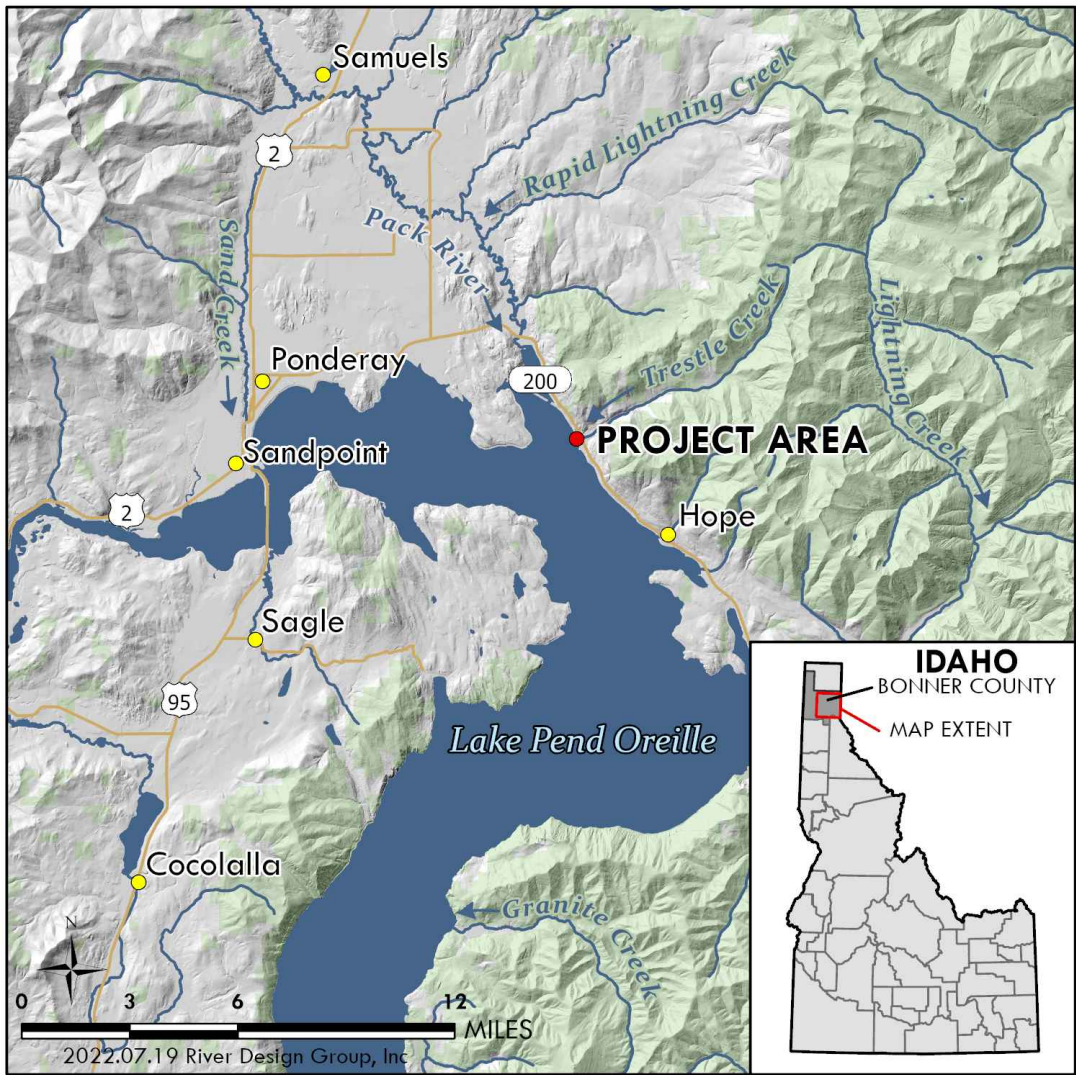


EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

FINAL DESIGN PLAN SET

TRESTLE CREEK VICINITY MAP



DRAWING INDEX

- 1.0 COVER SHEET AND NOTES
- 2.0 SITE PLAN
- 2.1 DEWATERING PLAN
- 3.0 SPECIFICATIONS
- 3.1 MATERIALS AND QUANTITIES
- 4.0 PLAN VIEW AND DATA SHEET
- 4.1 GRADING PLAN AND PROFILE
- 5.0 DESIGN CHANNEL CROSS SECTIONS
- 6.0 BOULDER STEP POOL STRUCTURE DETAIL
- 6.1 CONSTRUCTED CHANNEL STREAMBED DETAIL
- 6.2 VEGETATED WOOD MATRIX DETAIL
- 7.0 WETLAND IMPACTS

PROJECT PARTNERS



Valiant Idaho II, LLC
The Idaho Club
151 Clubhouse Way
Sandpoint, ID 83864

PROJECT DESCRIPTION

THE NORTH BRANCH OF TRESTLE CREEK (NBTC) WAS ARTIFICIALLY CONSTRUCTED AS AN IRRIGATION CANAL IN THE EARLY 1900S. PRESENTLY, RESIDENTIAL DEVELOPMENT, CLEARING OF INSTREAM WOOD, AND FISH PASSAGE BARRIERS ASSOCIATED WITH THE OUTFALL TO LAKE PEND OREILLE, US HIGHWAY 200 AND THE MONTANA RAIL LINK TRACKS HAVE DEGRADED STREAM CORRIDOR HABITAT CONDITIONS AND IMPEDED THE PASSAGE OF KOKANEE *ONCORHYNCHUS NERKA* (KOKANEE), *SALVELINUS CONFLUENTUS* (BULL TROUT), AND OTHER FISH SPECIES INTO NBTC FROM LAKE PEND OREILLE.

IN EARLY 2022, THE LAKE PEND OREILLE IDAHO CLUB EXPRESSED INTEREST IN IMPROVING FISH PASSAGE AND RE-NATURALIZING A PORTION OF THE NORTH BRANCH TRESTLE CREEK (NBTC) FOR THE BENEFIT OF KOKANEE, BULL TROUT AND OTHER FISH SPECIES. RIVER DESIGN GROUP WAS RETAINED TO PRODUCE A FINAL DESIGN FOR THIS PROJECT AREA USING THE MOST RECENT DESIGN STANDARDS. THE PRIMARY GOAL OF THIS PROJECT IS TO ENHANCE THE AESTHETICS OF THE EXISTING NBTC CHANNEL BY CONSTRUCTING A NATURALLY FUNCTIONING CHANNEL AND FLOODPLAIN CONFIGURATION THROUGH THE PROPOSED IDAHO CLUB PROPERTY.

STANDARD OF PRACTICE

RIVER DESIGN GROUP, INC. WORKS EXCLUSIVELY IN THE RIVER ENVIRONMENT AND UTILIZES THE MOST CURRENT AND ACCEPTED PRACTICES AVAILABLE FOR PLANNING AND DESIGN OF RIVER, FLOODPLAIN, AND AQUATIC HABITAT RESTORATION PROJECTS. CURRENT STANDARDS FOR THE DESIGN OF RESTORATION PROJECTS VARY DEPENDING ON PROJECT GOALS.

REUSE OF DRAWINGS

THESE DRAWINGS, THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF RIVER DESIGN GROUP, INC. (RDG) AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RDG. LIKEWISE, THESE DRAWINGS MAY NOT BE ALTERED OR MODIFIED WITHOUT AUTHORIZATION OF RDG. DRAWING DUPLICATION IS ALLOWED IF THE ORIGINAL CONTENT IS NOT MODIFIED.



COVER PAGE AND NOTES

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

NEAR SANDPOINT, IDAHO



NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW
2	08/01/23		ADD WETLAND SHEET	NW
3	10/12/23		ADD DEWATER SHEET	NW
4	02/29/24		DESIGN REVISION	
5	04/18/24		DESIGN REVISION	

PROJECT NUMBER
RDG-22-170

DRAWING NUMBER

1.0

Drawing 1 of 12

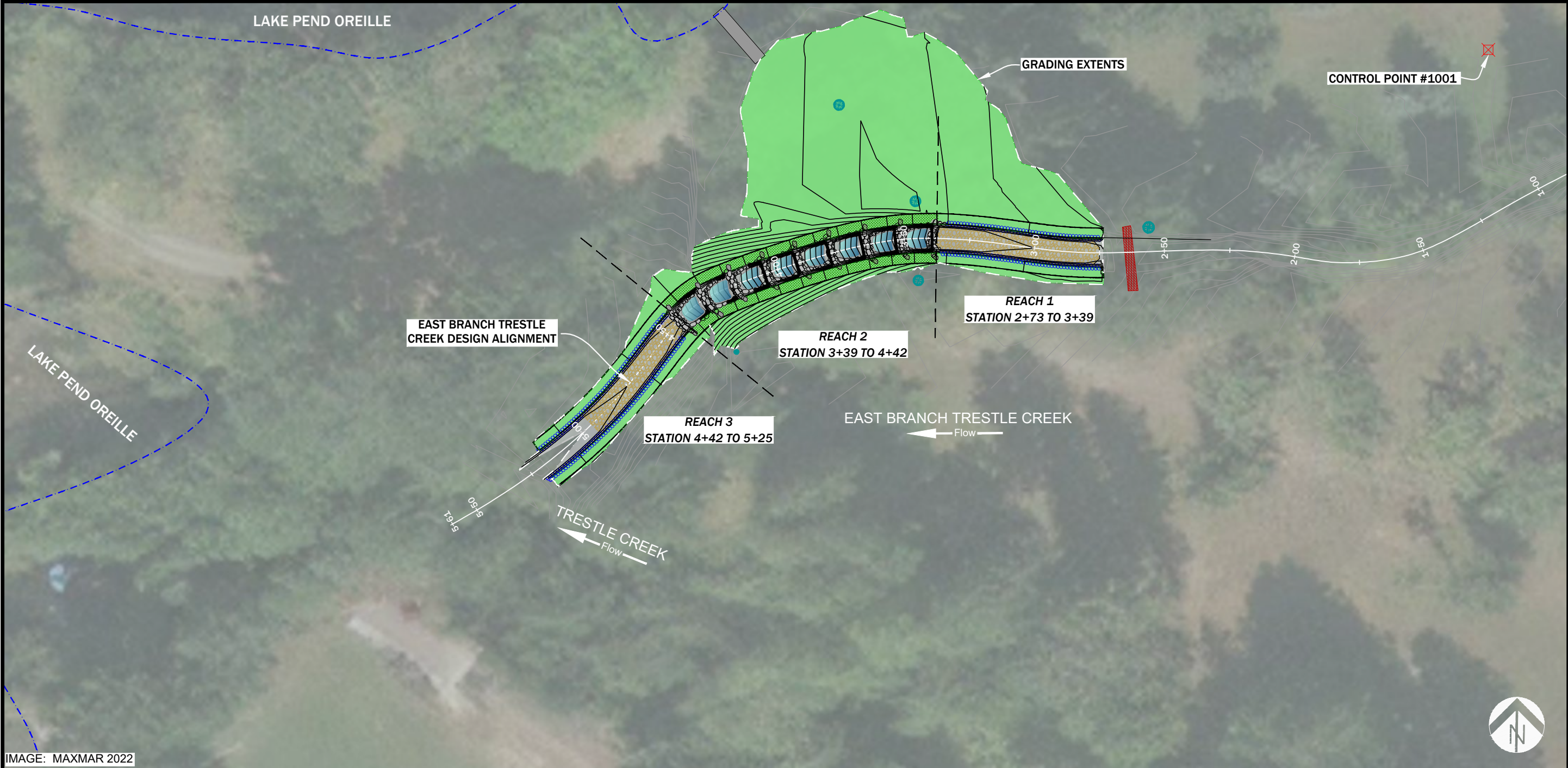


IMAGE: MAXMAR 2022

1 SITE PLAN

1" = 40'

