

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-9620
Exam Date: 05/13/2025

1. Current Owner:
STATE OF IDAHO DEPT OF FISH & GAME
2885 W KATHLEEN AVE COEUR D ALENE ID 83815-8523

2. Accompanied by: David Van de Riet
Phone No: 208-818-3695
Address: Same as above
Relationship to permit Holder: Representative – IDFG Senior Wildlife Technician

3. **SOURCE:**
BLACKROCK GULCH
BULL RUN CREEK

Tributary
COEUR D ALENE RIVER
COEUR D ALENE RIVER

Method of Determination: ArcMap and DRG Layer.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap
2. Other water rights with the same point-of-diversion: NO Overlap

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

BLACKROCK GULCH SW¼ NE¼, Sec. 7, Twp 48N, Rge 01W, B.M. KOOTENAI County
BLACKROCK GULCH NE¼ NE¼, Sec. 7, Twp 48N, Rge 01W, B.M. KOOTENAI County
BULL RUN CREEK NE¼ NE¼, Sec. 7, Twp 48N, Rge 01W, B.M. KOOTENAI County

Method of Determination: GPS; Three water control structures, one culvert per POD located at:

- 116°30.6722, 47°31.4611 – Blackrock Gulch Agri drain 24" culvert (west pipe location)
- 116°30.3019, 47°31.6717 – Blackrock Gulch 42" culvert with stoplogs
- 116°30.3019, 47°31.6717 – Bull Run Creek 42" culvert with stoplogs

PLACE OF USE: WILDLIFE STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	01W	7	X	X	X	X				X L5					X	X		X	
48N	01W	8		X			X	X											
48N	01W	5									X		X	X	X L9	X L10	X	X	
48N	01W	6																X L10	

Method of Determination: Beneficial use field examination, ArcMap aerial imagery, and as-built engineering documents.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

☒ Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

☒☒ Aerial Photo Attached (required for irrigation of 10+ acres).☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Blackrock Gulch (West pipe)	N/A	N/A	Diversion considered in-stream impoundment of Blackrock Gulch tributary of CDA River	N/A	24-inch corrugated steel culvert with Agri-drain flow control structure
Blackrock Gulch (Main water control structure)	N/A	N/A	Diversion considered in-stream impoundment of Blackrock Gulch tributary of CDA River	N/A	42-inch corrugated steel culvert with stoplogs and slide gate
Bull Run Creek (Main water control structure)	N/A	N/A	Diversion considered in-stream impoundment of Bull Run Creek tributary of CDA River	N/A	42-inch corrugated steel culvert with stoplogs and slide gate

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: the beneficial use of water constitutes in-stream or on-stream impoundment of water and doesn't receive a diversion rate for licensing purposes.

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses: See attached Pond Analysis Worksheet.

G. NARRATIVE/REMARKS/COMMENTS

I conducted the beneficial use field examination on 5/13/2025 with David Van de Riet – IDFG Senior Wildlife Technician, which showed Blackrock Gulch and Bull Run Creek water being impounded for Wildlife Storage beneficial use as part of the Black Rock Slough Enhancement Project. This water right incorporates on-stream impoundment within a wetland with flow channels from each water source being impounded by water control structure(s) and there is no diversion rate associated with this water right filing.

The Permit contemplated two PODs, one for each water source, but during the field exam I observed three separate water control structures, with two being developed side by side. I recommended an Amendment of Permit (for licensing purposes) be filed by the Right Holder to add a 3rd POD prior to licensing. The Department received the signed Application for Amendment (For Licensing Purposes) on 5/29/2025 along with the \$100.00 filing fee invoice No45430 which adds a second BlackRock Gulch source POD in the SW1/4NE1/4, Sec. 7, Twp 48N, Rge 01W which accounts for the 24-inch Agri drain culvert POD.

