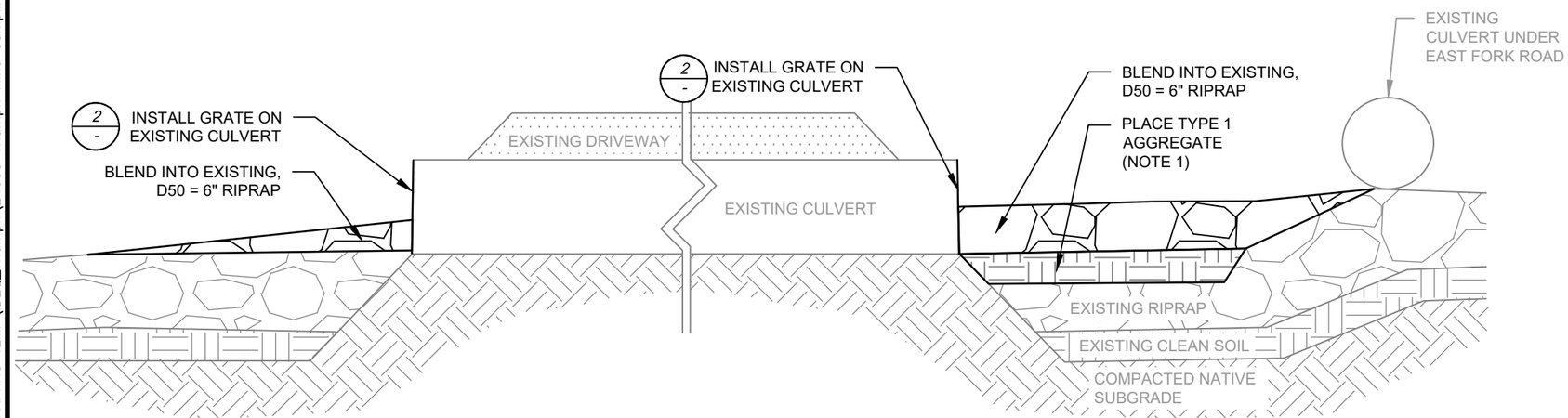
SHEET:	S1
DATE:	5/26/2026
PROJECT NO.:	25003
SHEET NO.:	4 OF 25

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NOTES:
1. PRESERVE AND PROTECT EXISTING CULVERTS AND PAVEMENT.
2. AFTER RAISING FLOWLINE, REARRANGE RIPRAP ON EITHER SIDE TO BLEND INTO EXISTING DITCH. PLACE UP TO 5 CY OF NEW RIPRAP ON EITHER END OF CULVERT TO BLEND INTO EXISTING.

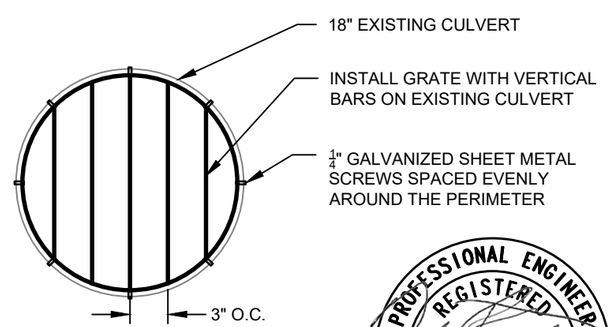


NOTES:
1. PLACE A MAXIMUM OF 5 CY OF TYPE 1 AGGREGATE ON TOP OF EXISTING RIPRAP IN BOTTOM OF DITCH TO RAISE FLOWLINE TO MATCH THE INVERT ELEVATION OF EXISTING CULVERT. INSTALL GRATES ON BOTH INLET AND OUTLET OF CULVERT TO PREVENT RIPRAP MIGRATION. PLACE UP TO AN ADDITIONAL 5 CY OF RIPRAP ON TOP OF TYPE 1 AGGREGATE AND AT OUTLET OF CULVERT TO BLEND INTO EXISTING DITCH.



1 / - LOWER CULVERT
NTS

NOTES:
1. INSTALL ROUND GALVANIZED STEEL PIPE END GRATE BOTH ENDS OF EXISTING CULVERT.
2. GRATE TO HAVE BARS SPACED 3" O.C., BARS ORIENTED VERTICALLY. CONNECT TO EXISTING CMP WITH $\frac{1}{4}$" DIA. GALVANIZED SHEET METAL SCREWS SPACED EVENLY AROUND THE PERIMETER.



2 / - END GRATE
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

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DRAFTER: E. HURLEY
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DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 40'
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

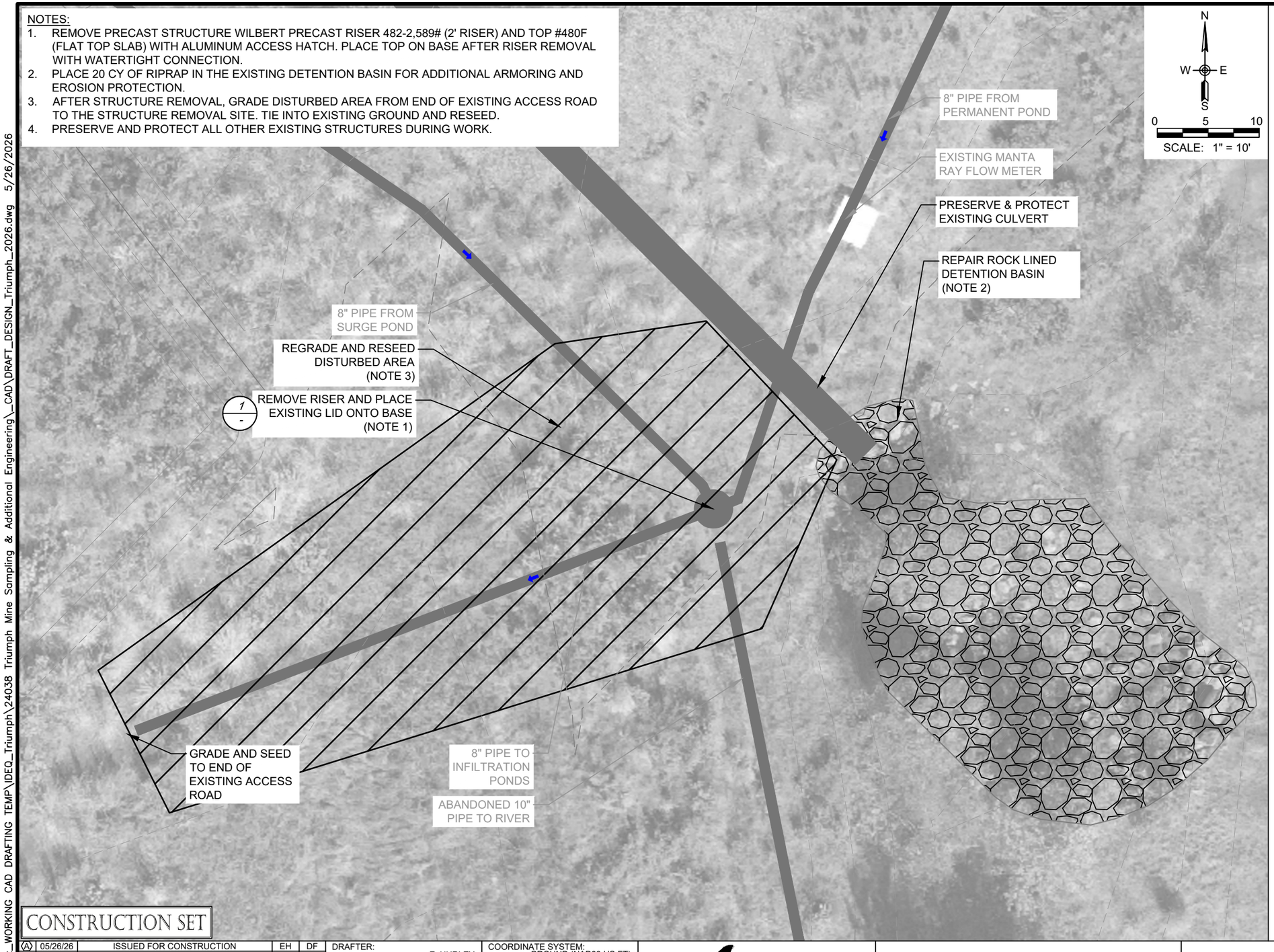
BLAINE COUNTY, ID

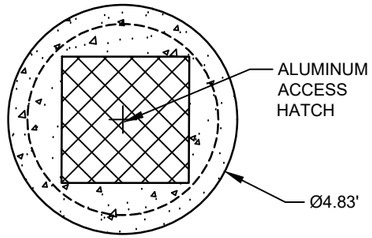
EAST FORK ROAD DITCH

SHEET: S2
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 5 OF 25

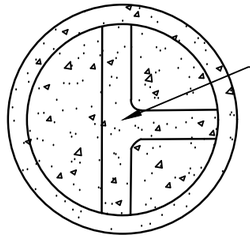
R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:
1. REMOVE PRECAST STRUCTURE WILBERT PRECAST RISER 482-2,589# (2' RISER) AND TOP #480F (FLAT TOP SLAB) WITH ALUMINUM ACCESS HATCH. PLACE TOP ON BASE AFTER RISER REMOVAL WITH WATERTIGHT CONNECTION.
2. PLACE 20 CY OF RIPRAP IN THE EXISTING DETENTION BASIN FOR ADDITIONAL ARMORING AND EROSION PROTECTION.
3. AFTER STRUCTURE REMOVAL, GRADE DISTURBED AREA FROM END OF EXISTING ACCESS ROAD TO THE STRUCTURE REMOVAL SITE. TIE INTO EXISTING GROUND AND RESEED.
4. PRESERVE AND PROTECT ALL OTHER EXISTING STRUCTURES DURING WORK.

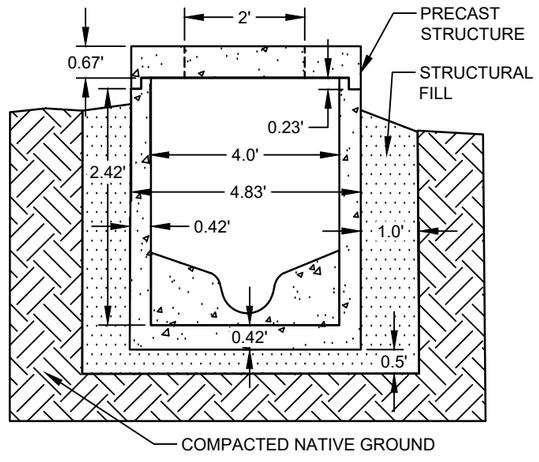




PLAN VIEW - TOP



PLAN VIEW - BASE



SECTION VIEW

1 - PRECAST STRUCTURE
NTS

PROFESSIONAL ENGINEER
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12175
5/26/2026
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DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

WYE RESETTING & BASIN REPAIR

SHEET: S3
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 6 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:
1. FOR SURGE POND ACCESS ROAD CROSS SECTIONS, REFERENCE SHEETS X1 - X3.

N
W E
S
0 30 60
SCALE: 1" = 60'

END ACCESS ROAD IMPROVEMENTS STA 14+63

EXISTING ACCESS ROAD FROM PORTAL

SURGE POND

UPPER ACCESS ROAD - STA 8+50 - 14+50 (SEE SHEET S7)

PARCEL NO: RP04N180257260
OWNER: IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

PARCEL NO: RP04N180250000
OWNER: BLM

MIDDLE ACCESS ROAD STA 4+50 - 8+50 (SEE SHEET S6)

PROTECT PARKING AREA (REMEDIATED 2025)

BEGIN ACCESS ROAD IMPROVEMENTS STA 0+00

LOWER ACCESS ROAD STA 0+00 - 4+50 (SEE SHEET S5)

EAST FORK RD

PROFESSIONAL ENGINEER
REGISTERED
12175
5/26/2026
STATE OF IDAHO
DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
1	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 80'
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

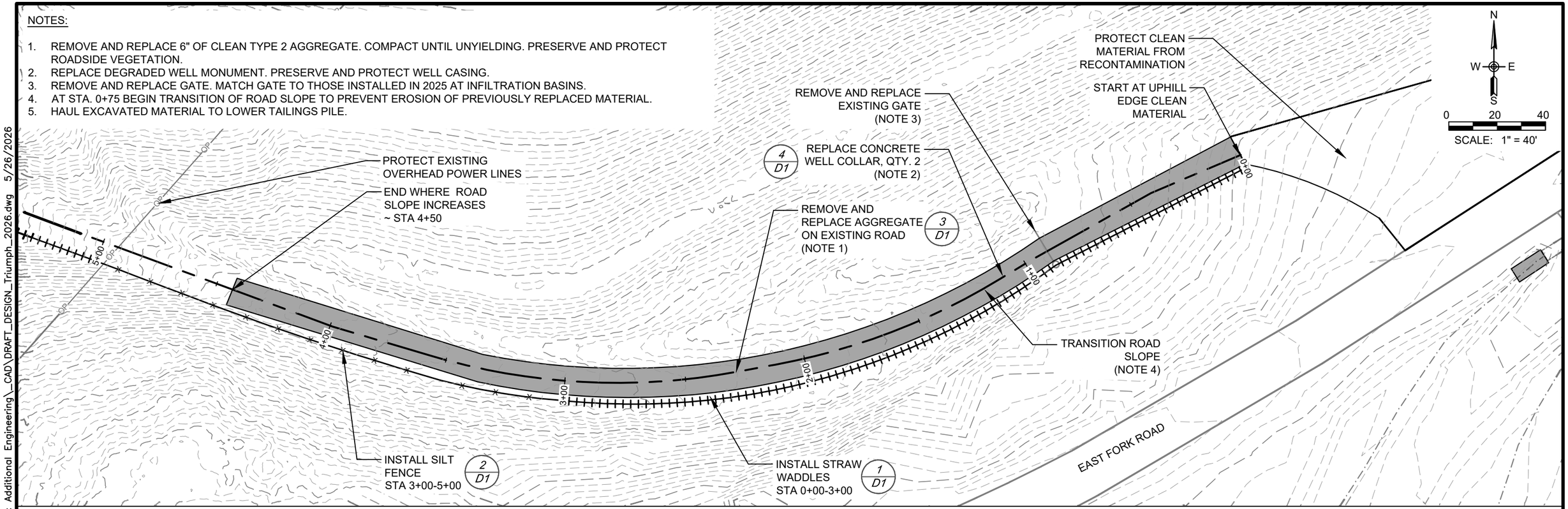
SURGE POND ACCESS ROAD OVERVIEW

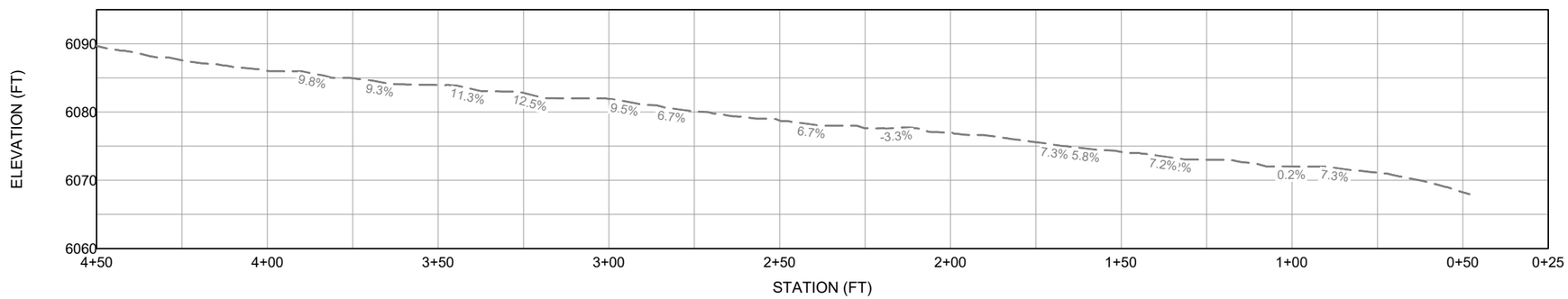
SHEET: S4
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 7 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:

1. REMOVE AND REPLACE 6" OF CLEAN TYPE 2 AGGREGATE. COMPACT UNTIL UNYIELDING. PRESERVE AND PROTECT ROADSIDE VEGETATION.
2. REPLACE DEGRADED WELL MONUMENT. PRESERVE AND PROTECT WELL CASING.
3. REMOVE AND REPLACE GATE. MATCH GATE TO THOSE INSTALLED IN 2025 AT INFILTRATION BASINS.
4. AT STA. 0+75 BEGIN TRANSITION OF ROAD SLOPE TO PREVENT EROSION OF PREVIOUSLY REPLACED MATERIAL.
5. HAUL EXCAVATED MATERIAL TO LOWER TAILINGS PILE.





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DRAFTER:	E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)	
DESIGNER:	D. FORSETH	SCALE:	1" = 80'
CHECKED:	D. FORSETH	APPROVED:	D. FORSETH
DATE:	05/26/2026	DATE:	05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

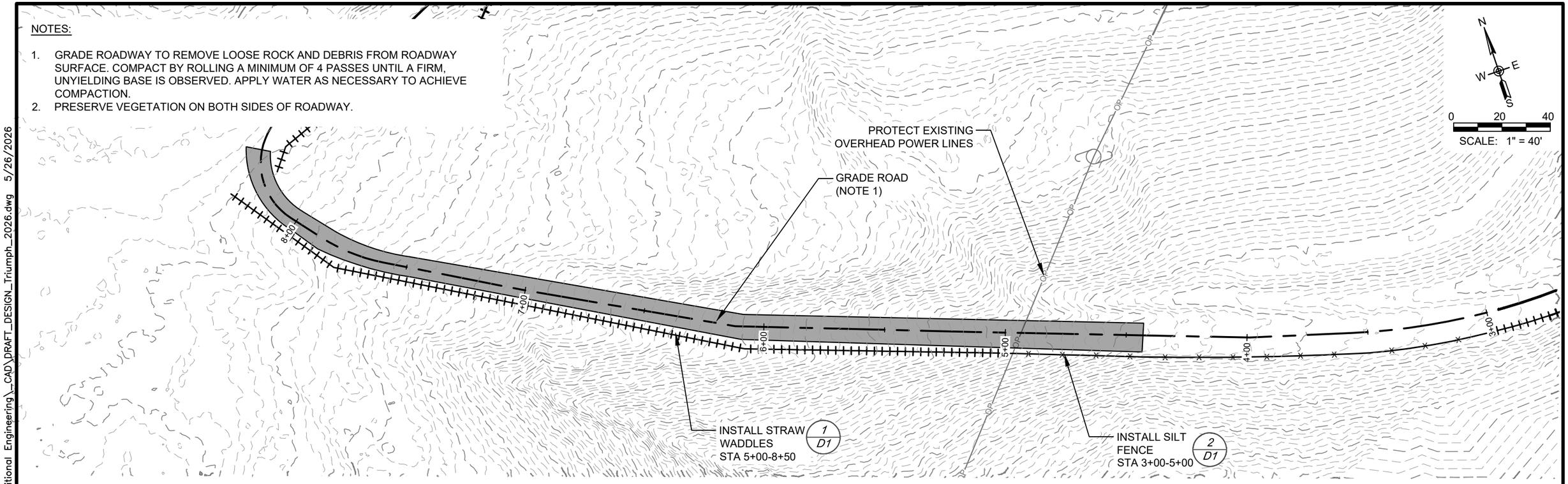
SURGE POND ACCESS ROAD - 0+00-4+50

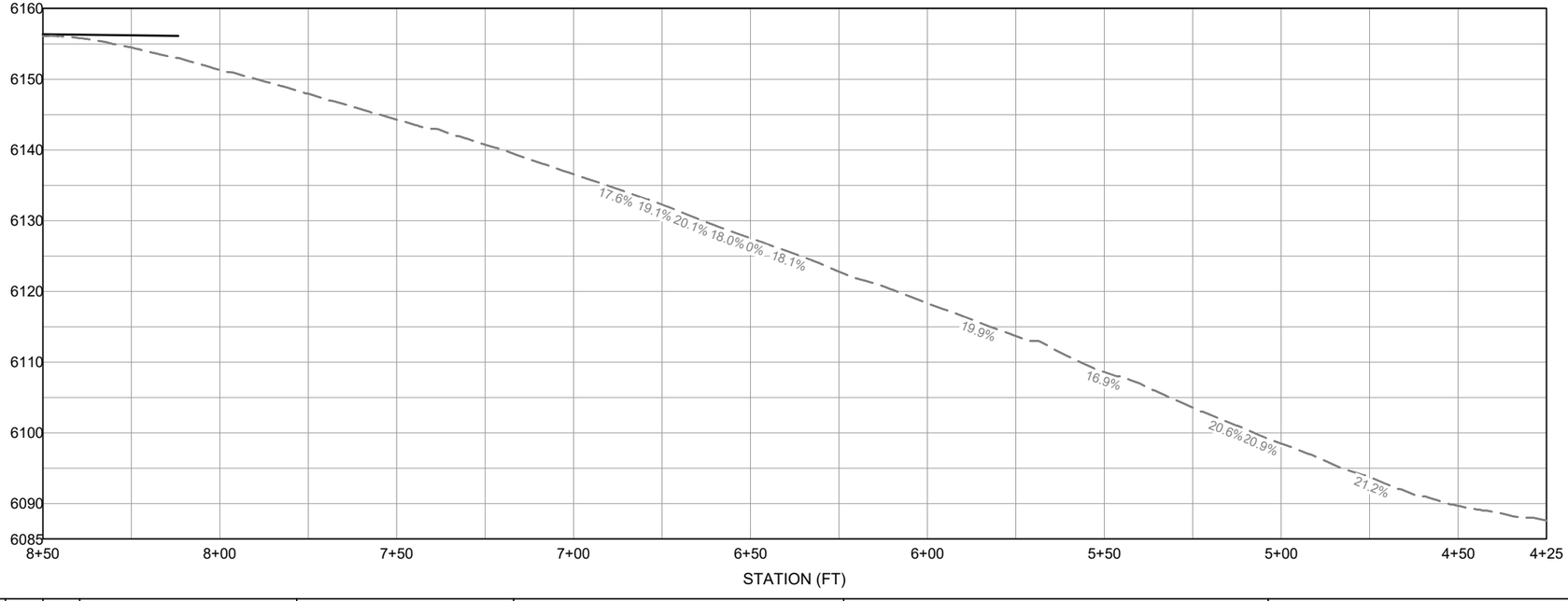
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PROJECT NO.:	25003
SHEET NO.:	8 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:

1. GRADE ROADWAY TO REMOVE LOOSE ROCK AND DEBRIS FROM ROADWAY SURFACE. COMPACT BY ROLLING A MINIMUM OF 4 PASSES UNTIL A FIRM, UNYIELDING BASE IS OBSERVED. APPLY WATER AS NECESSARY TO ACHIEVE COMPACTION.
2. PRESERVE VEGETATION ON BOTH SIDES OF ROADWAY.





CONSTRUCTION SET

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

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DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 80'
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE

BLAINE COUNTY, ID

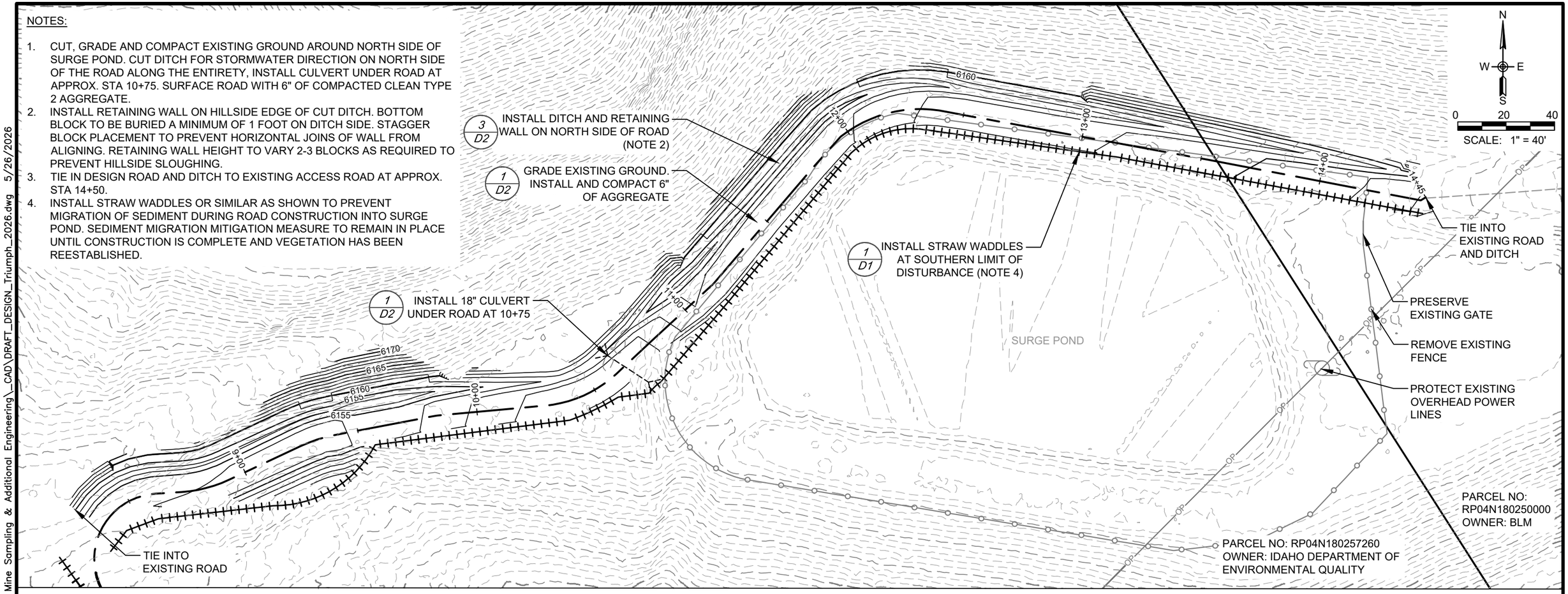
SEDIMENT POND ACCESS ROAD - 4+50-8+50

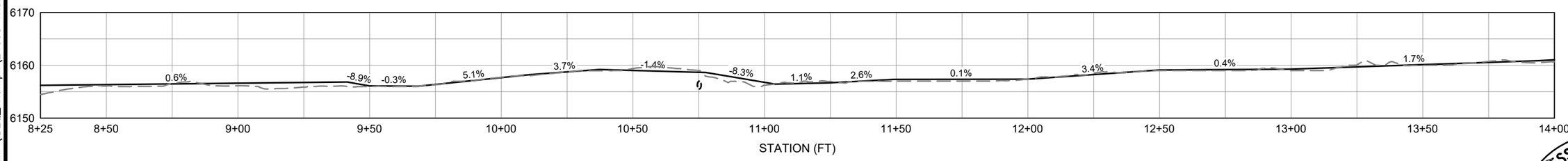
SHEET: S6
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 9 OF 25

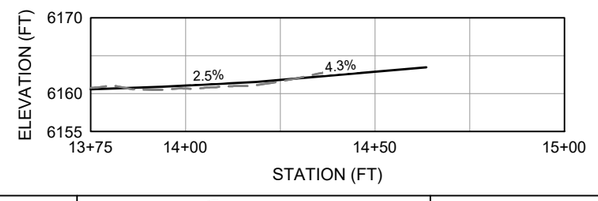
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NOTES:

1. CUT, GRADE AND COMPACT EXISTING GROUND AROUND NORTH SIDE OF SURGE POND. CUT DITCH FOR STORMWATER DIRECTION ON NORTH SIDE OF THE ROAD ALONG THE ENTIRETY, INSTALL CULVERT UNDER ROAD AT APPROX. STA 10+75. SURFACE ROAD WITH 6" OF COMPACTED CLEAN TYPE 2 AGGREGATE.
2. INSTALL RETAINING WALL ON HILLSIDE EDGE OF CUT DITCH. BOTTOM BLOCK TO BE BURIED A MINIMUM OF 1 FOOT ON DITCH SIDE. STAGGER BLOCK PLACEMENT TO PREVENT HORIZONTAL JOINS OF WALL FROM ALIGNING. RETAINING WALL HEIGHT TO VARY 2-3 BLOCKS AS REQUIRED TO PREVENT HILLSIDE SLOUGHING.
3. TIE IN DESIGN ROAD AND DITCH TO EXISTING ACCESS ROAD AT APPROX. STA 14+50.
4. INSTALL STRAW WADDLES OR SIMILAR AS SHOWN TO PREVENT MIGRATION OF SEDIMENT DURING ROAD CONSTRUCTION INTO SURGE POND. SEDIMENT MIGRATION MITIGATION MEASURE TO REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND VEGETATION HAS BEEN REESTABLISHED.