DETAIL LEGEND		
SYMBOL		DETAIL SHEET #
	RIPARIAN SEED AREA	
	SOD BANK TREATMENT	
	EXISTING TREE TO BE PRESERVED	
	BOULDER STEP POOL	6.0
	CONSTRUCTED CHANNEL STREAMBED	6.1
	VEGETATED WOOD MATRIX	6.2

PROJECT DATUM

THE PROJECT COORDINATES ARE BASED ON THE FOLLOWING:

HORIZONTAL PROJECTION: IDAHO STATE PLANE (WEST FOOT)

HORIZONTAL DATUM: NAD83 (2011)

UNITS: US SURVEY FEET

VERTICAL DATUM: NAVD29 (GEOID 12B)

TOPOGRAPHY AND CROSS SECTION GROUND LINES ARE BASED ON SURVEY WORK PERFORMED BY RDG IN JULY 2022.

CONTROL POINTS				
POINT NUMBER	EASTING	NORTHING	POINT ELEVATION	RAW DESCRIPTION
1001	2478328.5410'	2412772.5490'	2075.704'	5/8" REBAR WITH A 2" ALUMINUM CAP MARKED "RDG"



SITE PLAN

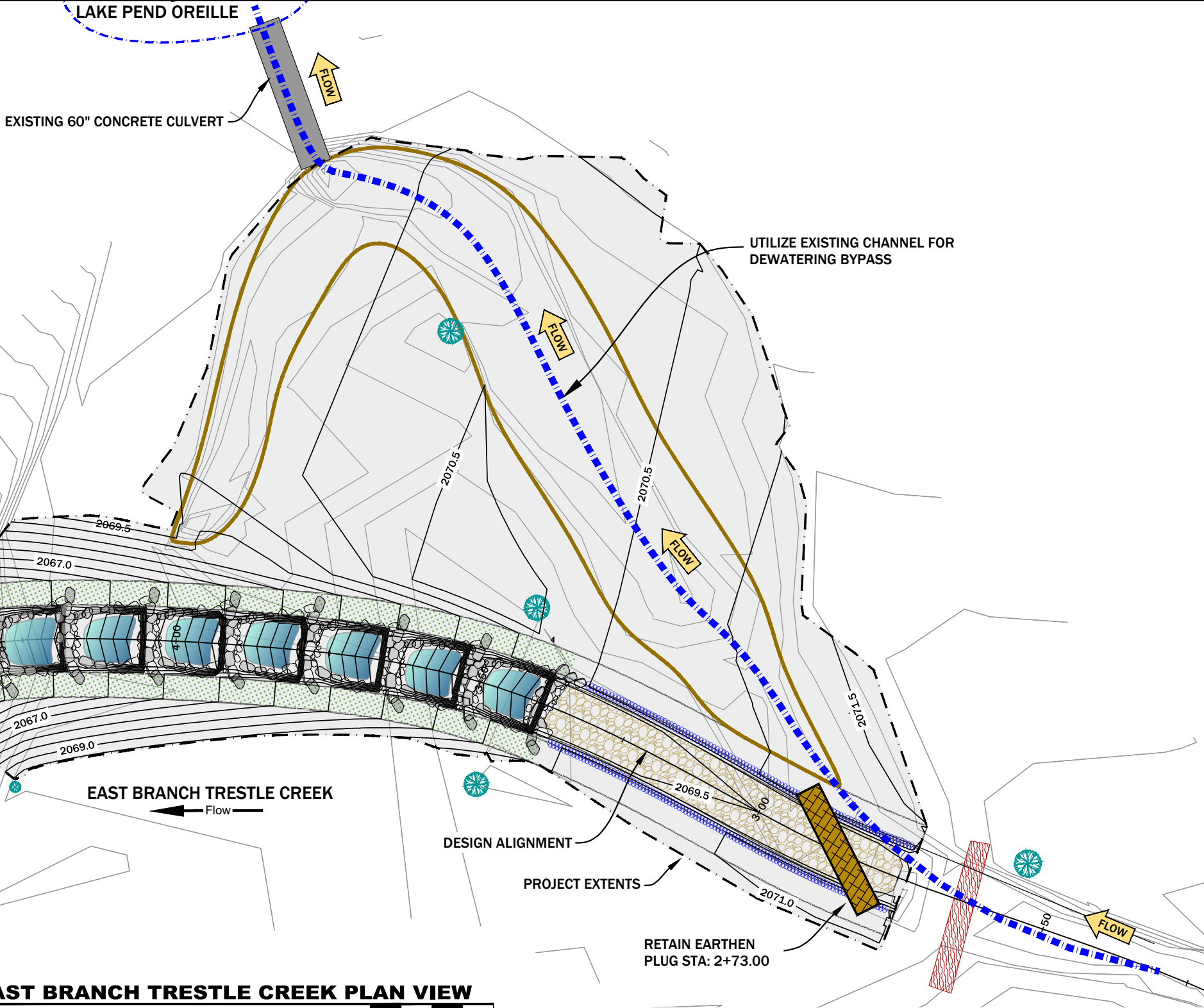
EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

NEAR SANDPOINT, IDAHO




NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW
PROJECT NUMBER RDG-22-170				
DRAWING NUMBER 2.0				
Drawing 2 of 12				

DEWATERING AND CONSTRUCTION SEQUENCE:

- 1. MAINTAIN ALL FLOW WITHIN THE EXISTING CHANNEL.
- 2. CONSTRUCT REACH 1 LEAVING AN EARTHEN PLUG AT STATION 2+73.
- 3. CONSTRUCT REACH 2 AND STAGE EXCAVATED MATERIAL ADJACENT TO THE EXISTING CHANNEL.
- 4. CONSTRUCT REACH 3 LEAVING AN EARTHEN PLUG AT STATION 5+00.
- 5. REMOVE THE PLUG AT STATION 5+00 AND CONSTRUCT THE REMAINDER OF REACH 3 IN THE WET.
- 6. REMOVE THE PLUG AT STATION 2+73 AND INCREMENTALLY TURN THE FLOW INTO THE DESIGN CHANNEL.
- 7. CONSTRUCT THE REMAINDER OF REACH 1 IN THE WET AND FILL THE EXISTING CHANNEL TO DESIGN ELEVATION WITH STAGED MATERIAL.