The west POD, 24-inch Agri drain culvert with valve allows Black Rock Gulch flow through the wetland to be impounded or released down stream a short distance where the channel's confluence with the Coeur D'Alene River (CDA River). During the exam I collected photographs of the POD and during licensing review I reviewed ArcMap DRG layer information to validate that Blackrock Gulch historically flowed along the western extent of the drainage entering the slough and it's reasonable to account for flows impounded by the 24-inch Agri drain control structure using the same source although both water sources on the Permit co-mingle to a certain extent in the slough.

Approximately 2,000 ft NE of the west POD location IDFG has constructed the main water control structure(s) where a bike path bridge crossed a portion of the historic slough. Two 42-inch corrugated culverts each with fabricated gates using stop logs serve as the POD, one for each water source being impounded in the slough. As-built, the western POD accounting for Blackrock Gulch impoundment is set 2.25-ft lower in elevation than the eastern POD that impounds Bull Run Creek water. Each POD's slide gate is lockable. I collected photographs during the field exam and during licensing review I used ArcMap software to assign all three PODs based on GPS data.

The Wildlife POU consists of historic wetland Blackrock Slough that are bounded on the east by a roadway dike that intersects Bull Run Lake from which Bull Run Creek inflows to the slough. With project development complete, The Right Holder can impound seasonal flows from the Gulch and Creek and hold them longer in the season and recharge in the late fall & winter months. Wildlife use includes habitat for numerous terrestrial species and is used by IDFG as a wildlife-based preserve for waterfowl hunting. During the exam I questioned whether water from the CDA River during high flows are impounded and David explained that the control structures are closed at that time to prevent inflow of river water which holds contaminants and sediment; slough water from the Gulch and Creek are impounded for late releases throughout the season as water levels are managed for the slough.

I collected several photographs of the slough and drove the dike along the eastern extent of the POU to validate the Bull Run Creek inflow to the slough. During licensing review, I used ArcMap to designate the Wildlife POU, which for illustrative purposes consists of 340 acres and includes the historic wetland boundaries using DRG Layer imagery and Year 2023 aerial imagery wetland area. The Permit was approved contemplating 326 acres of active surface acreage for the storage impoundment POU area to derive an annual volume and I'm unable to recommend for licensing more than the volume authorized on the permit. Considering seasonal recharge from snowmelt and surface runoff, both of which are not regulated by the Department, the volume contemplated from 326 acres of the slough is reasonable and it is also reasonable to link any early season peak runoff periods as being non-regulated capture of surface runoff.

During the exam David and I evaluated the operating elevation levels for impoundment of Wildlife Storage water in the slough. The typical operating elevation profile is 2129 – 2130 ft but the base elevation level was set at 2128 ft and maximum operating level equals 2133 ft. Using the base and maximum values I have used a 5 ft depth to evaluate storage volume toward licensing this Permit. Using the Pond analysis worksheet the initial fill equals 1630 af and I've not calculated any seepage loss based on the wetland environment being equivalent to having a ground water source. The evaporation

loss was found to be variable depending on which ET IDWR monitored regional statistics for precipitation deficit(s). I evaluated the St. Maries region and the Kellog region of the state because the POU falls close to Kellog but has similar topography to the St. Maries region.

During permit approval a pond analysis worksheet derived a total volume of 2092.4 af but designated an evaporation loss rate of 462.4 af. During licensing review my pond analysis worksheet calculations derived a total volume of 1993.9 af considering an evaporative loss rate of 363.9 af. In both instances the initial fill was consistent at 1630 af respectively, but I was unable to duplicate the higher evaporation loss rates.

I evaluated the pond analysis worksheet (see attached with notes) using ET IDWR evaporation rate loss data configured for "Wetlands – Large Stands" as well as "Wetlands – Narrow Stands" and found the Estimated Evaporation Loss (AF) to be variable depending on end user selection. The POU lies within historic wetlands designated Wetland_Type = Lake and Wetland_Type = Freshwater Emergent Wetland. As the POU is within a historic wetland I believe characterizing it in some fashion as a wetland environment in ET IDWR is reasonable, but at the same time there are no large or narrow stands of tree canopy in a majority of the POU.