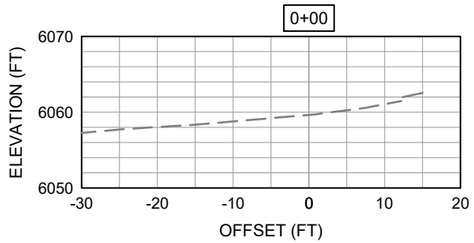
PROFESSIONAL ENGINEER
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12175
5/26/2026
STATE OF IDAHO
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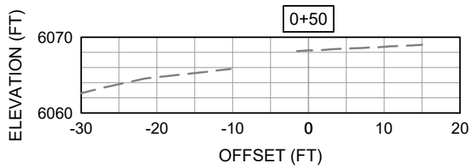
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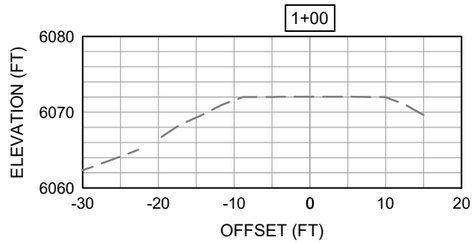
NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

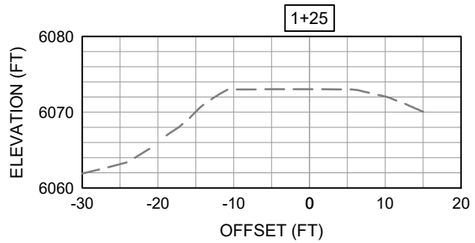
DRAFTER: E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)	TRIUMPH MINE SITE	SHEET: S7
DESIGNER: D. FORSETH	SCALE: 1" = 80'	BLAINE COUNTY, ID	DATE: 5/26/2026
CHECKED: D. FORSETH	APPROVED: D. FORSETH	SEDIMENT POND ACCESS ROAD - 8+50-14+50	PROJECT NO.: 25003
DATE: 05/26/2026	DATE: 05/26/2026	Alta Science & Engineering, Inc.	SHEET NO.: 10 OF 25

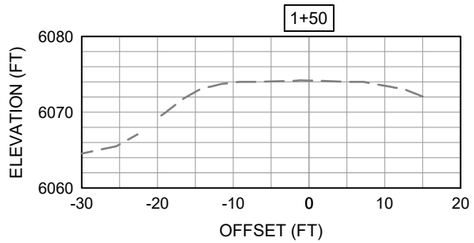
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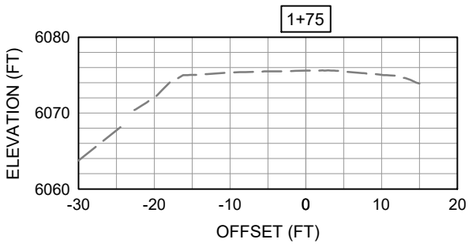


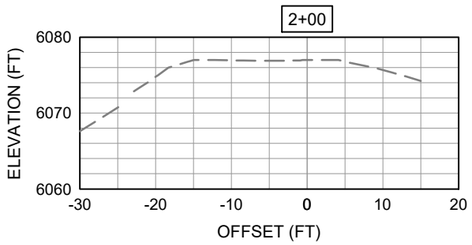


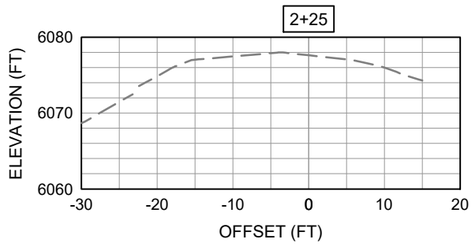


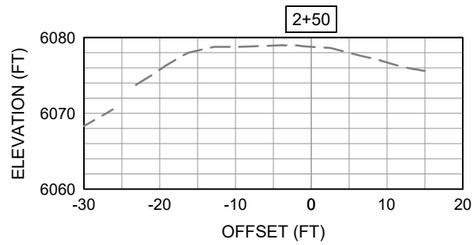


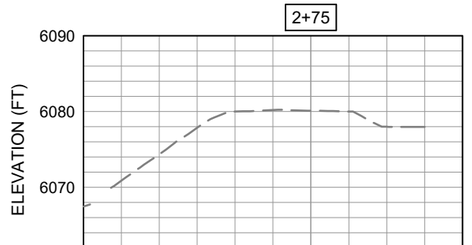


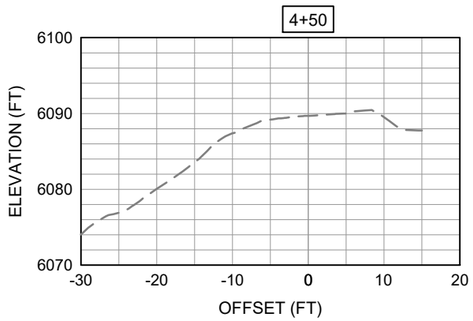


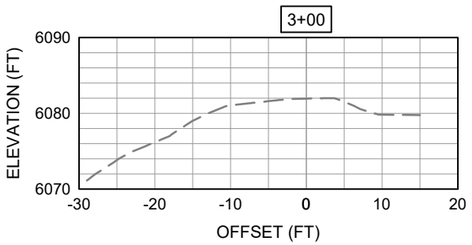


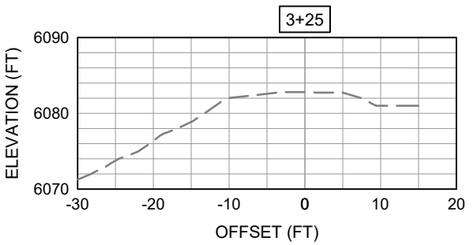


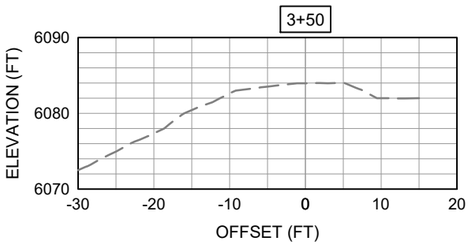


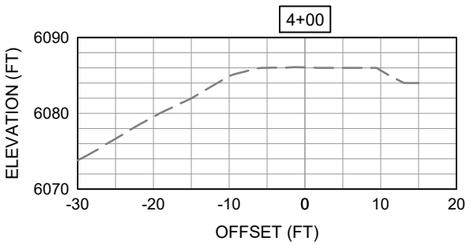


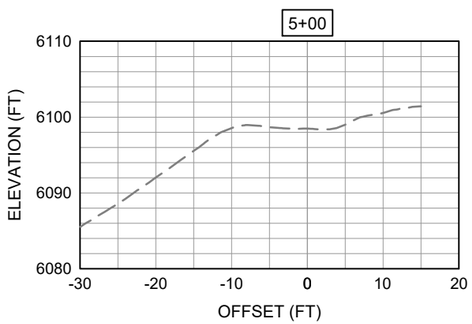


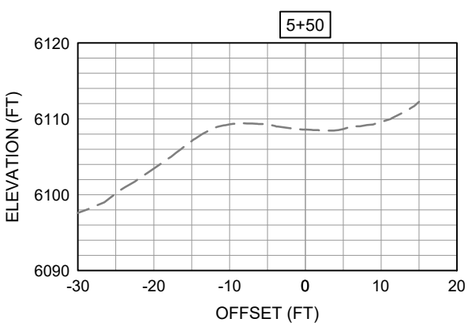


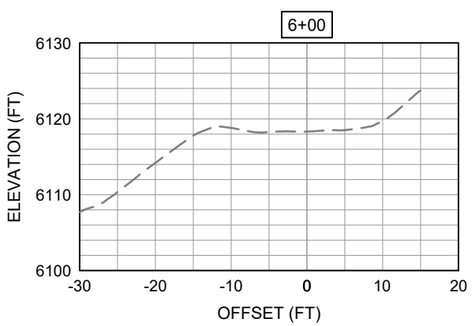


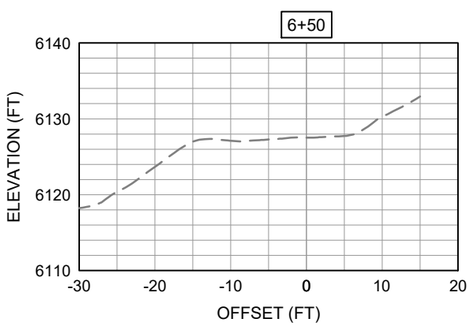














CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 20'
APPROVED: D. FORSETH
DATE: 05/26/2026

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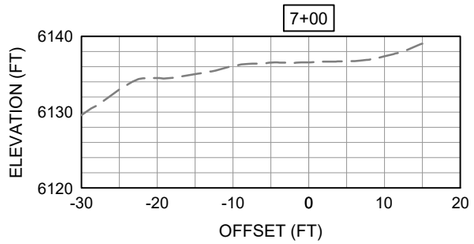
TRIUMPH MINE SITE

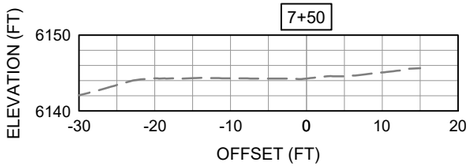
BLAINE COUNTY, ID

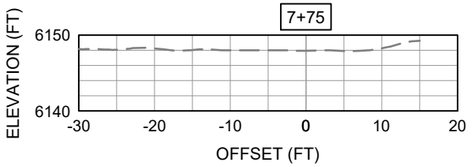
SURGE POND ACCESS ROAD CROSS SECTIONS - 0+00-6+50

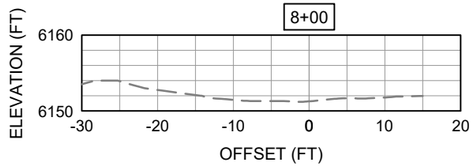
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DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 11 OF 25

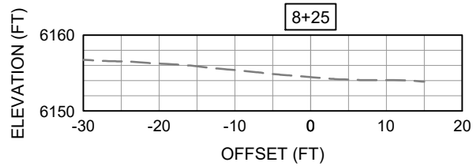
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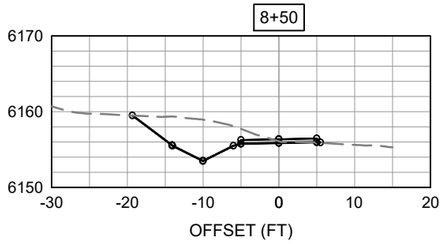


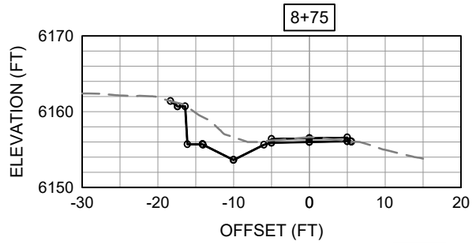


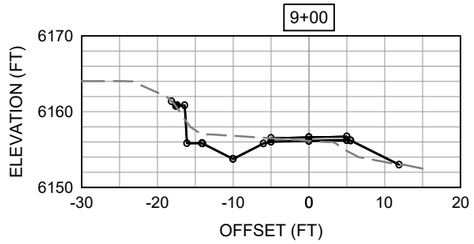


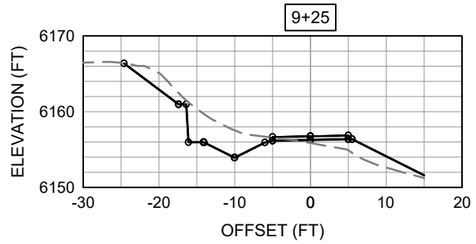


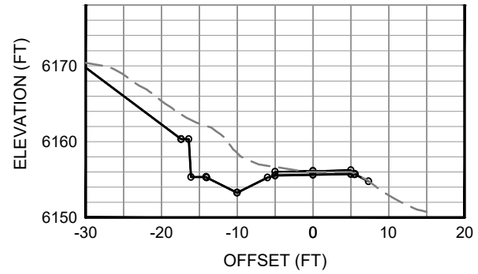


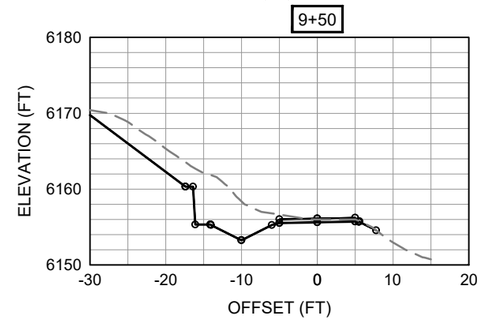


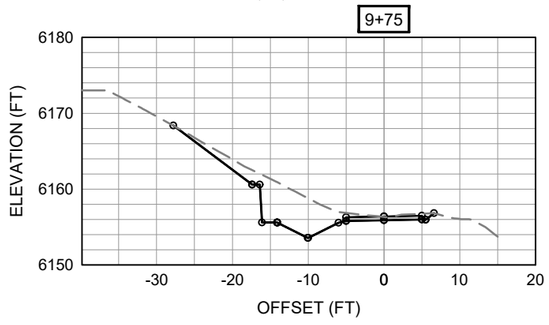


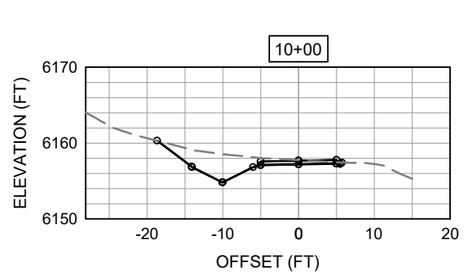


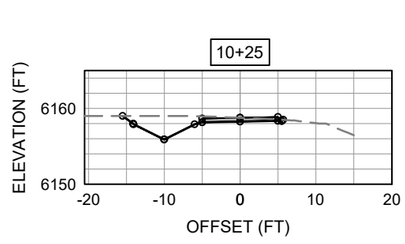


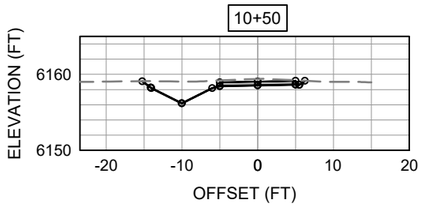


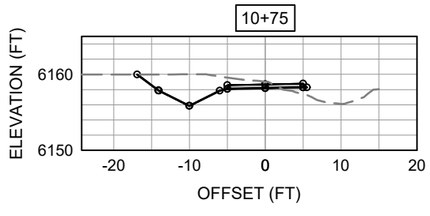


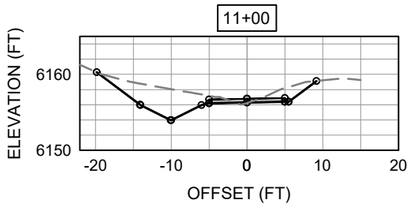


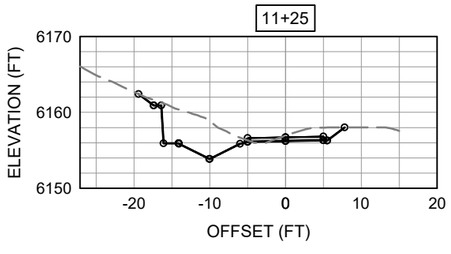














CONSTRUCTION SET

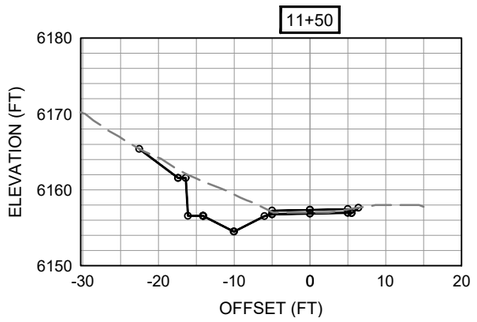
NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