1 EAST BRANCH TRESTLE CREEK PLAN VIEW
1" = 20'

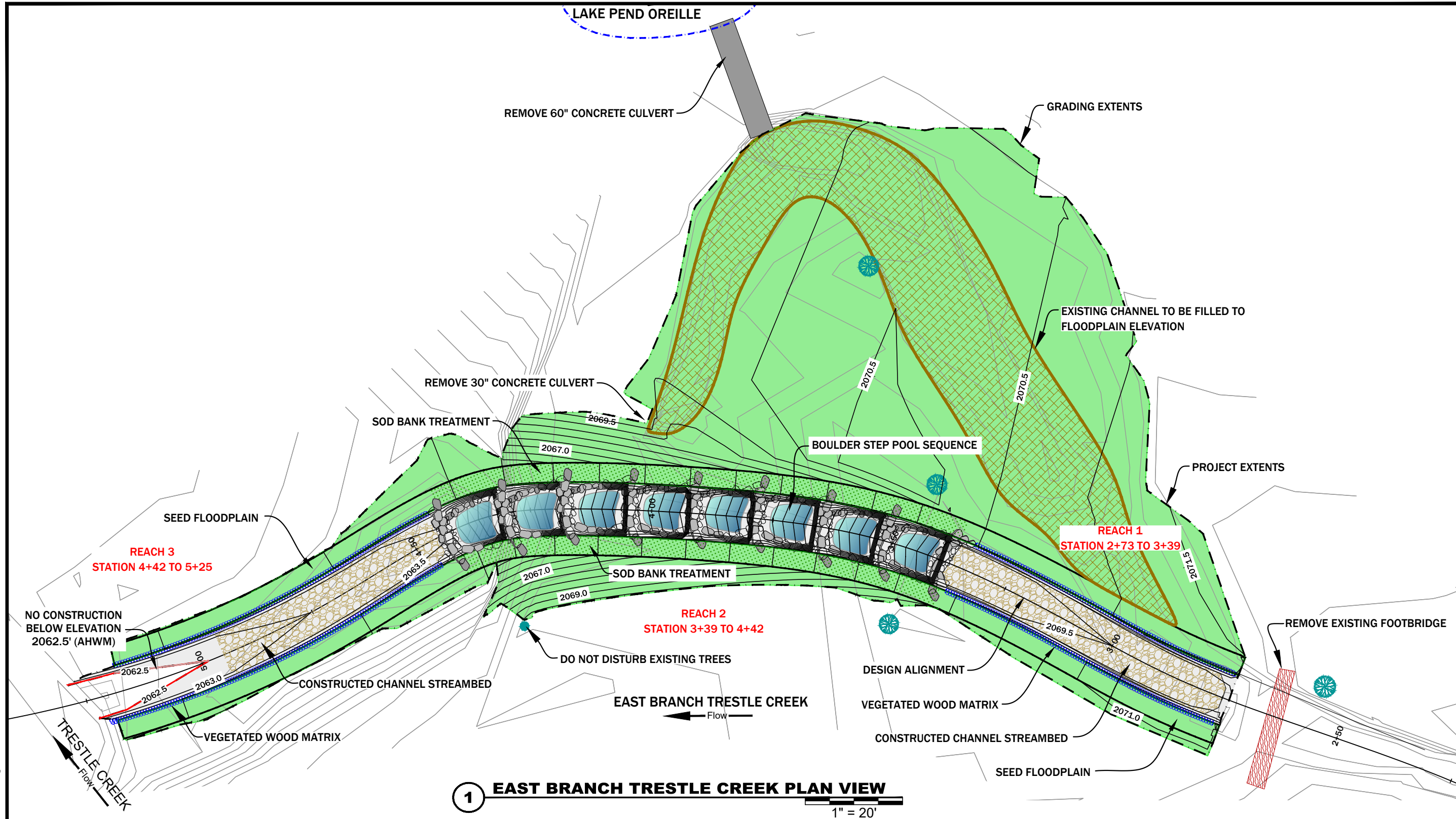
LEGEND	
SYMBOL	
	BYPASS CHANNEL
	EARTHEN PLUG
	BYPASS FLOW DIRECTION



DEWATERING PLAN
EAST BRANCH TRESTLE CREEK RESTORATION PROJECT
NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW
3	10/12/23	LS	DEWATER PLAN	NW
PROJECT NUMBER RDG-22-170				
DRAWING NUMBER 2.1				
Drawing 3 of 12				

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1 EAST BRANCH TRESTLE CREEK PLAN VIEW
1" = 20'

CHANNEL TOP OF BANK ELEVATIONS

STATION START	ELEVATIONS (FT)	STATION START	ELEVATIONS (FT)	STATION START	ELEVATIONS (FT)	STATION START	ELEVATIONS (FT)
0+30	2075.5	3+64	2079.1	3+92	2067.5	4+19	2066.1
2+72	2071.5	3+66	2068.9	3+93	2067.5	4+29	2065.5
3+39	2070.4	3+67	2068.9	4+03	2066.9	4+31	2065.4
3+40	2070.4	3+77	2068.3	4+05	2066.8	4+32	2065.4
3+51	2069.8	3+79	2068.2	4+06	2066.8	4+42	2064.8
3+53	2069.7	3+80	2068.2	4+16	2066.2	4+44	2064.8
3+54	2069.6	3+90	2067.6	4+18	2066.1	5+27	2063.7

STRUCTURE SCHEDULE

STATION START	STATION END	BANK	STRUCTURE	STATION START	STATION END	BANK	STRUCTURE
2+95	3+39	L	VWM	4+03	4+16	C	BSP
3+00	3+39	C	CCS	4+16	4+29	C	BSP
3+05	3+39	R	VWM	4+29	4+42	C	BSP
3+39	3+51	C	BSP	4+42	5+20	L	VWM
3+51	3+64	C	BSP	4+42	4+95	C	CCS
3+64	3+77	C	BSP	4+42	5+18	R	VWM
3+90	4+03	C	BSP				

DETAIL LEGEND

SYMBOL	DETAIL SHEET #
	FLOODPLAIN SEED AREA
	SOD BANK TREATMENT
	EXISTING TREE TO BE PRESERVED
	BOULDER STEP POOL 6.0
	CONSTRUCTED CHANNEL STREAMBED 6.1
	VEGETATED WOOD MATRIX 6.2

PLAN VIEW AND DATA SHEET

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

NEAR SANDPOINT, IDAHO

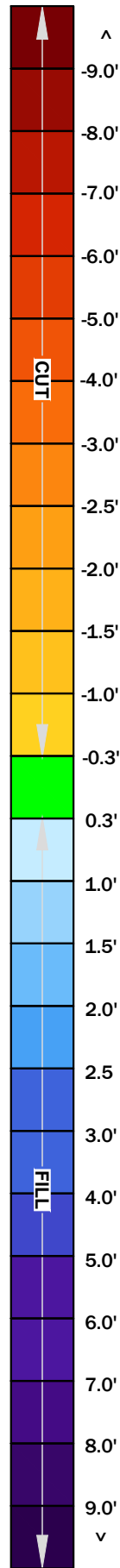
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PROJECT NUMBER
RDG-22-170

DRAWING NUMBER
4.0

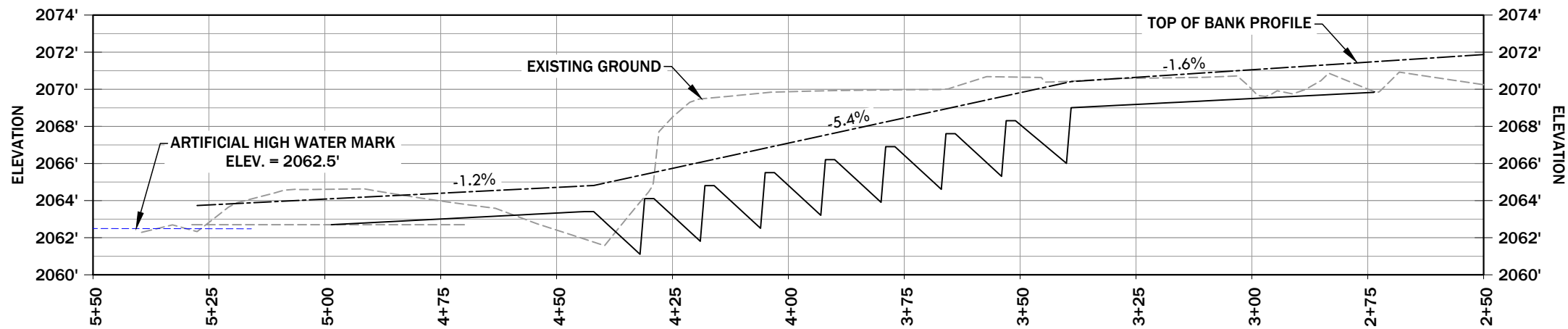
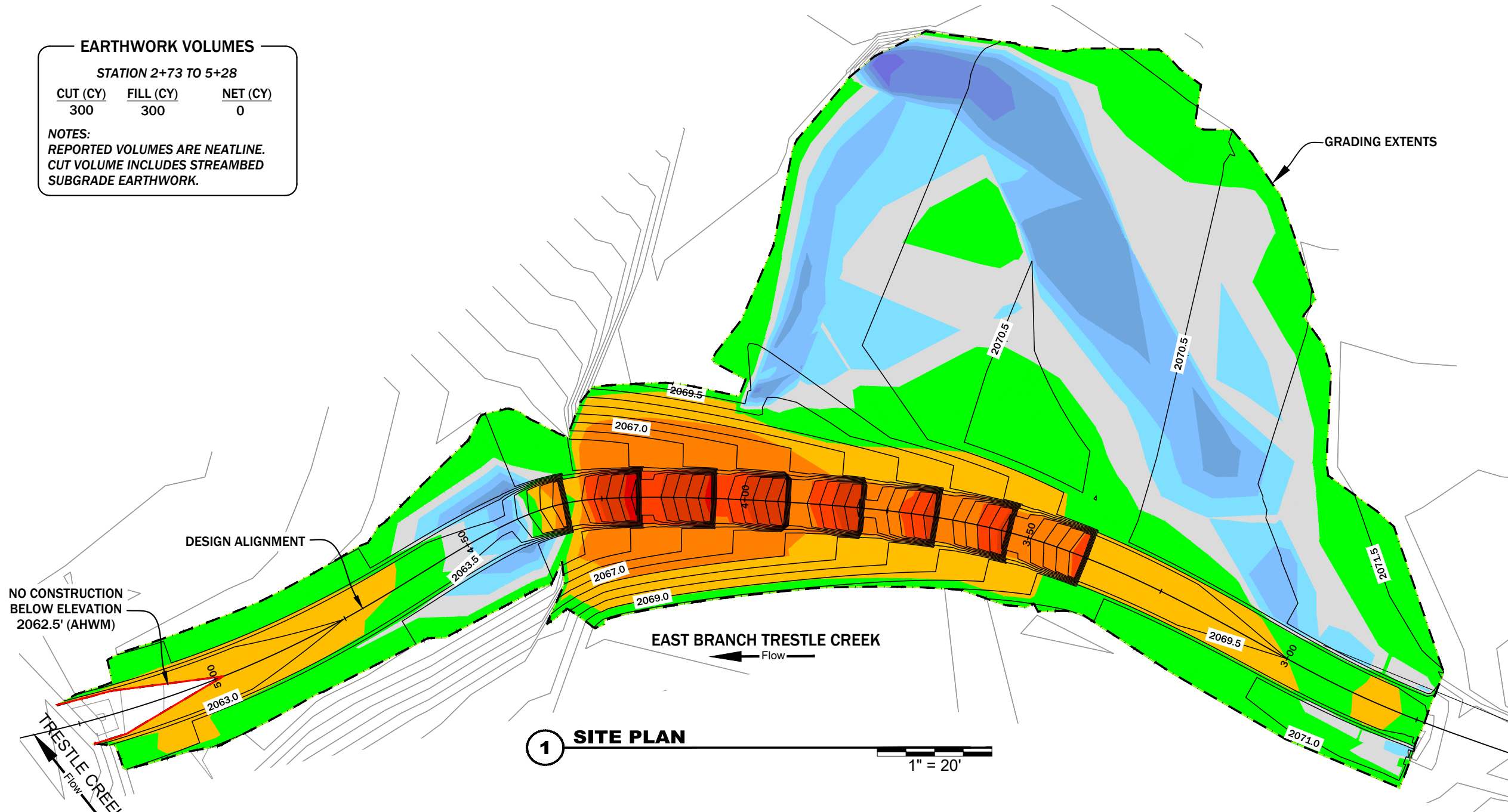
Drawing 6 of 12

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EARTHWORK VOLUMES		
STATION 2+73 TO 5+28		
CUT (CY)	FILL (CY)	NET (CY)
300	300	0

NOTES:
REPORTED VOLUMES ARE NEATLINE.
CUT VOLUME INCLUDES STREAMBED
SUBGRADE EARTHWORK.