I've concluded that the evaporation loss rate may be variable falling within my initial assessment of 363.9 af for shallow open water ponds and streams designation to the 604.7 af for wetlands large stand designation. Based on this information, using the storage volume of 1630 af initial fill + $[(363.9 \text{ af} + 604.7 \text{ af})/2]$ estimated average evaporation loss = 2114.3 af. This total volume is slightly higher than the Permit authorized 2090 af but supports the physical environment following development of the Blackrock Gulch Slough Enhancement Project. I'm recommending **2090 af** for licensing this Permit which maintains an average evaporation loss of 460 af which is comparable to my calculated average of 484 af assuming the above calculation.

During licensing review, I removed condition 26A based on compliance by the Right Holder. I removed condition 220 based on verbal directive from the Deputy Director Shelley Keen not to have a volume and surface area description-based condition on the license approval. All other conditions on the Permit shall be carried forward to licensing. The Blackrock Gulch water control structure was developed 2.25 feet lower in elevation to ensure if releases are required to satisfy downstream senior MSF Right 94-7341's in-river flow this can be accomplished. Additionally, this enables the Right Holder to conduct releases to the lowest elevation of the slough to perform maintenance if required. There are no overlapping water right concerns toward licensing Permit 94-9620.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Annual Volume</u>
WILDLIFE STORAGE	01/01 to 12/31	2,090.0 AF

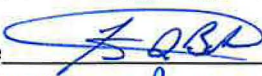
Totals: 2,090.0 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☒ **Add P.D. as reflected above** ☐ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

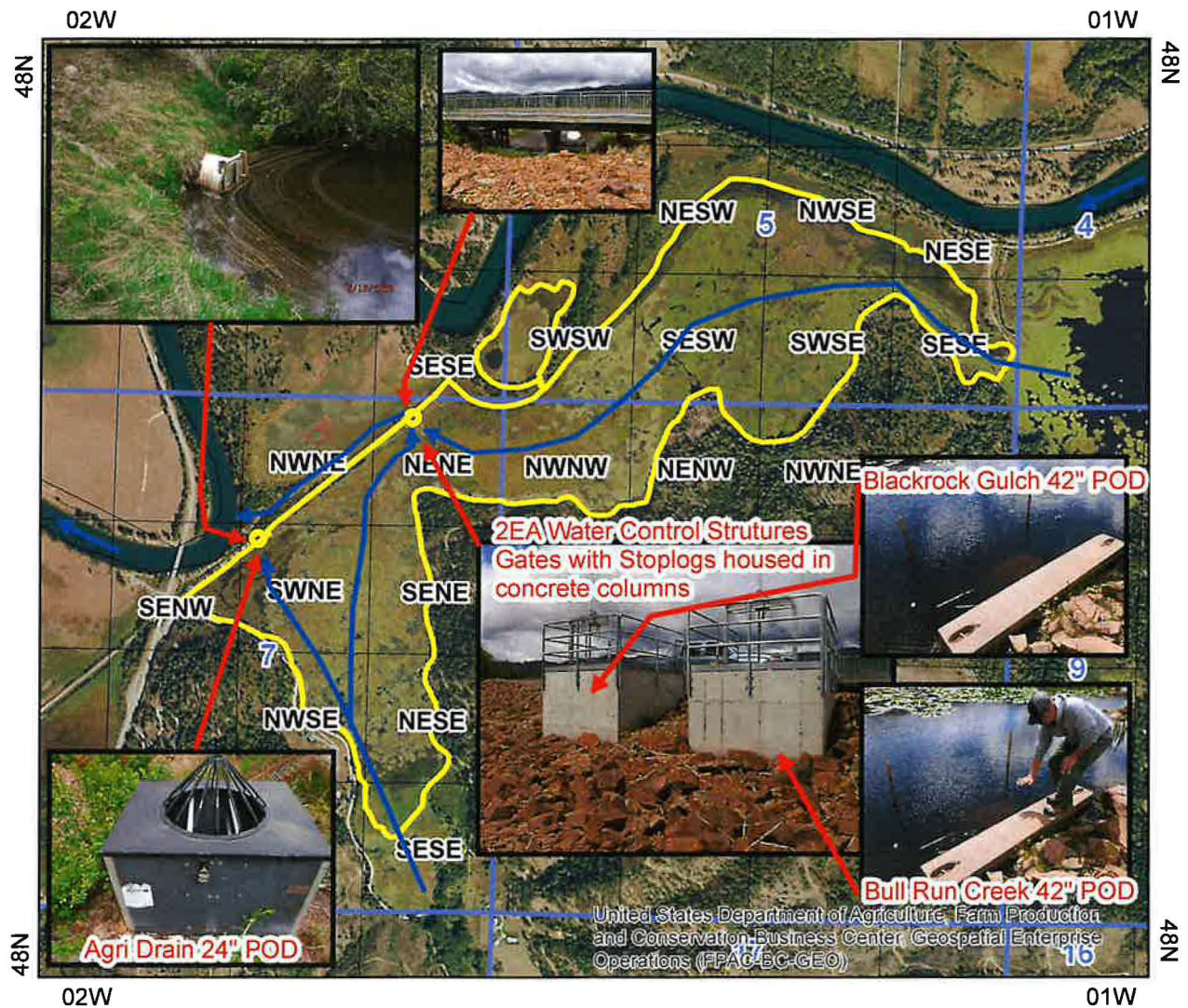
I. AUTHENTICATION Luke Bates – Sr Water Resource Agent