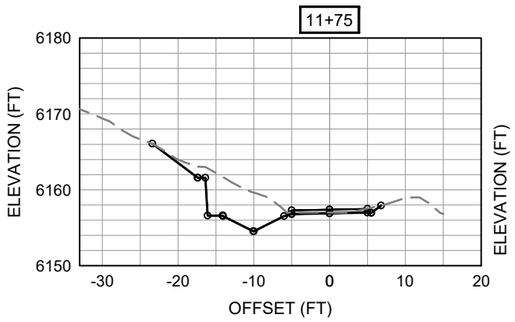
DRAFTER: E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)	TRIUMPH MINE SITE	SHEET: X2
DESIGNER: D. FORSETH	SCALE: 1" = 20'		DATE: 5/26/2026
CHECKED: D. FORSETH	APPROVED: D. FORSETH	BLAINE COUNTY, ID	PROJECT NO.: 25003
DATE: 05/26/2026	DATE: 05/26/2026		SHEET NO.: 12 OF 25

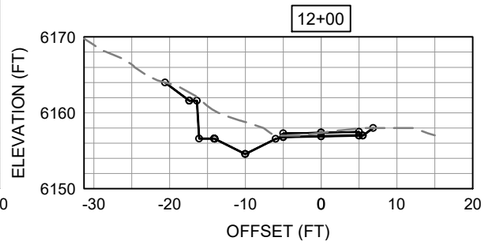
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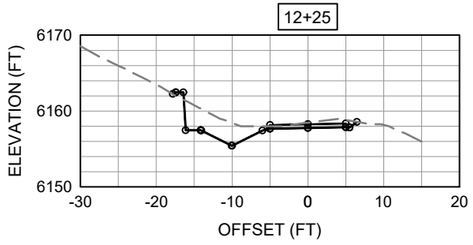
SURGE POND ACCESS ROAD CROSS SECTIONS - 7+00-11+25

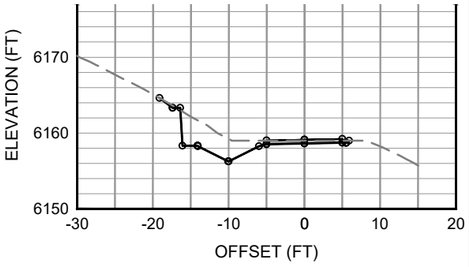
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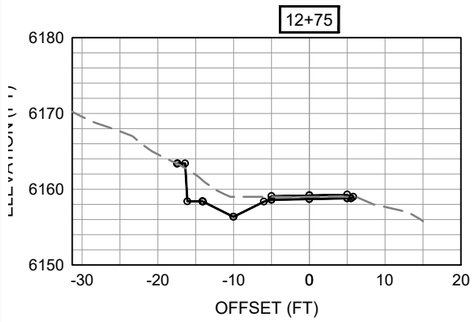


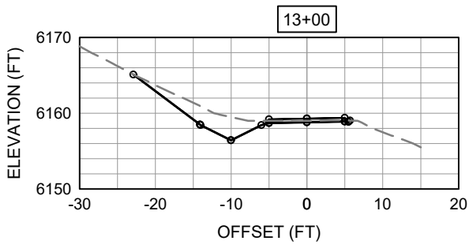


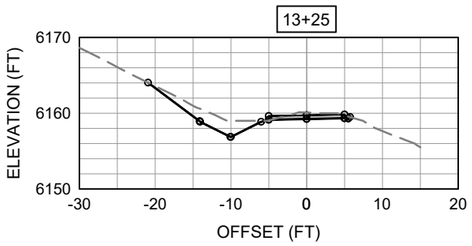


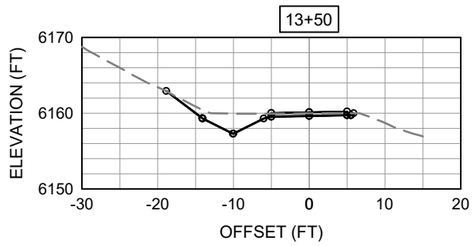


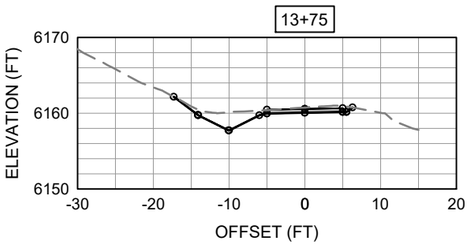


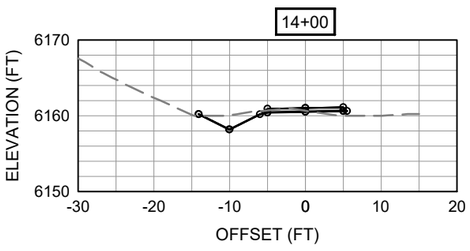


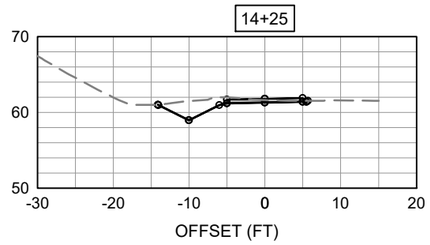












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PROFESSIONAL ENGINEER
REGISTERED
12175
5/26/2026
STATE OF IDAHO
DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 20'
APPROVED: D. FORSETH
DATE: 05/26/2026

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TRIUMPH MINE SITE

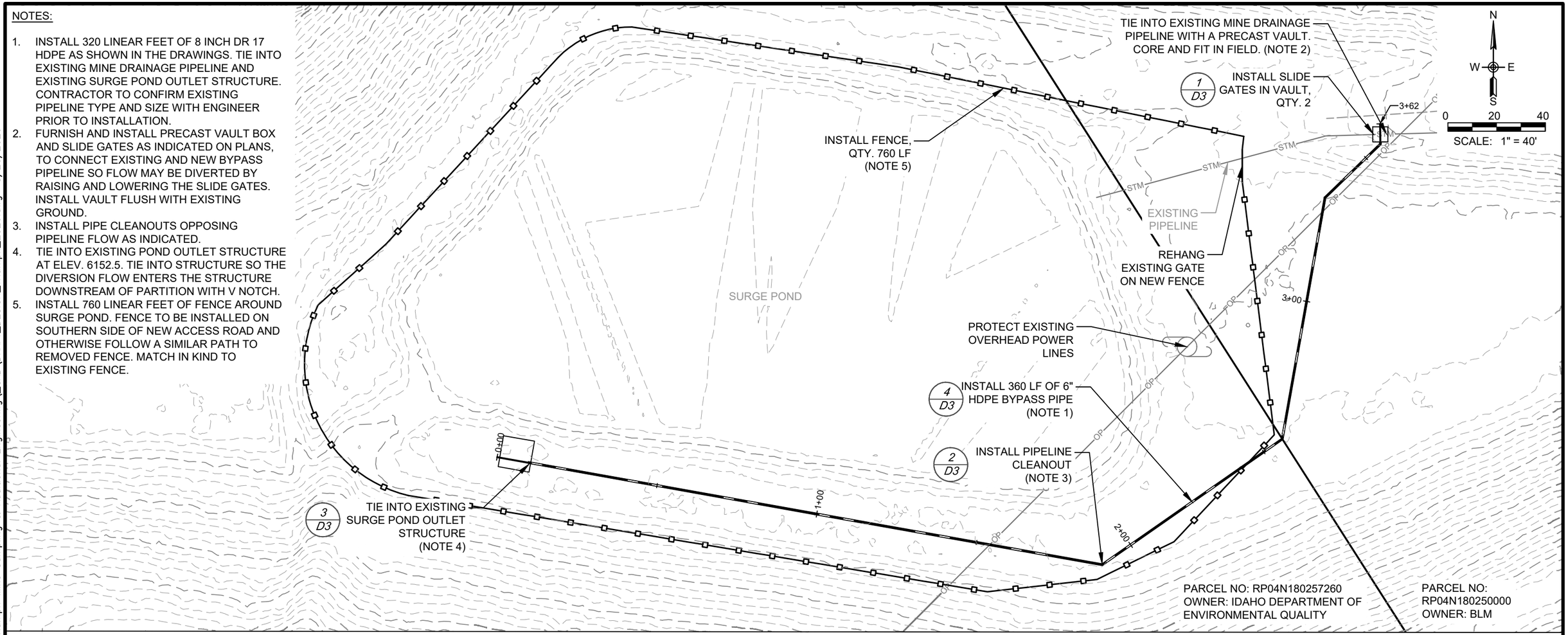
BLAINE COUNTY, ID

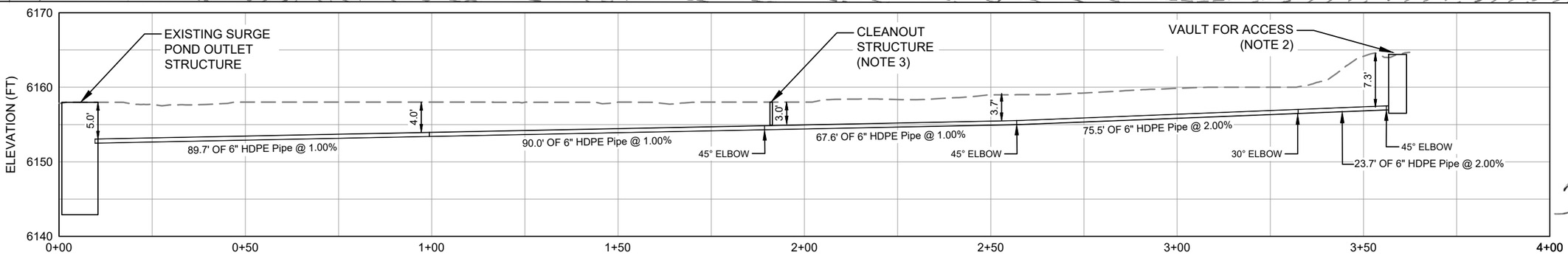
SURGE POND ACCESS ROAD CROSS SECTIONS - 11+50-14+63

SHEET: X3
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 13 OF 25

NOTES:

1. INSTALL 320 LINEAR FEET OF 8 INCH DR 17 HDPE AS SHOWN IN THE DRAWINGS. TIE INTO EXISTING MINE DRAINAGE PIPELINE AND EXISTING SURGE POND OUTLET STRUCTURE. CONTRACTOR TO CONFIRM EXISTING PIPELINE TYPE AND SIZE WITH ENGINEER PRIOR TO INSTALLATION.
2. FURNISH AND INSTALL PRECAST VAULT BOX AND SLIDE GATES AS INDICATED ON PLANS, TO CONNECT EXISTING AND NEW BYPASS PIPELINE SO FLOW MAY BE DIVERTED BY RAISING AND LOWERING THE SLIDE GATES. INSTALL VAULT FLUSH WITH EXISTING GROUND.
3. INSTALL PIPE CLEANOUTS OPPOSING PIPELINE FLOW AS INDICATED.
4. TIE INTO EXISTING POND OUTLET STRUCTURE AT ELEV. 6152.5. TIE INTO STRUCTURE SO THE DIVERSION FLOW ENTERS THE STRUCTURE DOWNSTREAM OF PARTITION WITH V NOTCH.
5. INSTALL 760 LINEAR FEET OF FENCE AROUND SURGE POND. FENCE TO BE INSTALLED ON SOUTHERN SIDE OF NEW ACCESS ROAD AND OTHERWISE FOLLOW A SIMILAR PATH TO REMOVED FENCE. MATCH IN KIND TO EXISTING FENCE.