EXISTING GROUND COMPARED
TO RDG DESIGN SURFACE

PROFILE LEGEND		
---	EXISTING GROUND ELEVATION	
---	BANKFULL SURFACE	
---	DESIGN SURFACE	



GRADING PLAN AND PROFILE

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW

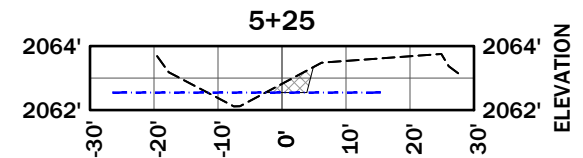
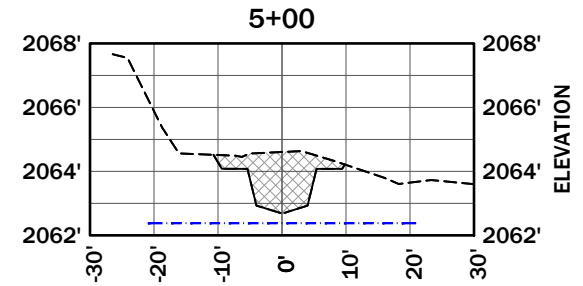
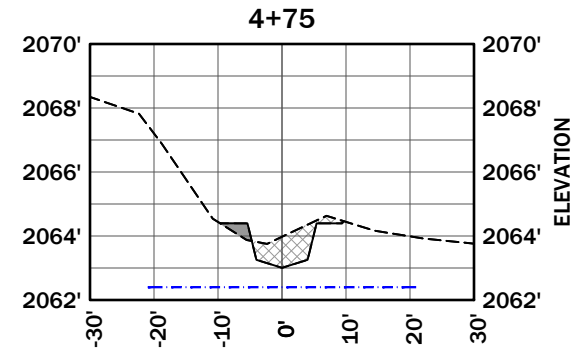
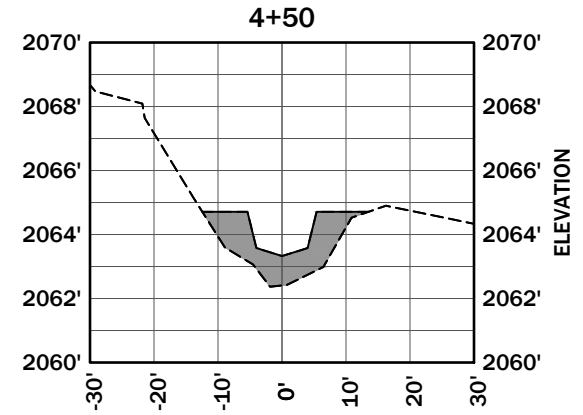
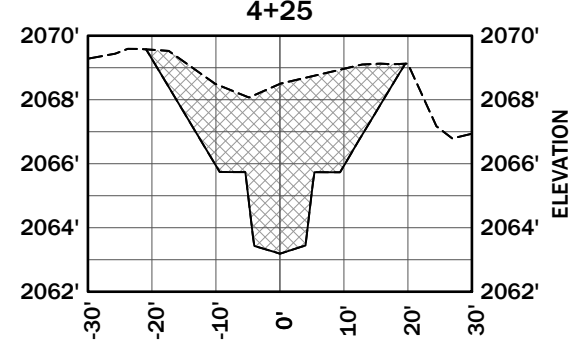
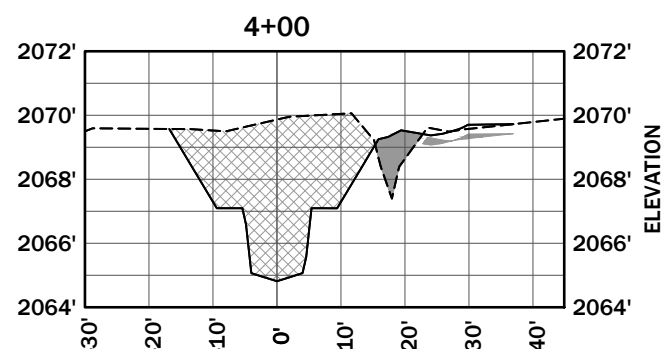
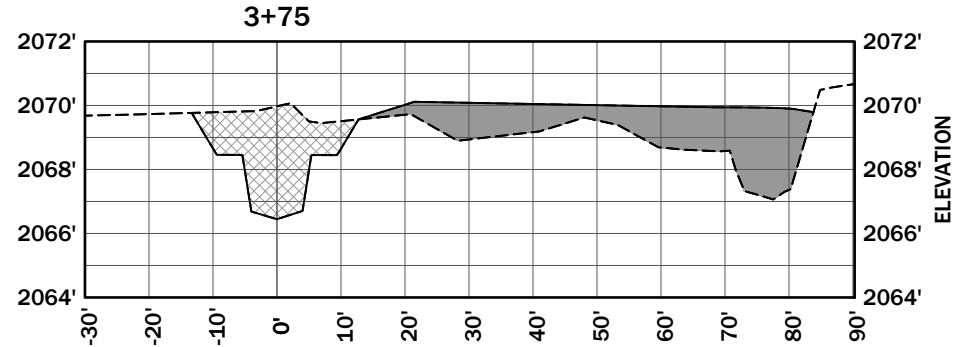
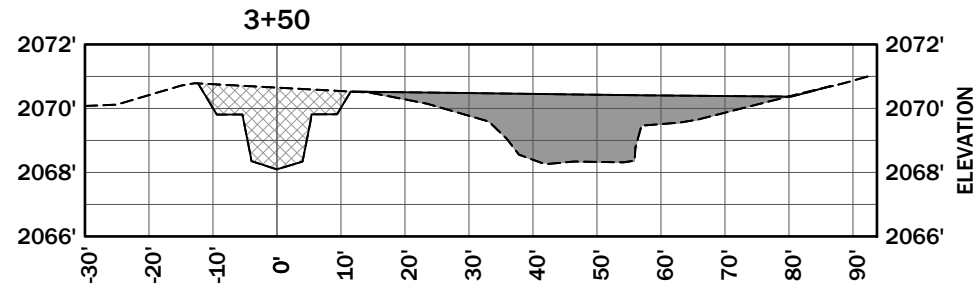
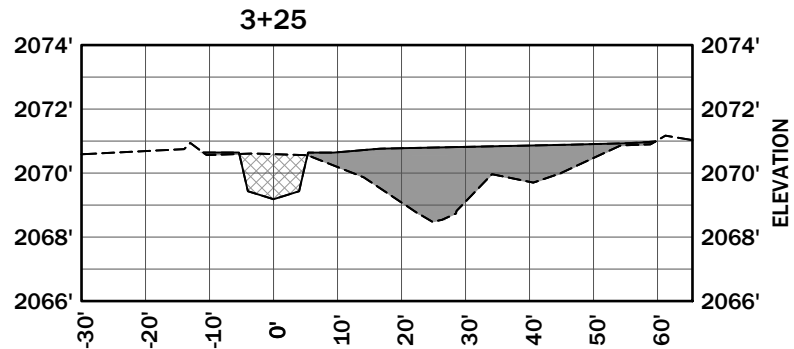
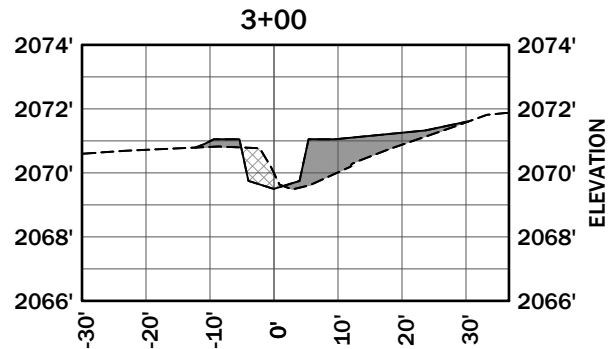
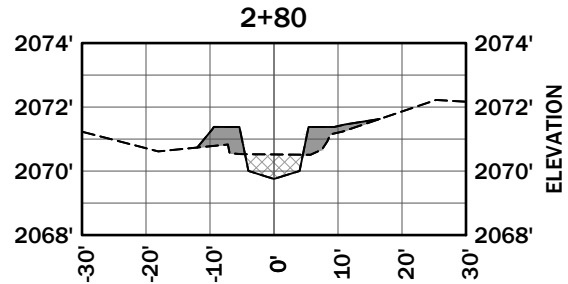
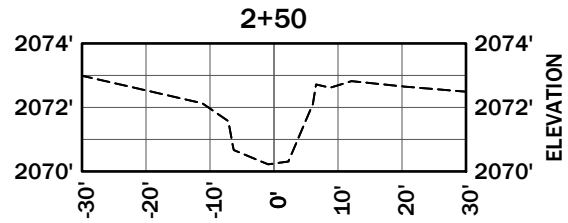
PROJECT NUMBER
RDG-22-170

DRAWING NUMBER

4.1

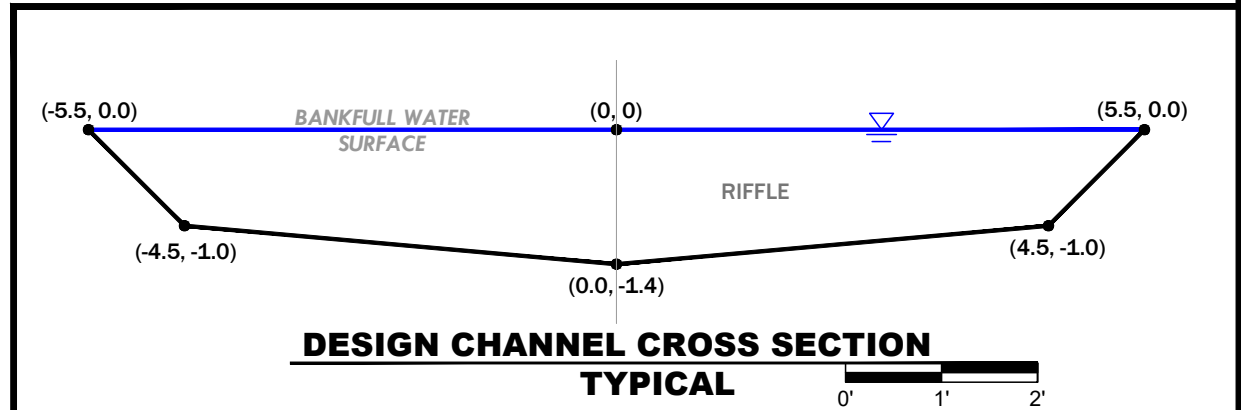
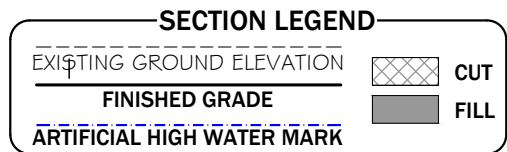
Drawing 7 of 12