Field Examiner's Name  Date 1/9/2026

Reviewer Michelle Richman Date 7/23/2026

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-9620

This map depicts the WILDLIFE STORAGE system diagram.



- Place Of Use Boundary
- Point of Diversion
- Townships
- PLS Sections
- Quarter Quarters

Total Storage Calculations

FILE NUMBER	94-9620
REVIEWER	Luke Bates
DATE	1/7/2026

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

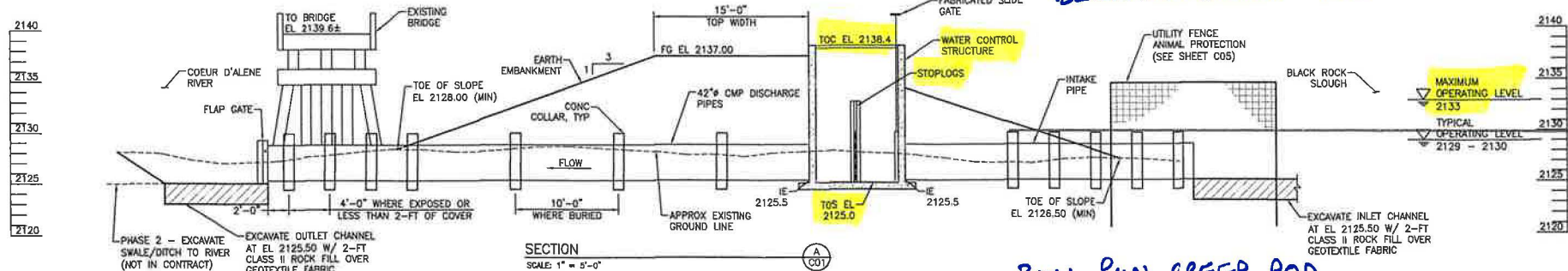
User Input
Calculated value
Formula Explanations

Surface Area (AC.)	326	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	5	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	1630	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.