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CONSTRUCTION SET

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DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 80'
APPROVED: D. FORSETH
DATE: 05/26/2026

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TRIUMPH MINE SITE

BLAINE COUNTY, ID

SURGE POND IMPROVEMENTS

SHEET: S8
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 14 OF 25

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NOTES:

1. REVEGETATE DISTURBED AREAS AS OUTLINED IN SPECS ON SHEET G2.

N
W E
S
0 30 60
SCALE: 1" = 60'

REVEGETATE GRADED AREAS ON EITHER SIDE OF THE UPPER SECTION

REMOVE STRAW WADDLES AND SILT FENCE AFTER COMPLETION OF CONSTRUCTION

SURGE POND

EXISTING ACCESS ROAD FROM PORTAL AREA

PROTECT EXISTING OVERHEAD POWER LINES

REVEGETATE AREA DISTURBED FOR BYPASS PIPELINE

REVEGETATE DISTURBED SHOULDERS ON EITHER SIDE OF THE LOWER AND MIDDLE SECTIONS

EAST FORK RD

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STATE OF IDAHO
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CONSTRUCTION SET

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DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 80'
APPROVED: D. FORSETH
DATE: 05/26/2026

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TRIUMPH MINE SITE

BLAINE COUNTY, ID

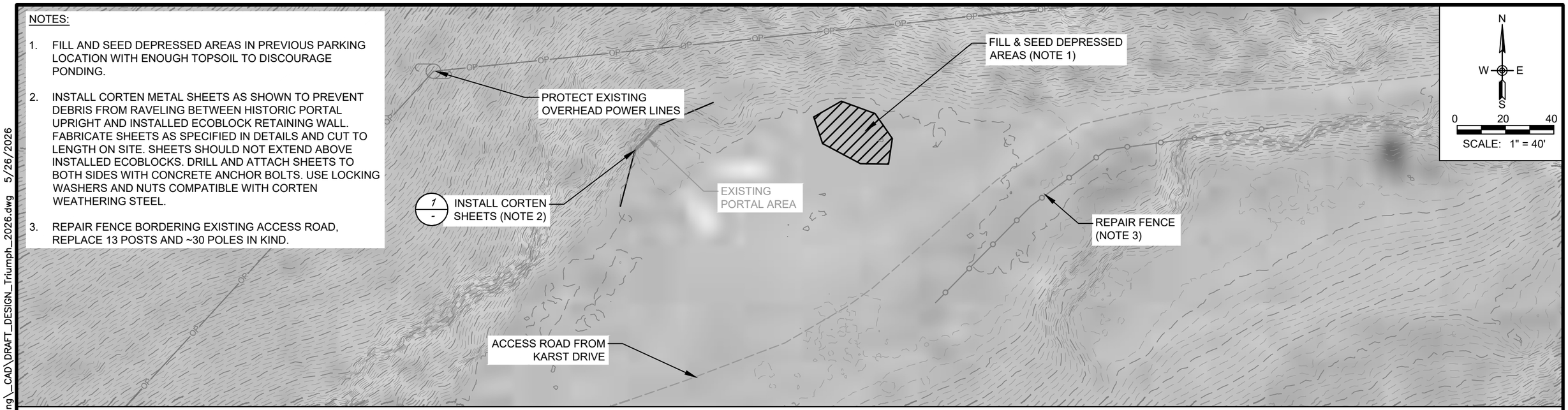
SEDIMENT POND ACCESS ROAD REVEG

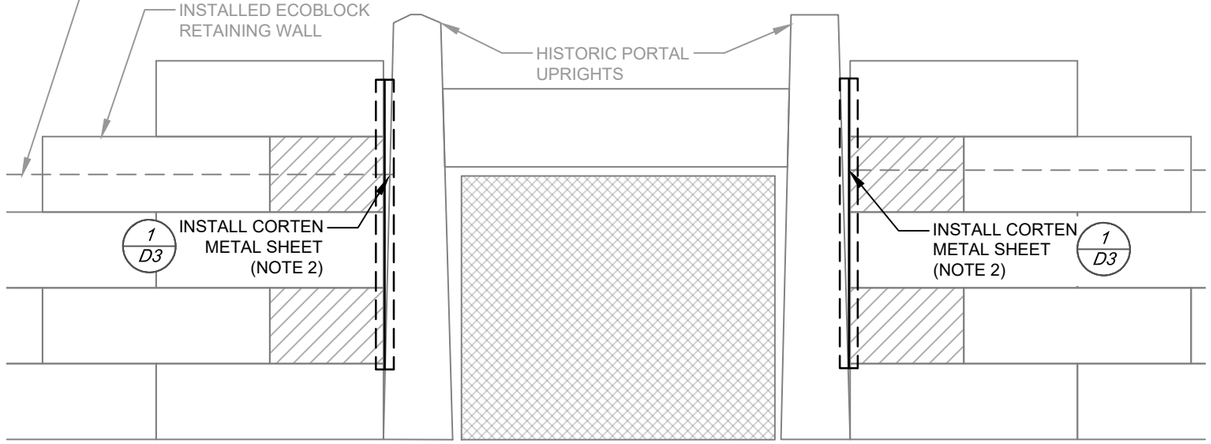
SHEET: S9
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 15 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

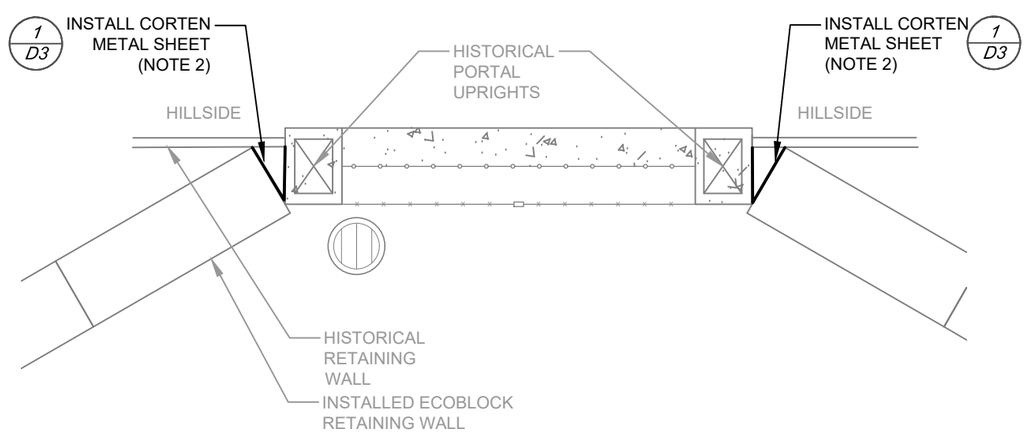
NOTES:

1. FILL AND SEED DEPRESSED AREAS IN PREVIOUS PARKING LOCATION WITH ENOUGH TOPSOIL TO DISCOURAGE PONDING.
2. INSTALL CORTEN METAL SHEETS AS SHOWN TO PREVENT DEBRIS FROM RAVELING BETWEEN HISTORIC PORTAL UPRIGHT AND INSTALLED ECOBLOCK RETAINING WALL. FABRICATE SHEETS AS SPECIFIED IN DETAILS AND CUT TO LENGTH ON SITE. SHEETS SHOULD NOT EXTEND ABOVE INSTALLED ECOBLOCKS. DRILL AND ATTACH SHEETS TO BOTH SIDES WITH CONCRETE ANCHOR BOLTS. USE LOCKING WASHERS AND NUTS COMPATIBLE WITH CORTEN WEATHERING STEEL.
3. REPAIR FENCE BORDERING EXISTING ACCESS ROAD, REPLACE 13 POSTS AND ~30 POLES IN KIND.





FRONT VIEW



TOP VIEW

1 / - METAL SHEET INSTALLATION
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

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

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 05/26/2026

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TRIUMPH MINE SITE
BLAINE COUNTY, ID

PORTAL DESIGN

SHEET: S10
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 16 OF 25

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NOTES:

1. REPAIR PIPE BELLY AT INDICATED LOCATIONS. PIPE BURY DEPTH VARIES FROM 4 FT TO 5 FT. EXPOSE EXISTING PIPE, COMPACT BEDDING AND RESET PIPE TO ELIMINATE BELLY.
2. PIPE BELLY LOCATIONS ARE APPROXIMATE, VERIFY LOCATIONS IN FIELD. DESCRIPTIONS ARE INCLUDED BELOW.
   - 2.1. BELLY 1: 33 FEET FROM CORNER OF ECOBLOCK RETAINING WALL, 33 FEET FROM CORNER OF THE PREVIOUSLY EXISTING CONCRETE RETAINING WALL.
   - 2.2. BELLY 2: 89 FEET FROM THE END CORNER OF THE PREVIOUSLY EXISTING RETAINING WALL. 63 FEET FROM CORNER OF PREVIOUSLY EXISTING CONCRETE PAD HOUSING MINING REMNANTS.
   - 2.3. BELLY 3: MEASUREMENTS ARE TO CENTERLINE OF PIPE BELLY. PIPE RUNS WITHIN BERM ON SOUTHWEST SIDE OF EXISTING ACCESS ROAD. PIPE BELLY EXTENDS 22 FEET UP AND DOWNSTREAM FROM MEASURED LOCATION. 47 FEET PERPENDICULAR FROM EDGE OF EXISTING CONCRETE PAD (CENTERED ON ONE OF THE EXPOSED NAILS IN CONCRETE). 62 FEET FROM EXISTING TELEPHONE POLE LOCATED AT SOUTHWESTERN EDGE OF EXISTING CONCRETE PAD.

N
W E
S
0 15 30
SCALE: 1" = 30'

OP

CORNER OF ECOBLOCK RETAINING WALL
CORNER OF EX. RETAINING WALL
PORTAL
33.00
33.00
PIPE BELLY 1
89.00
EX. OVERHEAD POWERLINE
CORNER OF EX. CONCRETE PAD
63.00
ACCESS FROM KARST ROAD
PIPE BELLY 2
EDGE OF EX. CONCRETE
TELEPHONE POLE
47.00
62.00
W
W
44.00
PIPE BELLY 3

PROFESSIONAL ENGINEER
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12175
5/26/2026
STATE OF IDAHO
DEREK FORSETH

CONSTRUCTION SET

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

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 30'
APPROVED: D. FORSETH
DATE: 05/26/2026

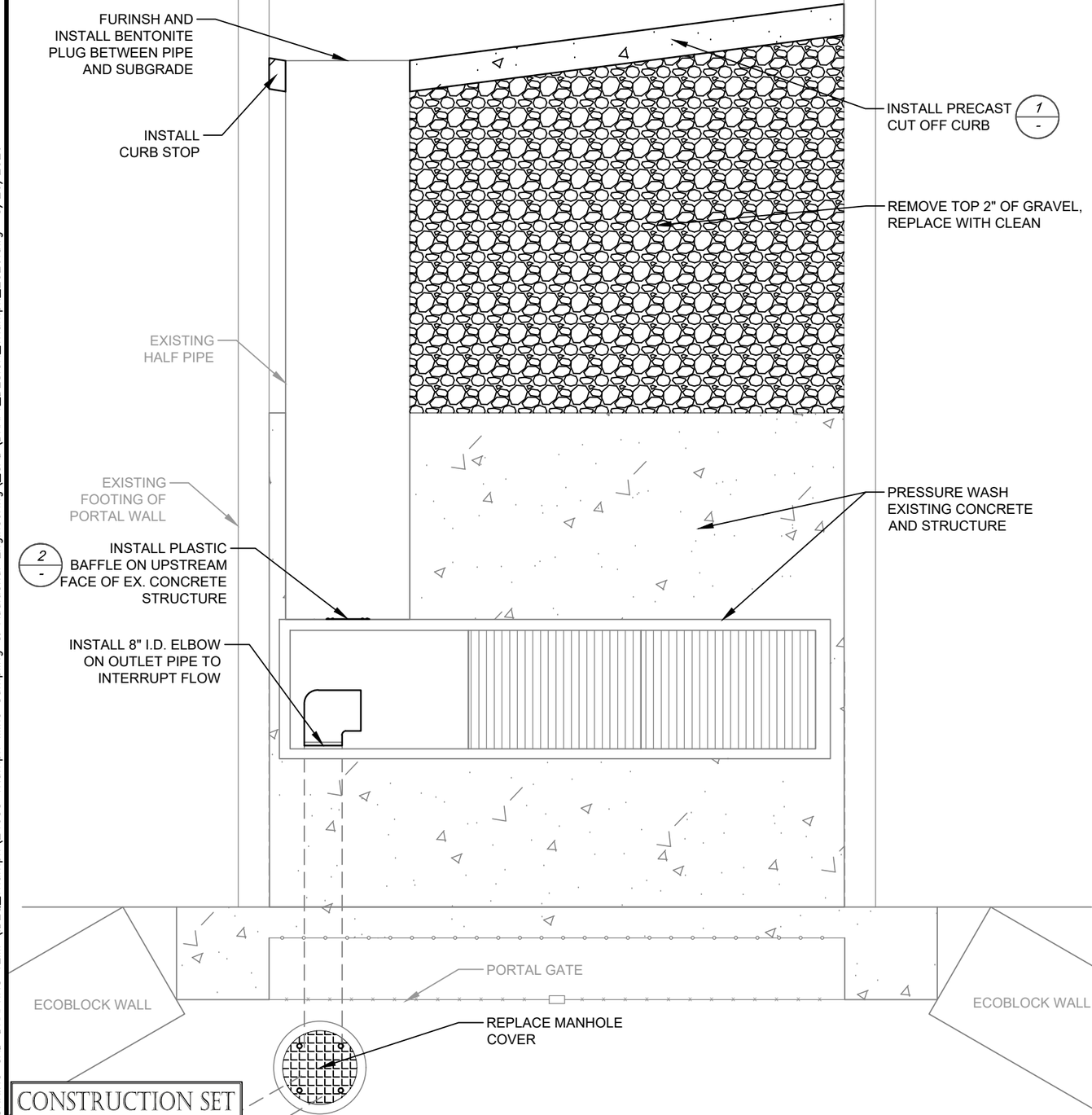
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TRIUMPH MINE SITE
BLAINE COUNTY, ID