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1 CHANNEL CROSS SECTIONS

1" = 30'



DESIGN CHANNEL CROSS SECTIONS

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT

NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW

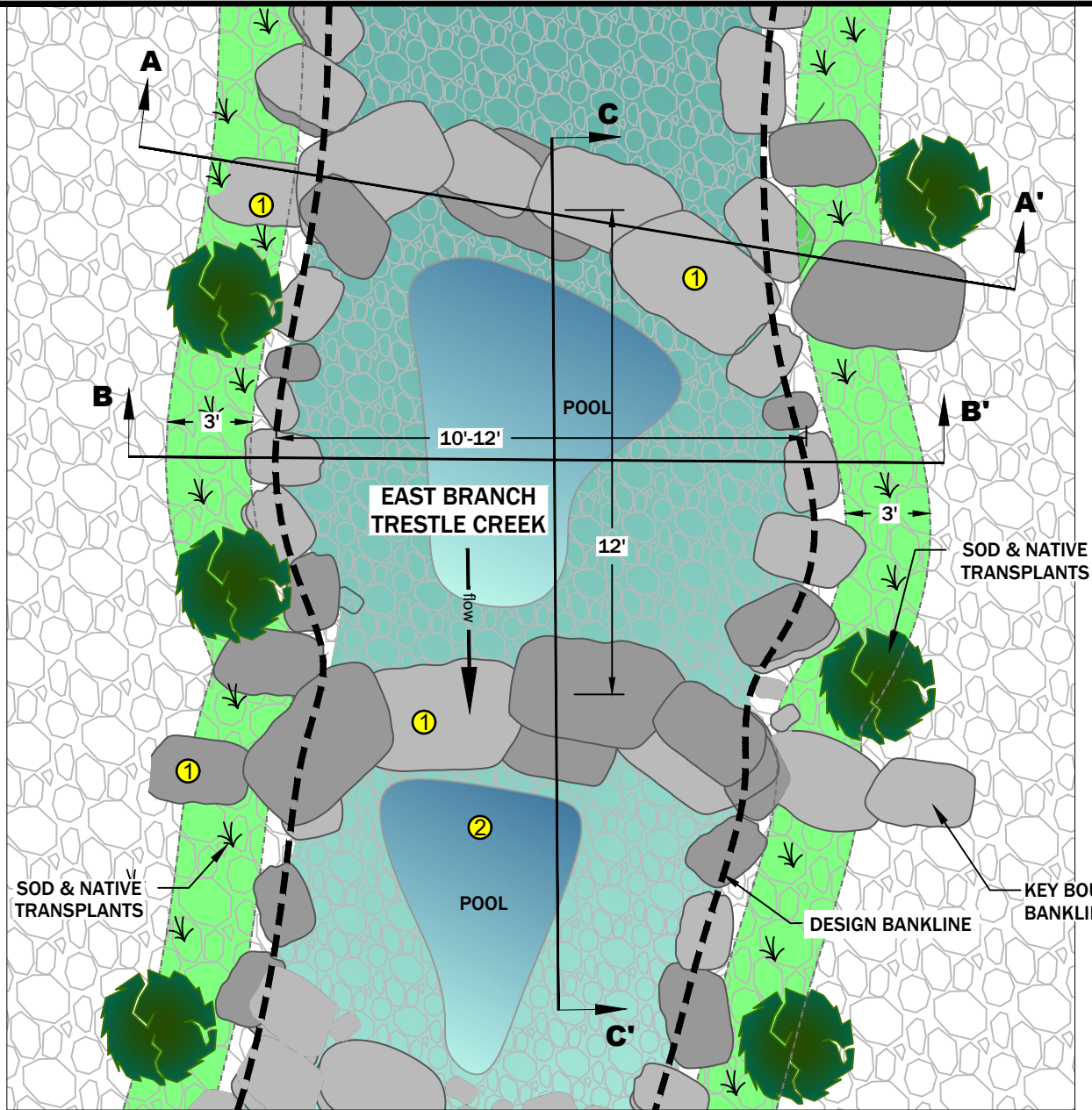
PROJECT NUMBER
RDG-22-170

DRAWING NUMBER
5.0

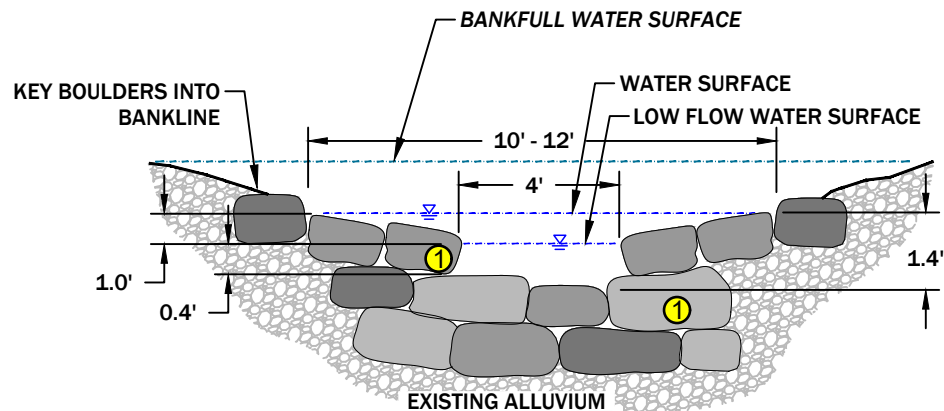
Drawing 8 of 12



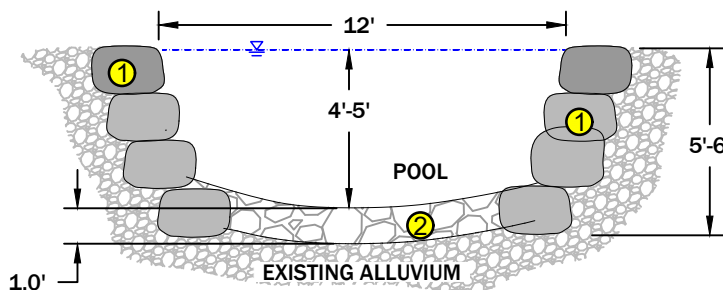
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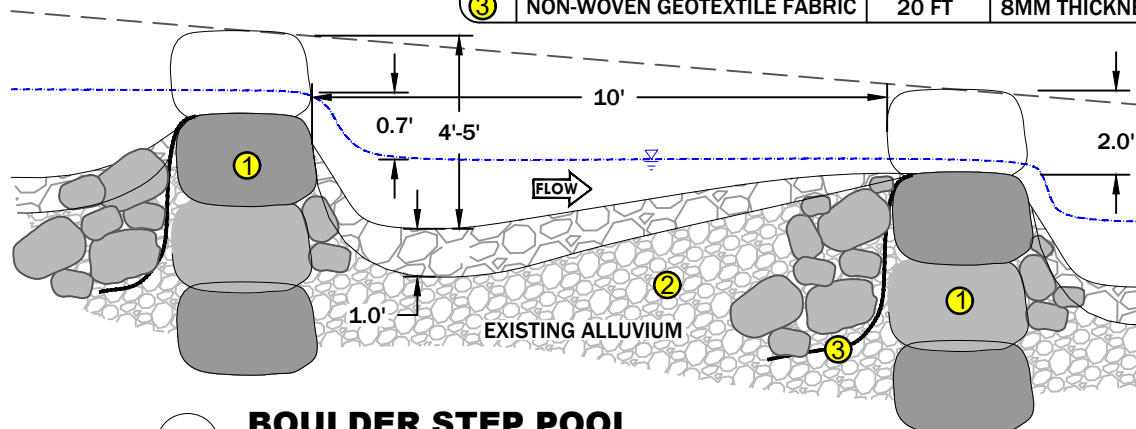
1 **BOULDER STEP POOL**
PLAN VIEW
1" = 6'



2 **BOULDER STEP WEIR**
SECTION A - A'
1" = 5'



3 **POOL**
SECTION B - B'
1" = 5'



4 **BOULDER STEP POOL**
PROFILE C - C'
1" = 5'

GENERAL NOTES

1. THE INTENT OF THE BOULDER STEP POOL STRUCTURE IS TO PROVIDE VERTICAL AND LATERAL STABILITY FOR ENTRENCHED STREAM TYPES EXHIBITING STEEP GRADIENTS. THE STRUCTURE CONSISTS OF ALTERNATING GRADE CONTROL STEPS AND PLUNGE POOLS. VELOCITY AND ENERGY DISSIPATION IS CONTROLLED BY STEP SPACING WHICH IS DETERMINED AS A FUNCTION OF GRADIENT RELATIVE TO CHANNEL WIDTH. STEP HEIGHT IS DESIGNED TO MAINTAIN UPSTREAM FISH PASSAGE AT ALL FLOW STAGES. PLUNGE POOLS PROVIDE RESTING AREAS FOR FISH TO STAGE.
2. ANY CHANGES TO THE CONSTRUCTION SEQUENCE MUST BE APPROVED BY ENGINEER.
3. ENGINEER SHALL MARK THE GENERAL CONSTRUCTION LOCATIONS FOR EACH BOULDER STEP POOL STRUCTURE PRIOR TO CONSTRUCTION.