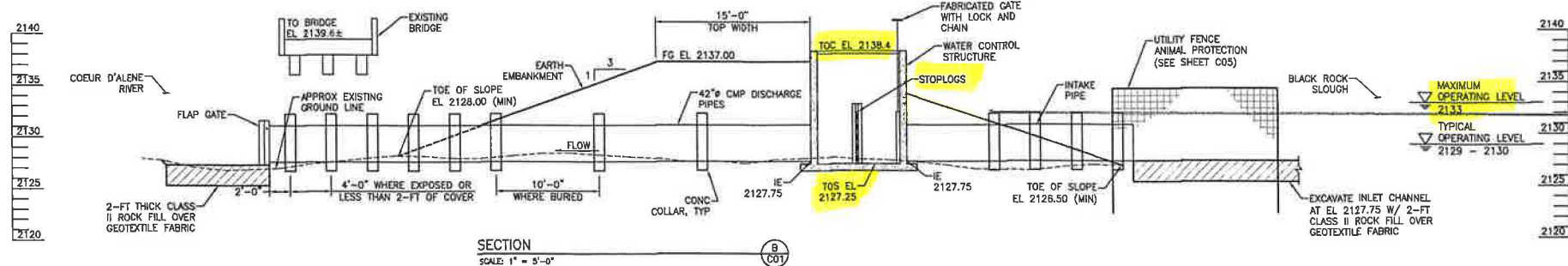
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	363.9	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	1993.9	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

- 363.9 af Evaporation Loss based on "open water - shallow systems (ponds/streams)"
 → apply Avg of two for Licensing purposes
 → 604.7 af Evaporation Loss based on "Wetlands - Large Stands"
 ↳ using this rate results in Total Volume = 2234.7 af.
 → 895.9 af Evaporation Loss based on "Wetlands - Narrow Stands"
 ↳ using this rate results in Total Volume = 2525.9 af.

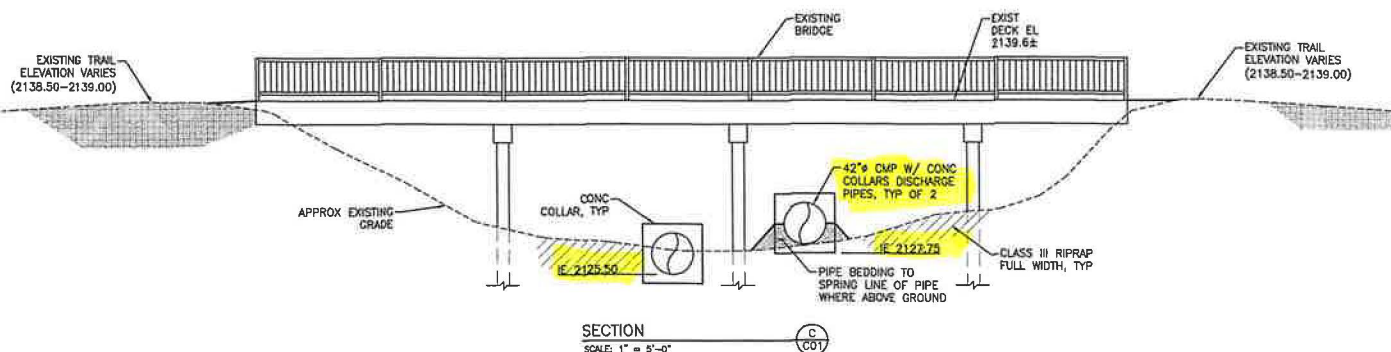
Blackrock Gulch POD



Bull Run CREG POD



- NOTES:
1. SEE SECTION E ON C03 FOR TYPICAL EMBANKMENT SECTION.
 2. SOIL EMBANKMENT MATERIAL SHALL BE CERTIFIED CLEAN MATERIAL OBTAINED FROM THE STOCKPILE AT THE IDFG ROBINSON CREEK PROJECT SITE LOCATED APPROXIMATELY 5 MILES AWAY.