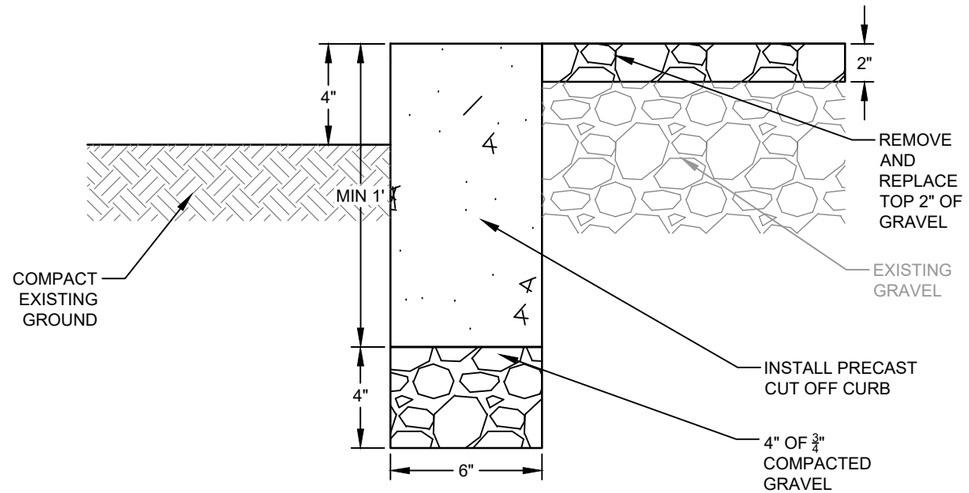
PORTAL PIPELINE REHABILITATION

SHEET: S11
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 17 OF 25

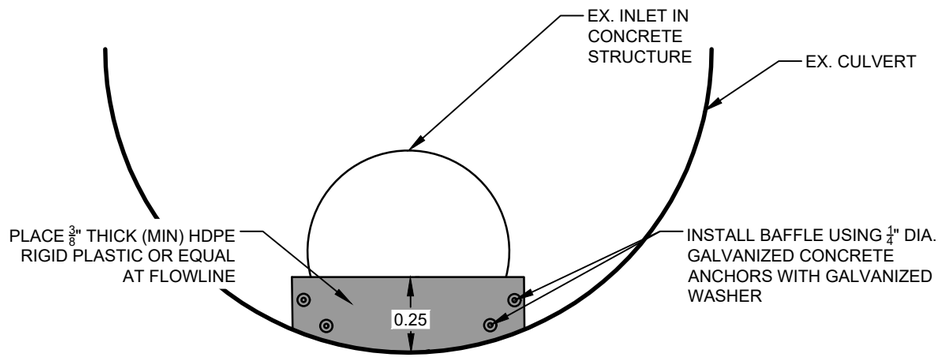
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CONSTRUCTION SET



1 - PRECAST CUT OFF CURB
NTS



2 - PLASTIC BAFFLE
NTS



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

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 05/26/2026

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TRIUMPH MINE SITE
BLAINE COUNTY, ID

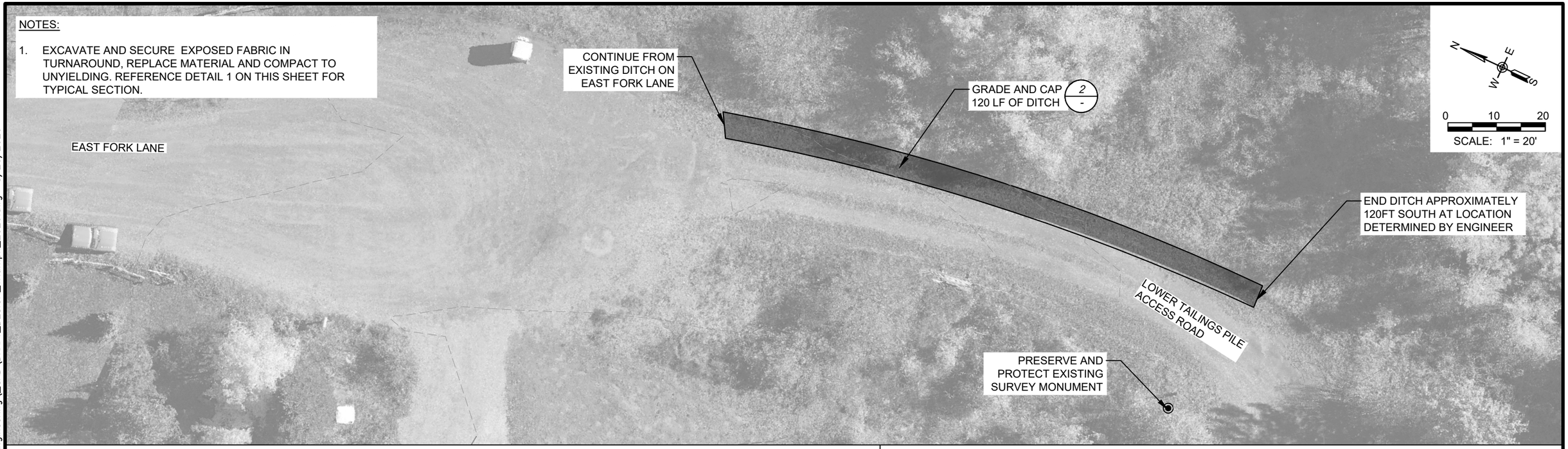
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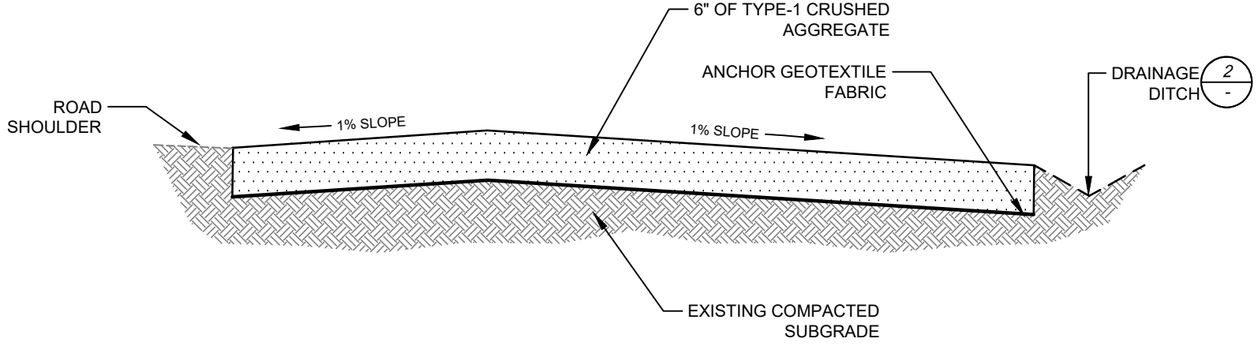
SHEET: S12
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 18 OF 25

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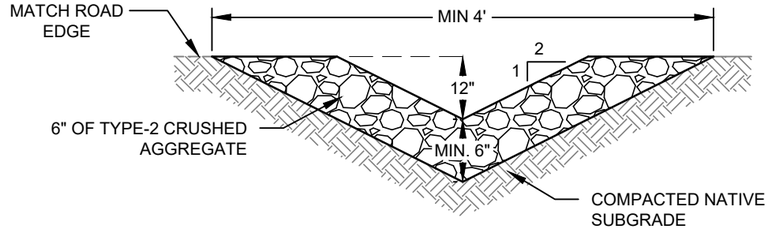
NOTES:

1. EXCAVATE AND SECURE EXPOSED FABRIC IN TURNAROUND, REPLACE MATERIAL AND COMPACT TO UNYIELDING. REFERENCE DETAIL 1 ON THIS SHEET FOR TYPICAL SECTION.





1 / - TURNAROUND
NTS



2 / - DRAINAGE DITCH
NTS

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12175
5/26/2026
STATE OF IDAHO
DEREK FORSETH

CONSTRUCTION SET

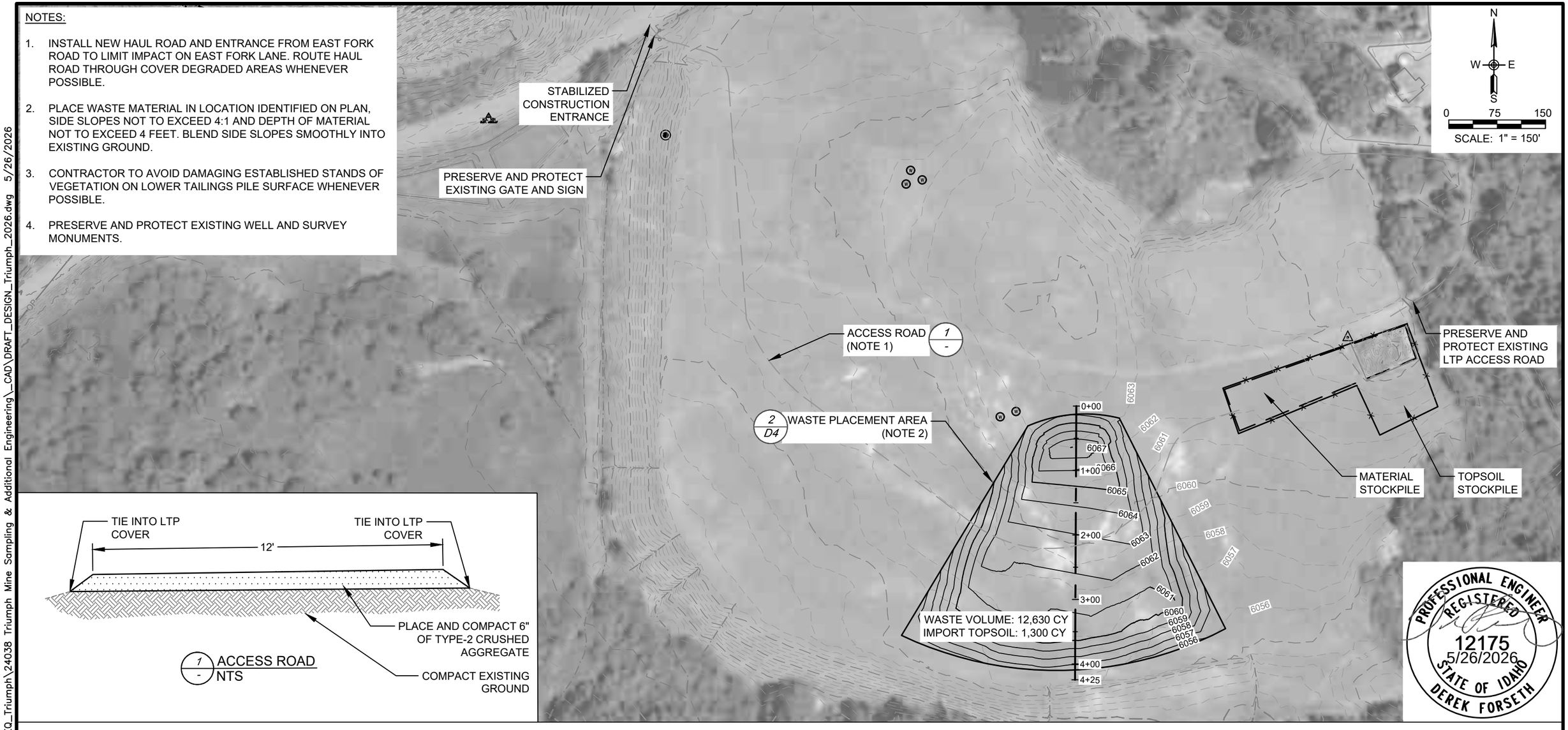
DRAFTER: E. HURLEY	COORDINATE SYSTEM: GROUND (NAD83 US FT)	TRIUMPH MINE SITE	SHEET: S13
DESIGNER: D. FORSETH	SCALE: 1" = 40'		DATE: 5/26/2026
CHECKED: D. FORSETH	APPROVED: D. FORSETH	BLAINE COUNTY, ID	PROJECT NO.: 25003
DATE: 05/26/2026	DATE: 05/26/2026	LTP ACCESS ROAD DITCH	SHEET NO.: 19 OF 25

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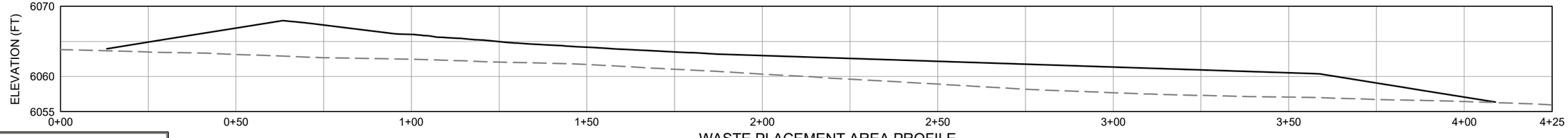
R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:

1. INSTALL NEW HAUL ROAD AND ENTRANCE FROM EAST FORK ROAD TO LIMIT IMPACT ON EAST FORK LANE. ROUTE HAUL ROAD THROUGH COVER DEGRADED AREAS WHENEVER POSSIBLE.
2. PLACE WASTE MATERIAL IN LOCATION IDENTIFIED ON PLAN, SIDE SLOPES NOT TO EXCEED 4:1 AND DEPTH OF MATERIAL NOT TO EXCEED 4 FEET. BLEND SIDE SLOPES SMOOTHLY INTO EXISTING GROUND.
3. CONTRACTOR TO AVOID DAMAGING ESTABLISHED STANDS OF VEGETATION ON LOWER TAILINGS PILE SURFACE WHENEVER POSSIBLE.
4. PRESERVE AND PROTECT EXISTING WELL AND SURVEY MONUMENTS.



1 / - ACCESS ROAD
NTS



WASTE PLACEMENT AREA PROFILE
SCALE: 1:30; VERTICAL EXAGGERATION - 1:2

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 150'
APPROVED: D. FORSETH
DATE: 05/26/2026

Alta Science & Engineering, Inc.

TRIUMPH MINE SITE
BLAINE COUNTY, ID

LOWER TAILINGS PILE - FILL, CAP & COVER PLAN

SHEET: S14
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 20 OF 25

R:\Projects\z_WORKING CAD DRAFTING TEMP\IDEQ_Triumph\24038 Triumph Mine Sampling & Additional Engineering_CAD\DRAFT_DESIGN_Triumph_2026.dwg 5/26/2026

NOTES:

1. ALL DISTURBED AREAS ON THE LOWER TAILINGS 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 SHEET G2.

2. SOIL FOR SOIL CAP SHALL BE SOURCED FROM EXISTING TOPSOIL STOCKPILE FIRST AND SECONDLY FROM LOCAL SOURCES. QUANTITY OF IMPORTED TOPSOIL IS NOT TO EXCEED 2800 CY.

3. PRIORITIZE RESTORATION OF AREAS WITH TOPSOIL AND SEEDING AS FOLLOWS:
   - 3.1. WASTE PLACEMENT AREA (SOLID LINE)
   - 3.2. STOCKPILE AREAS AND CONSTRUCTION ACCESS ROAD (DASHED LINE)
   - 3.3. AREAS OF VISIBLE DEGRADATION OUTSIDE OF CONSTRUCTION DISTURBANCE (NOT OUTLINED)

4. CONTRACTOR TO AVOID DAMAGING ESTABLISHED STANDS OF VEGETATION ON LOWER TAILINGS PILE SURFACE WHENEVER POSSIBLE.

5. RECLAIM COMMUNITY STOCKPILE BY REARRANGING ECOBLOCKS TO BOUND THE EASTERN, SOUTHERN AND WESTERN SIDES OF THE AREA OUTLINED IN PLAN. THE FINISHED AREA SHALL BE A MINIMUM OF 85 FEET NORTH TO SOUTH AND 55 FEET EAST TO WEST TO ENCOMPASS AN AREA COMPARABLE TO INITIAL COMMUNITY STOCKPILE.