NOTES ON BOULDER STEP POOL STRUCTURE

1. EXCAVATE TO THE EXCAVATION LIMITS AS SHOWN ON THE DRAWING. SALVAGE COBBLE FROM THE EXISTING CHANNEL AND STOCK PILE ON THE FLOODPLAIN OUTSIDE OF THE IMMEDIATE WORK AREA.
2. PREPARE THE BASE OF THE EXCAVATION BY PLACING AND BUCKET COMPACTING STREAMBED FILL TO SUBGRADE ELEVATIONS SHOWN ON THE DRAWINGS.
3. STEP POOLS SHALL BE CONSTRUCTED FROM ROCKS WITH THE DIMENSIONS SHOWN IN THE MATERIAL SCHEDULE. PREFERRED ROCK IS RECTANGULAR IN SHAPE FROM SOURCE APPROVED BY ENGINEER AND SHALL BE SOUND, DENSE (SG=2.65 MIN.) AND FREE FROM CRACKS, SEAMS OR OTHER DEFECTS THAT CAN ACCELERATE WEATHERING.
4. PLACE CAT 1 ROCKS ACCORDING TO THE LAYOUT AND ELEVATIONS SHOWN ON SITE PLAN. FOOTER ROCKS SHALL BE PLACED UNDER ALL CAP ROCKS UNLESS CAP ROCKS EXTEND BELOW SCOUR DEPTH. ALL ROCKS SHALL BE PLACED ON SUITABLE SUBGRADE CONSISTING OF COARSE ALLUVIUM AS APPROVED BY ENGINEER. ROCK SHALL BE EQUIPMENT-PLACED SO THAT LARGER ROCKS ARE UNIFORMLY DISTRIBUTED WITH NO GAPS BETWEEN BOTH FOOTER ROCKS AND CAP ROCKS. STREAMBED FILL SHALL BE PLACED IN VOIDS AROUND RIPARIAN CUTTINGS AND BETWEEN FOOTER ROCKS AND CAP ROCKS.
5. PLACE NON-WOVEN GEOTEXTILE FABRIC ON THE UPSTREAM SIDE OF STEP POOLS TO MINIMIZE PIPING OF WATER THROUGH THE STEPS. FABRIC SHALL BE PLACED ACROSS THE ENTIRE WIDTH OF THE STEP THROAT AND SHALL EXTEND BELOW THE ESTIMATED SCOUR DEPTH AS SHOWN ON THE DRAWINGS AND AS DIRECTED BY ENGINEER. BACKFILL FABRIC WITH NATIVE STREAMBED FILL AND SMALL BOULDERS AS SHOWN ON THE DRAWINGS.
6. THE UPSTREAM TIE-IN WILL BE STAKED IN THE EXISTING STREAMBED BY ENGINEER. THE DOWNSTREAM TIE-IN SHALL TRANSITION SMOOTHLY INTO EXISTING TRESTLE CREEK. STRUCTURE TIE-IN LOCATIONS MAY BE STABILIZED WITH BOULDERS AND STREAMBED FILL AS DIRECTED BY ENGINEER.

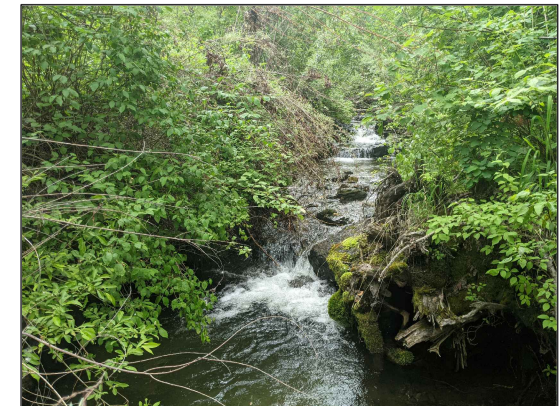
MATERIAL SCHEDULE (PER STRUCTURE)

	ITEM	QUANTITY	DIAMETER (IN.)
①	CATEGORY 1 ROCK	25	24 - 30
②	CHANNEL STREAMBED FILL	5 CY	SEE GRADATION
③	NON-WOVEN GEOTEXTILE FABRIC	20 FT	8MM THICKNESS

STREAMBED FILL GRADATION

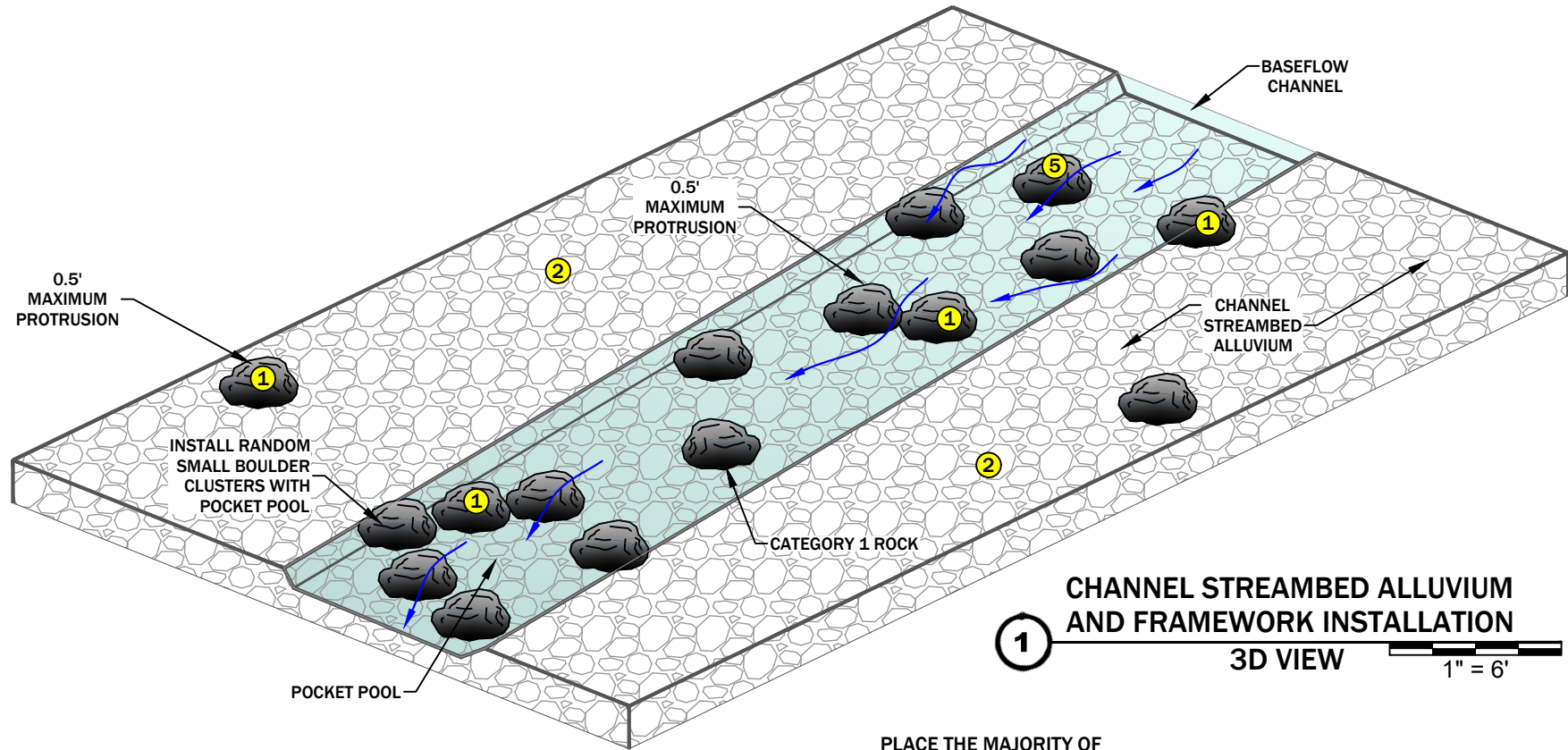
SIZE (IN)	PERCENT PASSING
10	100
6	90-100
4	50-80
3	30-50
1	10-30
0.08	10

NOTE: MIX SALVAGED
MATERIAL AND IMPORTED
MATERIAL TO ACHIEVE
SPECIFIED GRADATION



EXAMPLE OF A CONSTRUCTED BOULDER STEP POOL SYSTEM

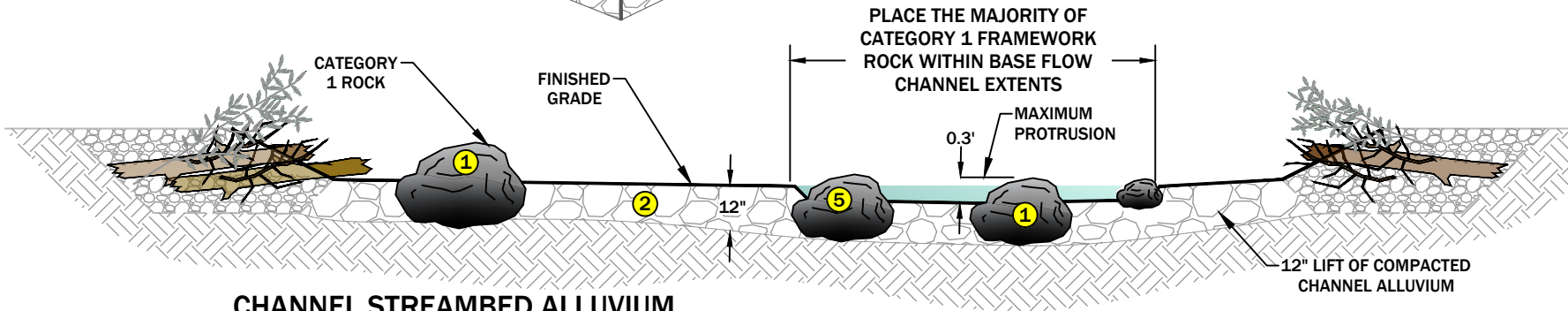
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CHANNEL STREAMBED ALLUVIUM AND FRAMEWORK INSTALLATION

3D VIEW

1" = 6'



CHANNEL STREAMBED ALLUVIUM AND FRAMEWORK INSTALLATION

SECTION VIEW

1" = 5'



TYPICAL CONSTRUCTED STREAMBED THROUGH A RIFFLE FEATURE

MATERIAL SCHEDULE
(PER LINEAR FOOT)

	ITEM	DIA.	QUANTITY
1	CATEGORY 1 ROCK	10" - 12"	0.8 EA
2	CHANNEL STREAMBED ALLUVIUM	6" MINUS	0.3 CY

GENERAL NOTES

1. CONSTRUCTION OF THE CHANNEL STREAMBED WILL OCCUR AFTER THE CHANNEL SUBGRADE IS PREPARED.
2. ANY CHANGES TO THE CONSTRUCTION SEQUENCE MUST BE APPROVED THE CONSTRUCTION MANAGER.
3. CONTRACTOR SHALL MARK THE UPSTREAM AND DOWNSTREAM EXTENTS OF THE LOCATIONS OF THE CONSTRUCTED CHANNEL STREAMBED STRUCTURES.
4. ALL **SUBGRADE EXCAVATION SHALL TERMINATE AT ELEVATION 2062.5'**. CONSTRUCTION MANAGER SHALL IDENTIFY LIMITS DURING CONSTRUCTION.

NOTES ON CONSTRUCTED CHANNEL STREAMBED INSTALLATION

1. PRIOR TO CONSTRUCTION OF THE CHANNEL STREAMBED, CONSTRUCTION MANAGER SHALL VERIFY CHANNEL SUBGRADE ELEVATIONS. CHANNEL SUBGRADE SERVES AS THE FOUNDATION FOR THE CONSTRUCTED CHANNEL STREAMBED.
2. CONTRACTOR SHALL STOCKPILE CHANNEL ALLUVIUM PER SPECIFICATIONS NOTED ON THE DRAWING.
3. PREPARE THE FRAMEWORK. CONTRACTOR SHALL PLACE 10-INCH TO 12-INCH BOULDERS (CATEGORY 1 ROCK) ON THE SURFACE OF THE CHANNEL SUBGRADE PRIMARILY WITHIN THE LOW FLOW CHANNEL AS INDICATED ON THE DRAWING. DUE TO THE INHERENT VARIABILITY IN MATERIALS, BOULDER ELEVATIONS SHALL BE ADJUSTED TO ASSURE BOULDER PROTRUSION ABOVE FINISH GRADE WILL BE NO GREATER THAN 0.5-FT.
4. CONTRACTOR MAY INSTALL 10-INCH TO 12-INCH BOULDERS (CATEGORY 1 ROCK) IN CLUSTERS, AS DIRECTED BY THE CONSTRUCTION MANAGER, TO CREATE A COMPLEX SERIES OF POCKET POOLS THAT EFFECTIVELY DISSIPATE ENERGY AND PROVIDE PATHWAYS FOR FISH MOVEMENT. BOULDER ELEVATIONS SHALL BE ADJUSTED TO ASSURE BOULDER PROTRUSION ABOVE FINISH GRADE IS NO GREATER THAN 0.3-FT.
5. PREPARE THE MATRIX. AFTER THE FRAMEWORK, BOULDER CLUSTERS, AND SMALL BOULDER RIBS ARE INSTALLED AND INSPECTED BY CONSTRUCTION MANAGER, PLACE APPROPRIATE CHANNEL STREAMBED ALLUVIUM GRADATION AND WASH FINES INTO STREAMBED. CHANNEL STREAMED ALLUVIUM SHALL BE PLACED TO THE FULL COURSE THICKNESS OF 12-INCHES TO FINISHED GRADE.

STREAMBED
FILL GRADATION

SIZE (IN)	PERCENT PASSING
10	100
6	90-100
4	50-80
3	30-50
1	10-30
0.08	10

NOTE: MIX SALVAGED
MATERIAL AND IMPORTED
MATERIAL TO ACHIEVE
SPECIFIED GRADATION



CONSTRUCTED CHANNEL STREAMBED DETAIL

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT
NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW

PROJECT NUMBER
RDG-22-170

DRAWING NUMBER

6.1

Drawing 10 of 12

NOTES ON VEGETATED WOOD MATRIX INSTALLATION

- 1. EXCAVATE TO THE EXCAVATION LIMITS AS SHOWN. EXCAVATED MATERIAL SHALL BE STOCKPILED ON THE FLOODPLAIN OUTSIDE OF THE IMMEDIATE WORK AREA.
- 2. PREPARE THE BENCH OF THE STRUCTURE BY PLACING CHANNEL STREAMBED ALLUVIUM FROM THE BASE OF THE EXCAVATION DEPTH/BOTTOM OF EXCAVATION TO WITHIN 1.0-FT. OF FINISHED GRADE.
- 3. CATEGORY 2 AND CATEGORY 3 WOOD, AND CHANNEL STREAMBED ALLUVIUM SHALL BE PLACED IN ALTERNATING LAYERS AND BUCKET COMPACTED UP TO THE TOP OF BANK ELEVATION AS SHOWN BELOW IN THE INSTALLATION SEQUENCE. PLACE SIX (6) FT TO EIGHT (8) FT. DORMANT WILLOW CUTTINGS AT A DENSITY OF 3 PER LINEAR FT ALONG THE TOP OF BANK LINE ELEVATION. WILLOW CUTTINGS SHALL SLOPE AT AN APPROXIMATE 1:1 SLOPE AS SHOWN IN SECTION VIEW. STEMS MAY OVERLAP. THE CUT ENDS SHALL BE PLACED AT THE BASE OF THE SLOPES WITH THE UN-CUT ENDS EXTENDING BEYOND THE EDGE OF THE TRENCH SO NO GREATER THAN ONE-THIRD OF THE TOTAL CUTTING LENGTH IS EXPOSED BEYOND THE TOP OF BANK EDGE. WILLOW CUTTINGS SHOULD INTERCEPT THE DESIGN TOP OF BANK LINE AS SHOWN IN STEP 5 OF THE INSTALLATION SEQUENCE.
- 4. THE UPSTREAM AND DOWNSTREAM ENDS OF THE STRUCTURE SHALL TRANSITION SMOOTHLY INTO ADJACENT STREAMBANK STRUCTURES TO MINIMIZE EROSION, FLANKING, AND BANK FAILURE. STRUCTURE ENDS MAY BE STABILIZED WITH ADDITIONAL CATEGORY 1 ROCK AS APPROVED BY ENGINEER.
- 5. AFTER INSTALLATION OF THE VEGETATED WOOD MATRIX, BACKFILL THE STRUCTURE WITH STOCKPILED MATERIAL TO FINISHED GRADE, AND BUCKET COMPACT.

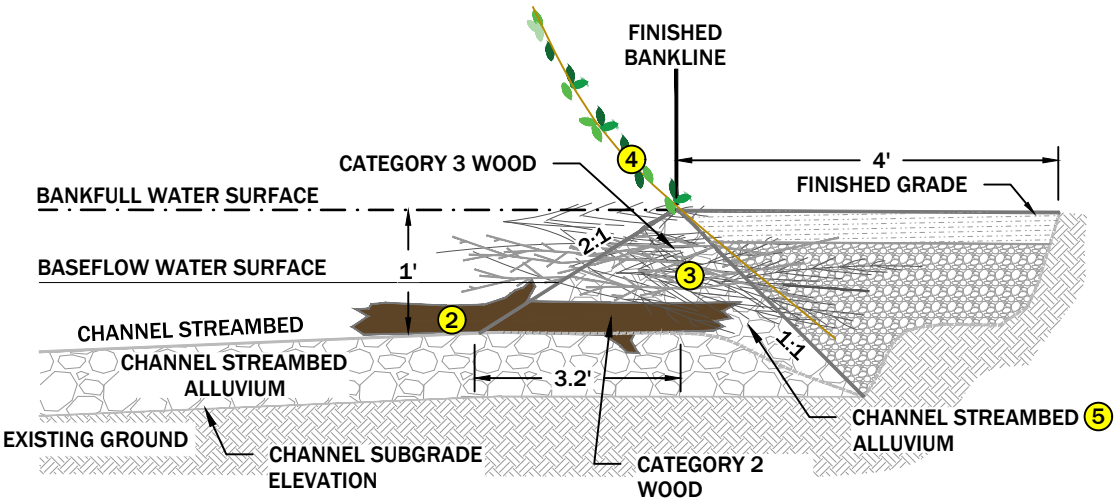
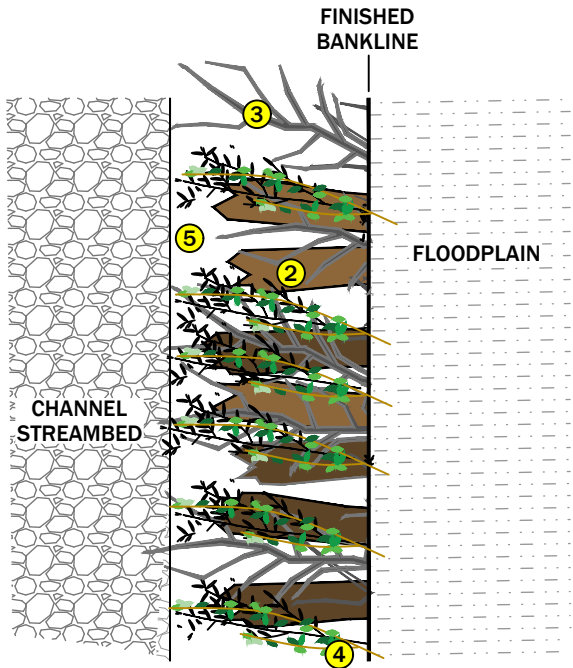
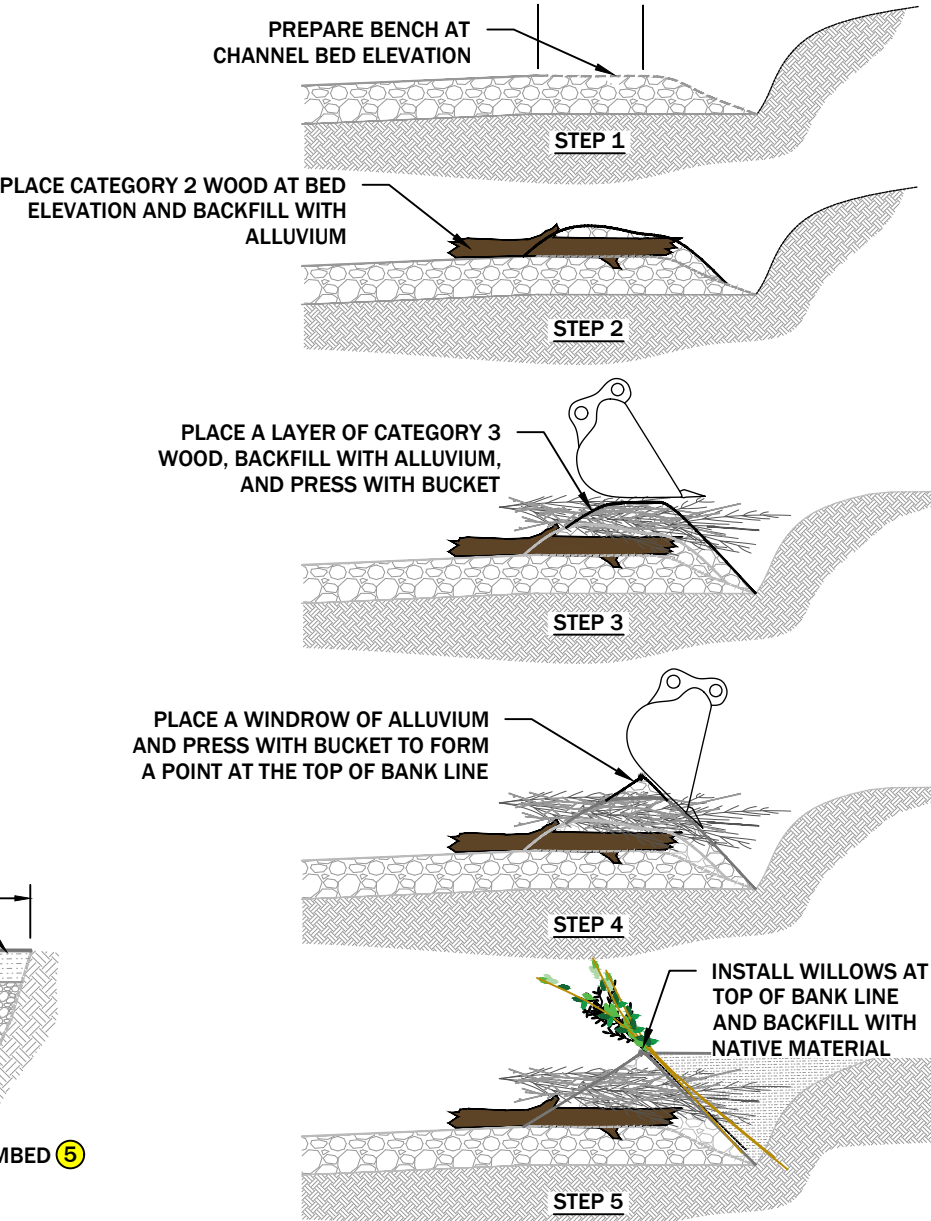
GENERAL NOTES