6. LTP SIDE SLOPE ARMORING IS DESIGNATED AS BID ALTERNATIVE WORK. DO NOT COMPLETE UNLESS WITH PRIOR APPROVAL FROM ENGINEER.

7. PRESERVE AND PROTECT EXISTING WELL AND SURVEY MONUMENTS.

N
W E
S
0 75 150
SCALE: 1" = 150'

ACCESS ROAD

PRESERVE AND PROTECT EXISTING LTP ACCESS ROAD

RECLAIM COMMUNITY STOCKPILE (NOTE 5)

REPLACE DEGRADED ARMORING (NOTE 6) 3/D4

WASTE PLACEMENT AREA 2/D4

REPLACE DEGRADED ARMORING (NOTE 6) 3/D4

PROFESSIONAL ENGINEER
REGISTERED
12175
5/26/2026
STATE OF IDAHO
DEREK FORSETH

CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026

COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: 1" = 150'
APPROVED: D. FORSETH
DATE: 05/26/2026

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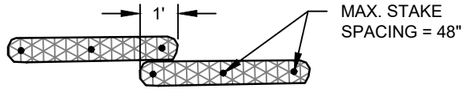
TRIUMPH MINE SITE

BLAINE COUNTY, ID

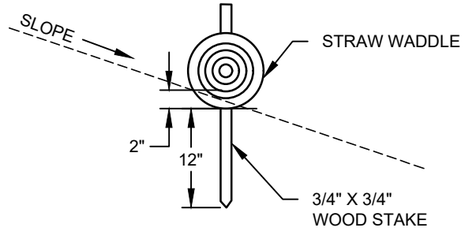
LOWER TAILINGS PILE - RE-VEGETATION PLAN

SHEET: S15
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 21 OF 25

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STRAW WADDLE OVERLAP



STRAW WADDLE CROSS SECTION

NOTES:

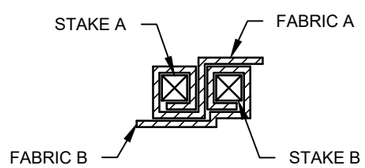
1. INSTALL STRAW WADDLES IN DESIGNATED AREAS DOWNSTREAM OF THE CONSTRUCTION.
2. STOCKPILE AREAS, CUT/FILL SLOPES, AND ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AFTER EVERY RAIN EVENT FOR EROSION. ERODED AREAS SHALL BE REPAIRED. SEDIMENT SHALL BE REMOVED WHEN DEPOSITS REACH ONE-HALF THE HEIGHT OF THE BMP AND DISPOSED OF AT THE LOWER TAILINGS PILE.
3. AT A MINIMUM, EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE PER DAY TO ENSURE THAT THEY ARE INSTALLED AND OPERATING AS DESIGNED. REPAIR DAMAGED BMPS DUE TO END-RUNS OR UNDERCUTTING.
4. INSTALL SEDIMENT CONTROL MEASURES PRIOR TO ANY CONSTRUCTION.

1 / - STRAW WADDLES
NTS

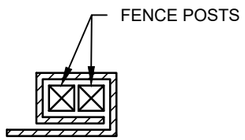
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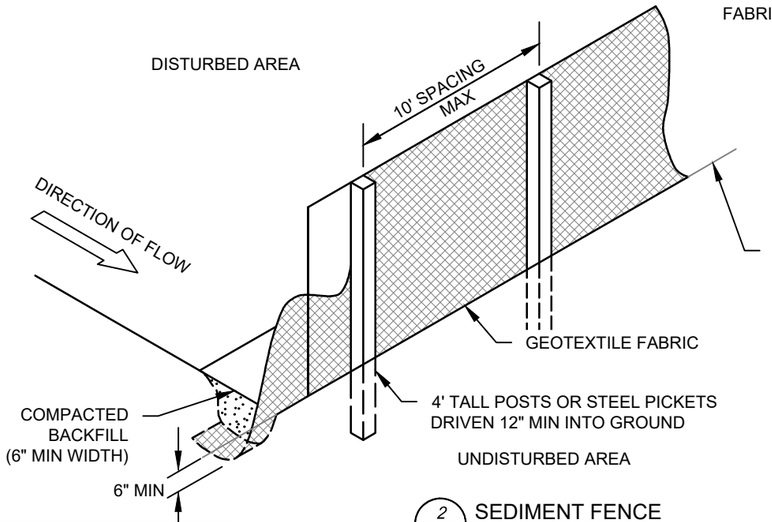
1. SECURE FENCING TO POSTS AS REQUIRED USING WIRE, STAPLES, OR CABLE TIES.
2. WHEN ADJOINING FABRIC, THE TWO ENDS SHALL OVERLAP NO LESS THAN 6" AND BE FOLDED.

JOINING SECTION DETAIL

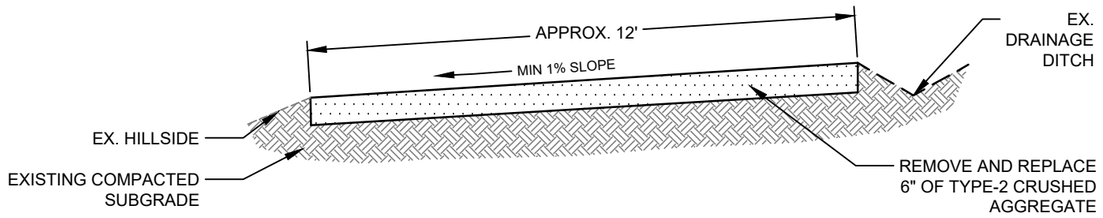


END STAKE DETAIL

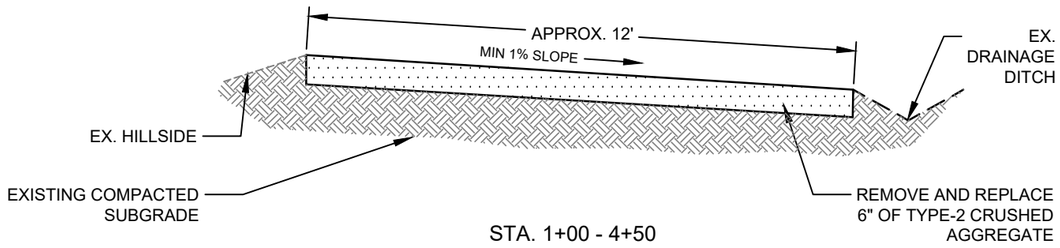




2 / - SEDIMENT FENCE
NTS



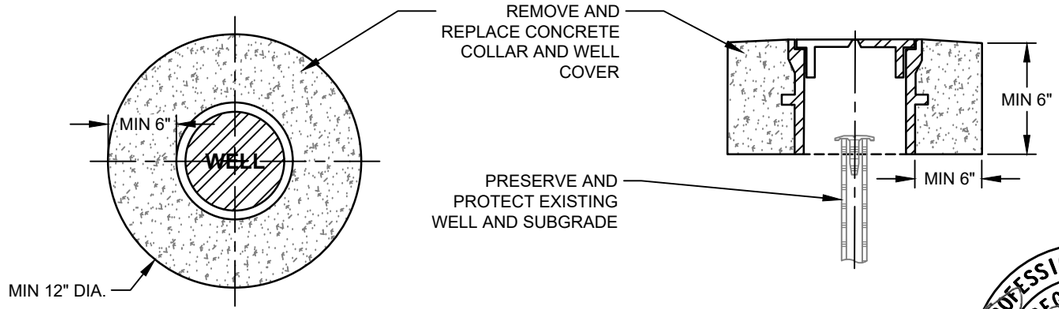
STA. 0+00 - 1+00



STA. 1+00 - 4+50

3 / - ROAD RESURFACING (TYP.)
NTS

NOTES:
1. CONCRETE COLLAR SHALL CONSIST OF A MINIMUM OF 4000 PSI NON-REINFORCED CONCRETE AND BE INSTALLED FLUSH WITH REPLACED ROAD MATERIALS.



4 / - WELL COLLAR REPLACEMENT
NTS



CONSTRUCTION SET

NO.	DATE	REVISIONS	BY	CHK
A	05/26/26	ISSUED FOR CONSTRUCTION	EH	DF

DRAFTER: E. HURLEY
DESIGNER: D. FORSETH
CHECKED: D. FORSETH
DATE: 05/26/2026
COORDINATE SYSTEM: GROUND (NAD83 US FT)
SCALE: NOT TO SCALE
APPROVED: D. FORSETH
DATE: 05/26/2026

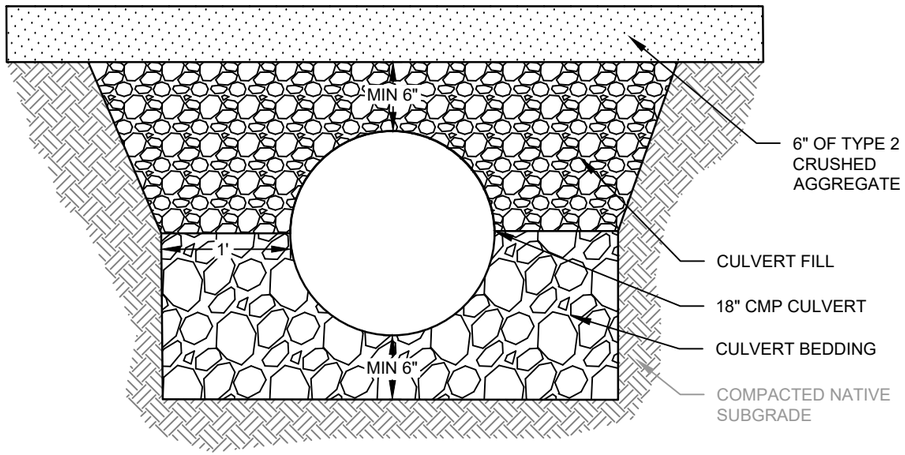
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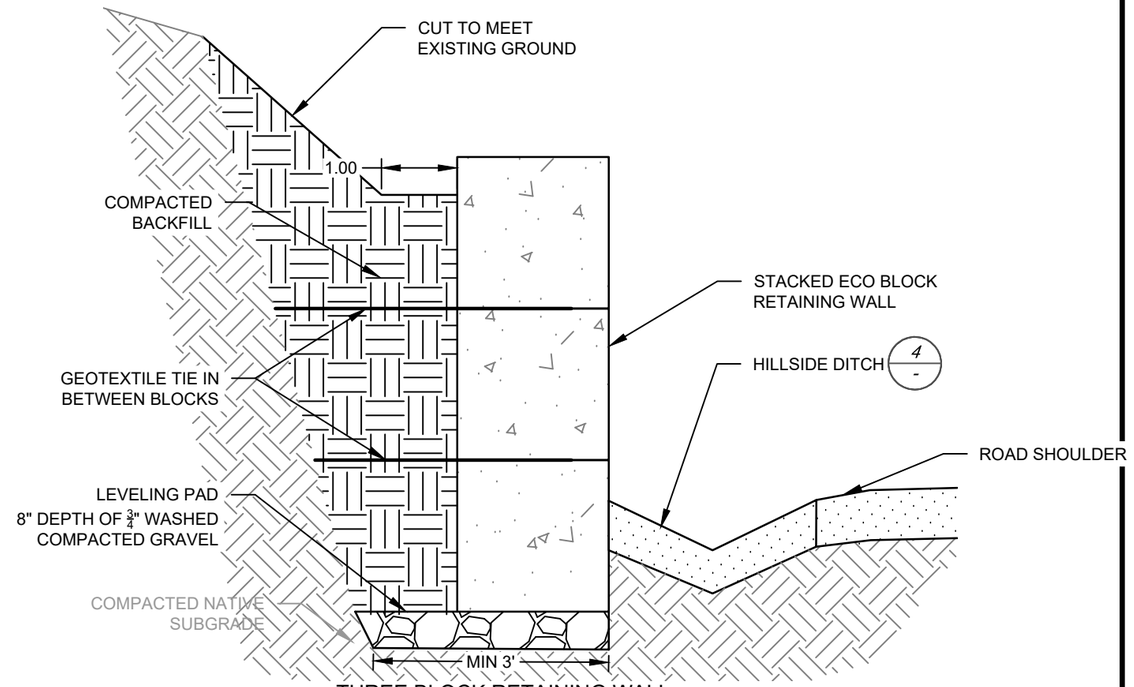
DETAILS

SHEET: D1
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 22 OF 25

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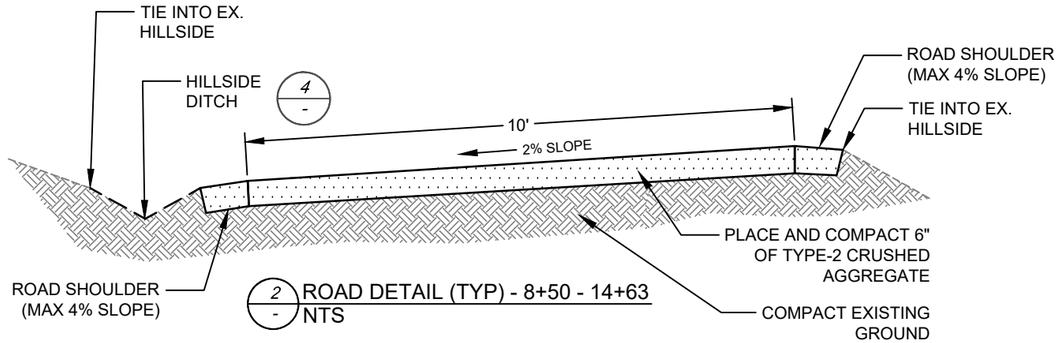


1 - CULVERT BEDDING DETAIL
NTS

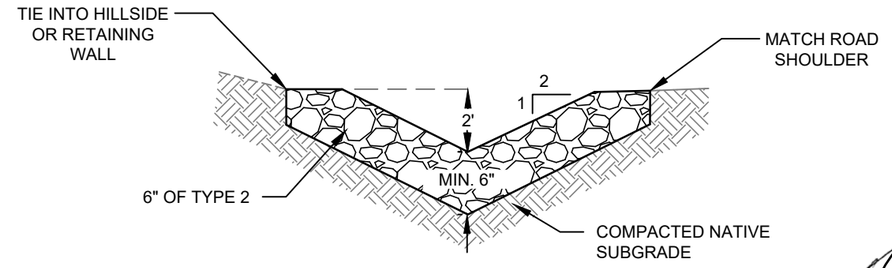


THREE BLOCK RETAINING WALL -
STA: 8+45-10+05, 11+35-13+15

3 - HILLSIDE RETAINING WALL(TYP)
NTS



2 - ROAD DETAIL (TYP) - 8+50 - 14+63
NTS



4 - HILLSIDE DITCH (TYP)
NTS

PROFESSIONAL ENGINEER
REGISTERED
12175
5/26/2026
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DEREK FORSETH

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APPROVED: D. FORSETH
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Alta Science & Engineering, Inc.