- 1. CONSTRUCTION OF THE VEGETATED WOOD MATRIX WILL OCCUR AFTER THE CHANNEL AND FLOODPLAIN BACKFILL IS PLACED AND THE CHANNEL STREAMBED IS CONSTRUCTED.
- 2. IF VEGETATED WOOD MATRIX STRUCTURES ARE INSTALLED PRIOR TO OCTOBER 1, LEAVE BACK TRENCH UNFILLED AND COMPLETE STRUCTURE WHEN DORMANT WILLOWS ARE AVAILABLE.
- 3. IT IS CONTRACTOR'S RESPONSIBILITY TO CUT WOOD INTO APPROPRIATE SIZE LENGTHS TO FIT STRUCTURE DIMENSIONS.
- 4. ANY CHANGES TO THE CONSTRUCTION SEQUENCE MUST BE APPROVED BY CONSTRUCTION MANAGER.
- 5. CONTRACTOR SHALL MARK AND CONSTRUCTION ENGINEER SHALL APPROVE THE GENERAL LOCATION FOR EACH VEGETATED WOOD MATRIX STRUCTURE PRIOR TO CONSTRUCTION.
- 6. ALL **SUBGRADE EXCAVATION SHALL TERMINATE AT ELEVATION 2062.5'**. CONSTRUCTION MANAGER SHALL IDENTIFY LIMITS DURING CONSTRUCTION.

STREAMBANK FILL GRADATION	
SIZE (IN)	PERCENT PASSING
10	100
6	90-100
4	50-80
3	30-50
1	10-30
0.08	10

NOTE: MIX SALVAGED MATERIAL AND IMPORTED MATERIAL TO ACHIEVE SPECIFIED GRADATION

MATERIAL SCHEDULE (PER LINEAR FOOT)			
	ITEM	DIA.	QUANTITY
②	CATEGORY 2 WOOD	2" - 4"	0.25
③	CATEGORY 3 WOOD	< 2"	2
④	WILLOW CUTTINGS	0.25" - 1"	3
⑤	STREAMBANK ALLUVIUM	6" MINUS	0.1 CY



1 VEGETATED WOOD MATRIX
PLAN VIEW
NTS

2 VEGETATED WOOD MATRIX
SECTION VIEW
NTS

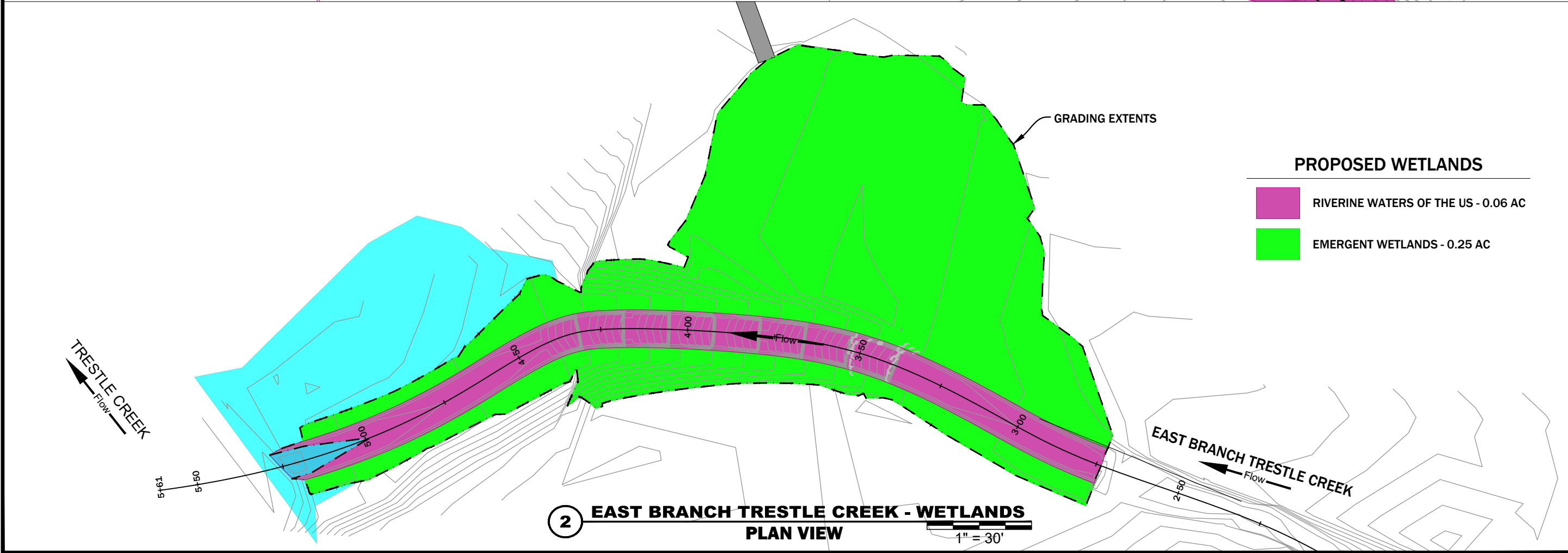
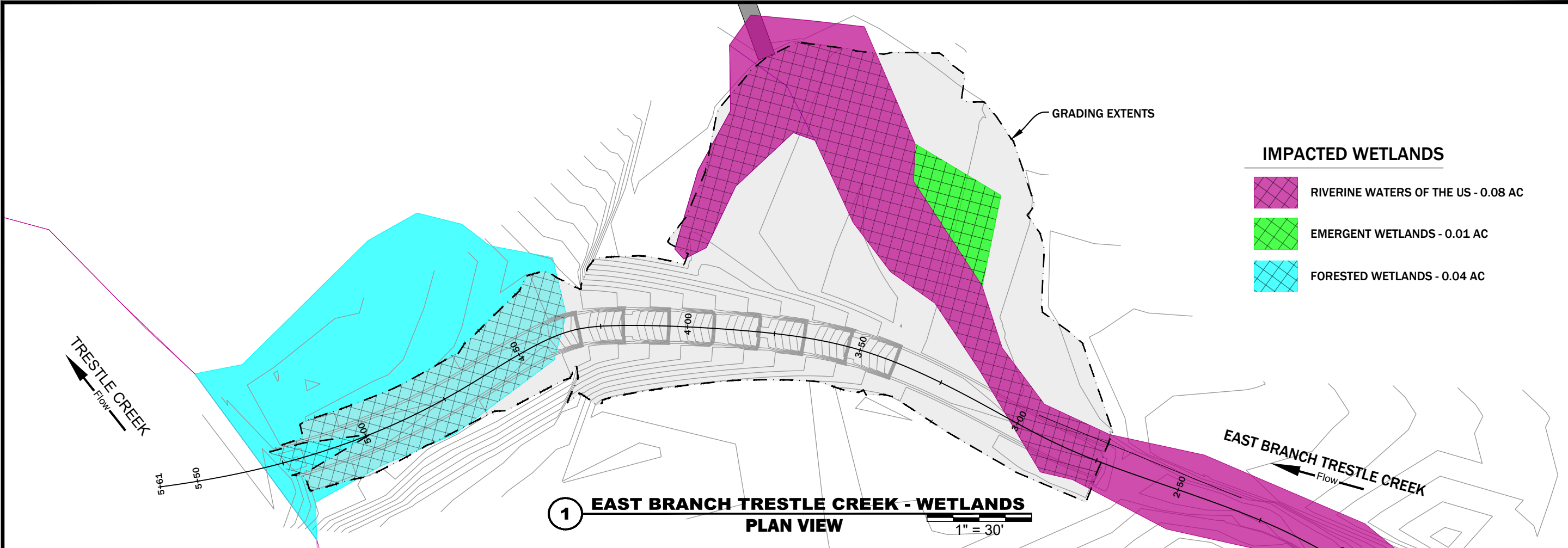
3 RECOMMENDED VEGETATED WOOD
MATRIX INSTALLATION SEQUENCE
SECTION VIEW
NTS



VEGETATED WOOD MATRIX
EAST BRANCH TRESTLE CREEK RESTORATION PROJECT
NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW
PROJECT NUMBER RDG-22-170				
DRAWING NUMBER 6.2				
Drawing 11 of 12				

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WETLAND IMPACTS

EAST BRANCH TRESTLE CREEK RESTORATION PROJECT
NEAR SANDPOINT, IDAHO

NO.	DATE	BY	DESCRIPTION	CHK
1	07/18/22	LS	FINAL DESIGN	NW

PROJECT NUMBER
RDG-22-170

DRAWING NUMBER
7.0

Drawing 12 of 12