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BLAINE COUNTY, ID

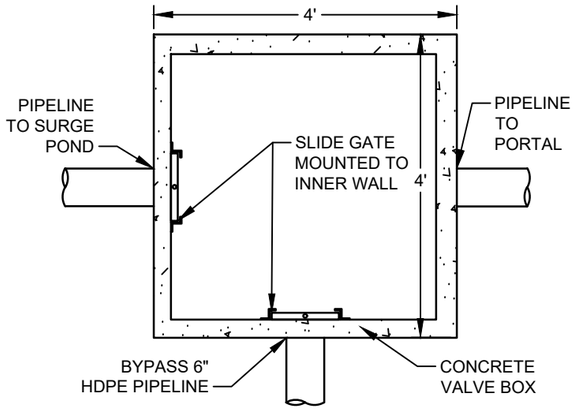
DETAILS

SHEET: D2
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 23 OF 25

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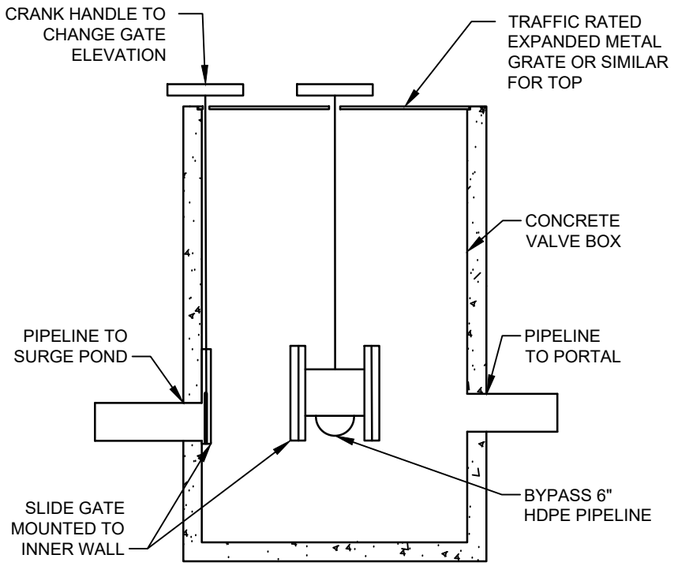
NOTES:

1. CORE AND SET OUTLET ELEVATIONS IN FIELD.



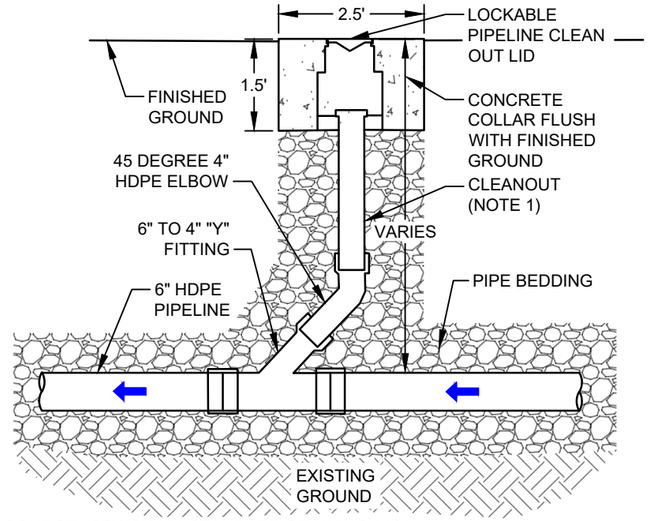
SOURCE: ISPWC 2025 STANDARD DRAWING 619.

PLAN



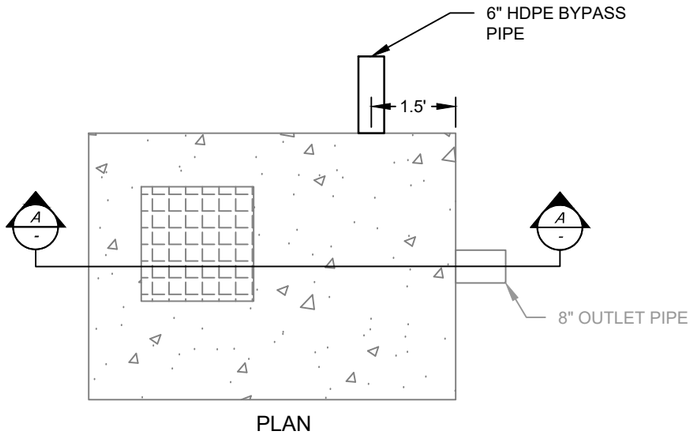
SECTION

1 / - BYPASS VALVE BOX
NTS

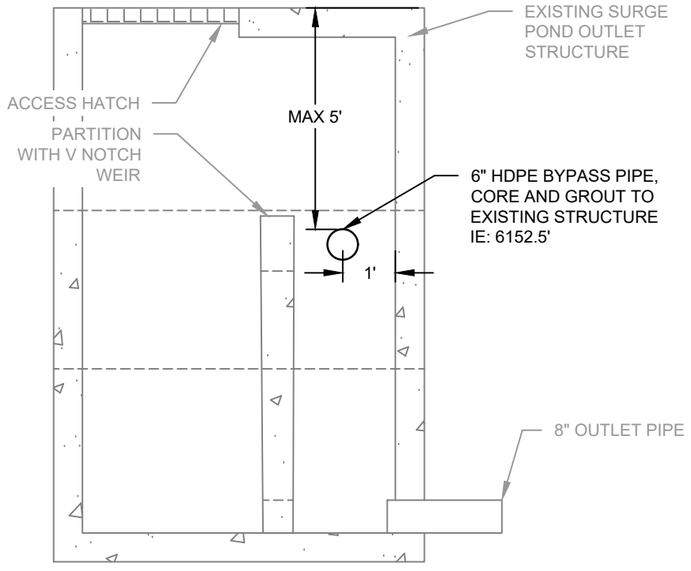


SOURCE: ISPWC 2025 STANDARD DRAWING 506A.

2 / - BYPASS CLEANOUT
NTS



PLAN

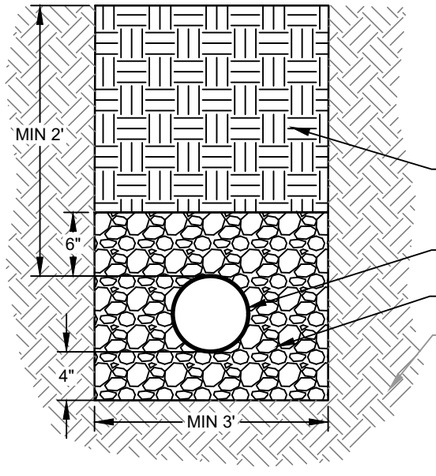


SECTION A - A

3 / - BYPASS TIE IN TO OUTLET STRUCTURE
NTS

NOTES:

1. TRENCHES OVER 5 FEET OF DEPTH REQUIRE SHORING DURING CONSTRUCTION.



4 / - PIPE TRENCH
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

CONSTRUCTION SET

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APPROVED: D. FORSETH
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TRIUMPH MINE SITE

BLAINE COUNTY, ID

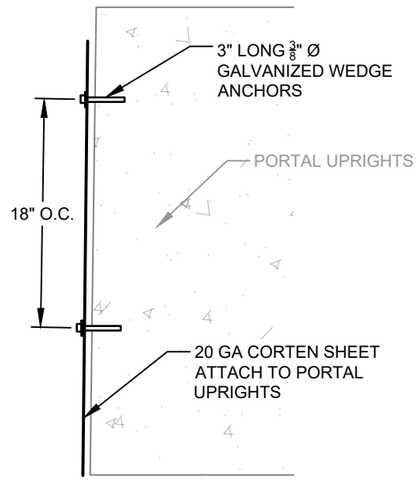
DETAILS

SHEET: D3
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 24 OF 25

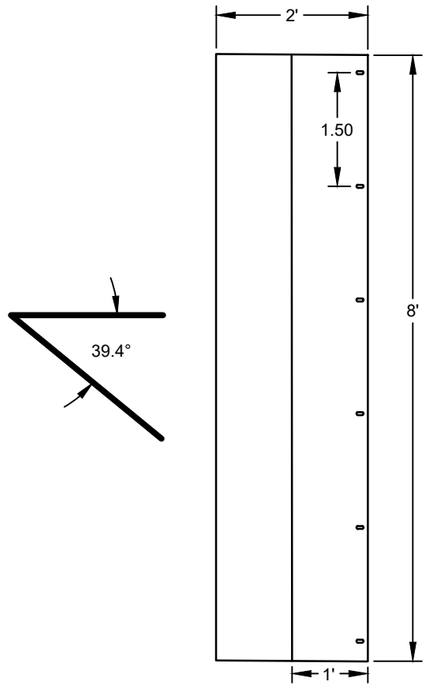
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NOTES:

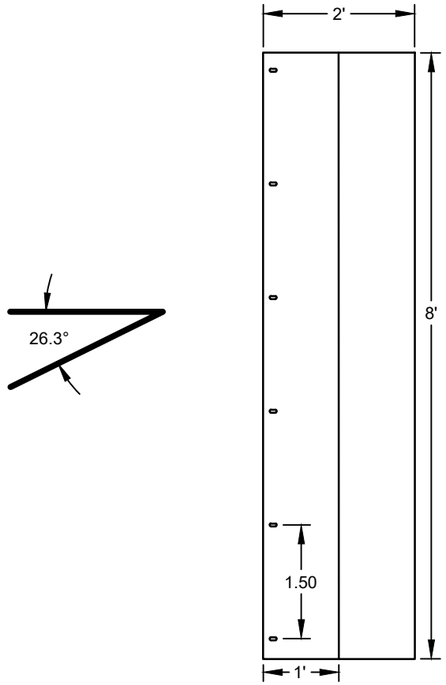
1. CORTEN METAL SHEETS TO BE BENT AT DESIGNED ANGLES AND HAVE SIX SLOTTED DRILL HOLES ON PORTAL UPRIGHT SIDE TO BE COMPLETED PRIOR TO TRANSPORT TO SITE.
2. SHEETS TO BE FIELD FIT AS REQUIRED TO FIT WITHIN THE GAP BETWEEN THE ECOBLOCK WALL AND HISTORIC PORTAL UPRIGHT.
3. SPACE WEDGE ANCHORS 18" O.C. (TYP).
4. INSTALL A MINIMUM OF 6 ANCHORS EACH SIDE.



PORTAL ATTACHMENT HARDWARE

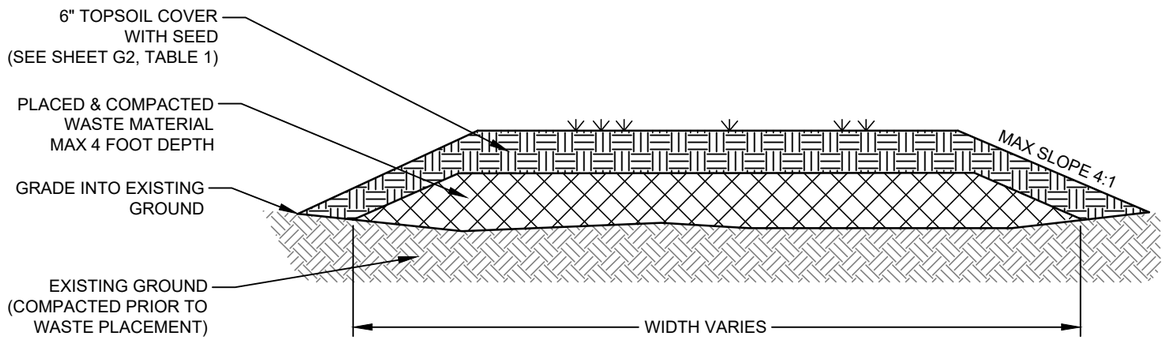


PORTAL ATTACHMENT - WEST

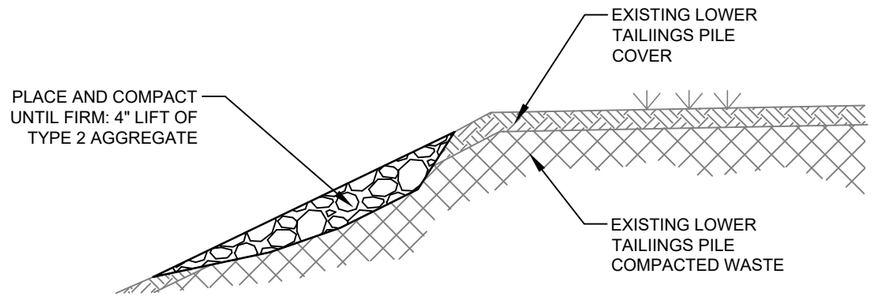


PORTAL ATTACHMENT - EAST

1 - PORTAL CORTEN SHEETS
NTS



2 - DISPOSAL LOCATION SECTION (TYP)
NTS



3 - GRAVEL COVER ON LTP SLOPE
NTS

PROFESSIONAL ENGINEER REGISTERED 12175 5/26/2026 STATE OF IDAHO DEREK FORSETH

5/26

CONSTRUCTION SET

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DRAFTER: E. HURLEY
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TRIUMPH MINE SITE
BLAINE COUNTY, ID

DETAILS

SHEET: D4
DATE: 5/26/2026
PROJECT NO.: 25003
SHEET NO.: 25 OF 25

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