REV	DATE	BY	DESCRIPTION
0	8/14/19	CCB	ISSUED FOR CONSTRUCTION

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



River Structures
CONSULTING

PO BOX 1643 | BOISE, ID 83701 | (208) 918-0627

DUCKS
UNLIMITED



IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT

WCS SECTIONS 1

DESIGNED C. BOYD
DRAWN W. ZIMMERMAN
CHECKED W. ZIMMERMAN
ISSUED DATE 8/14/19

DRAWING
C02
SCALE: AS NOTED

DUCKS UNLIMITED

DFG 2018-121

BLACK ROCK SLOUGH ENHANCEMENT PROJECT

ISSUED FOR CONSTRUCTION



DWG	SHEET NAME
G01	COVER SHEET & SHEET INDEX
G02	SITE ACCESS PLAN & NOTES
G03	GENERAL CIVIL & ESC NOTES
C01	WCS PLAN
C02	WCS SECTIONS 1
C03	WCS SECTIONS 2
C04	WCS DETAILS 1
C05	WCS ANNUAL PROTECTION FENCE
C11	WATER CONTROL STRUCTURE PLAN AND SECTIONS
C12	WATER CONTROL STRUCTURE DETAILS 1
C21	BLACK ROCK POND OUTLET PLAN & PROFILE
C31	WEST PIPE PLAN & PROFILE

VICINITY MAP

NTS



AREA MAP

NTS



PROJECT SITE PLAN

NTS



REV	DATE	BY	DESCRIPTION
0	8/14/19	CCB	ISSUED FOR CONSTRUCTION

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



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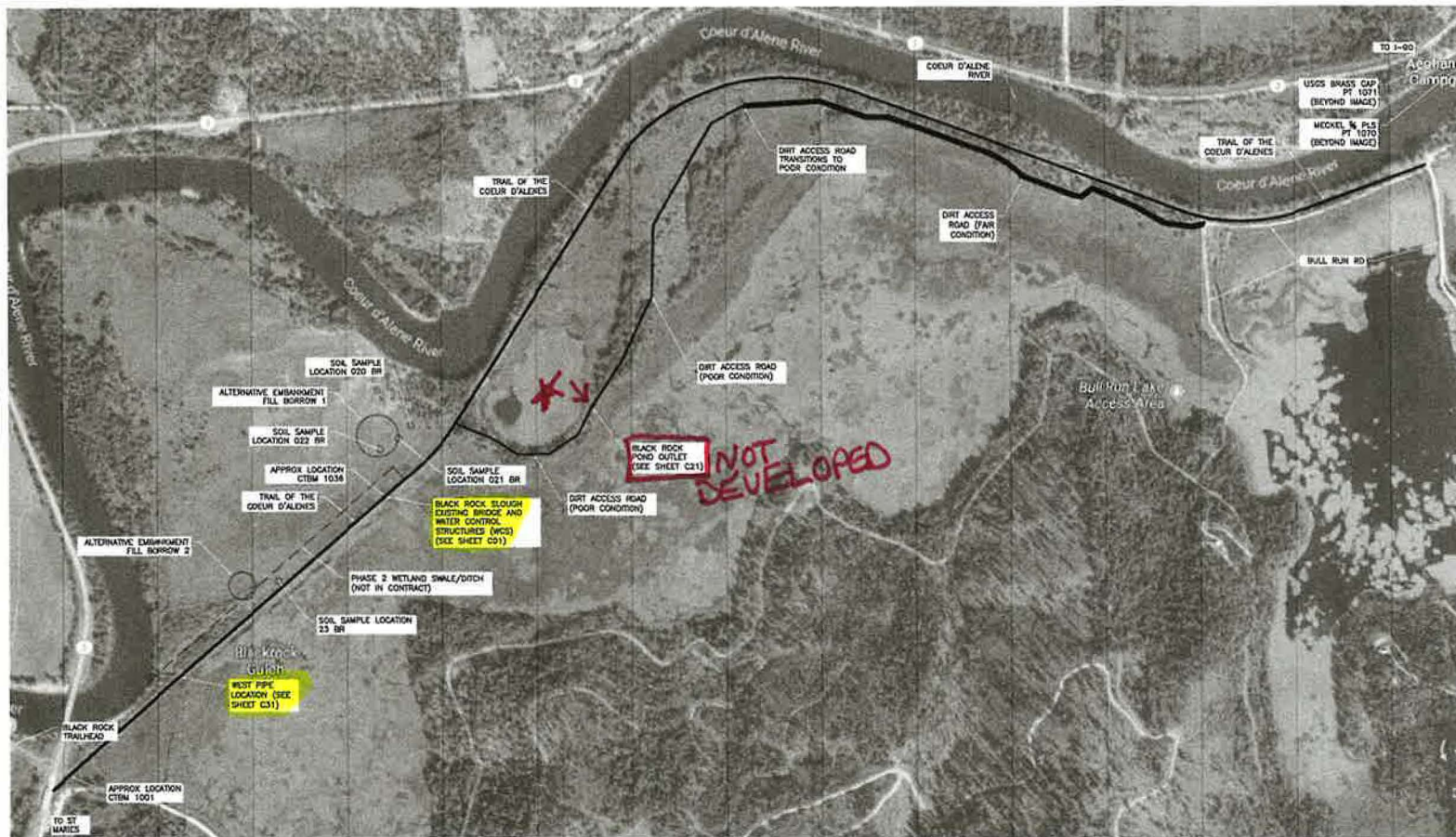


IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT

COVER SHEET & SHEET INDEX
DFG 2018-121

DESIGNED: C. BOYD
DRAWN: W. ZIMMERMAN
CHECKED: W. ZIMMERMAN
ISSUED DATE: 8/14/19

DRAWING
G01
SCALE: AS NOTED



- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS FOR ACCESS ROADS AND TRAILS. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CHANGE OF CONDITIONS.
 2. THE CONTRACTOR IS ALLOWED TO ACCESS THE PROJECT LOCATION VIA EITHER THE TRAIL OF THE COEUR D'ALENES OR THE DIRT ROAD. THE CONTRACTOR SHALL USE RUBBER TIED VEHICLES WHILE ON THE TRAIL OF THE COEUR D'ALENES. IF TRACKED EQUIPMENT IS REQUIRED, MATS MUST BE PLACED TO PROTECT THE TRAIL SURFACE.
 3. THE EXISTING DIRT ROAD TRANSITIONS FROM A RELATIVELY GOOD CONDITION DIRT ROAD TO A POOR CONDITION DIRT ROAD AT THE LOCATION INDICATED, APPROXIMATELY 1.2 MILES FROM BULL RUN ROAD. THE POOR CONDITION LASTS FOR APPROXIMATELY 0.7 MILES BEFORE THE DIRT ROAD INTERSECTS THE TRAIL OF THE COEUR D'ALENES. THE CONTRACTOR IS RESPONSIBLE FOR IMPROVING THE DIRT ROAD AS REQUIRED FOR ACCESS TO COMPLETE THE PROJECT.
 4. THE CONTRACTOR SHALL CLEAN ALL VEHICLES COMING OFF THE DIRT ACCESS ROAD ONTO THE TRAIL OF THE COEUR D'ALENES. NO DIRT OR GRAVEL TRACKING ONTO THE TRAIL IS PERMITTED.
 5. SEE SHEET C01 FOR ADDITIONAL NOTES.
 6. PRIMARY EMBANKMENT FILL SOURCE LOCATED AT IDFG ROBINSON CREEK PROJECT: N47.488931', E-116.552171' (NOT SHOWN ON SHEET).
 7. THREE ALTERNATIVE EMBANKMENT FILL BORROW LOCATIONS SHOWN ON THIS SHEET CAN BE USED WITH THE ENGINEER'S APPROVAL. THE FULL EXTENT OF THESE BORROW SOURCES IS UNKNOWN AND CONTRACTOR SHALL CONFIRM EXTENT WITH ADDITIONAL TEST HOLE/PITS.

PROJECT SITE PLAN
N75



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CONSTRUCTION NOTES:

1. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED IN THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL KEEP THE JOB SITE CLEAN AND HAZARD FREE. CONTRACTOR SHALL DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH THROUGHOUT THE DURATION OF THE WORK. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.
3. CONSTRUCTION STAGING AND REFUELING AREAS SHALL BE A MINIMUM OF 150 FT AWAY FROM SURFACE WATERS OR PROVIDE A REFUELING CONTAINMENT AREA MEETING ALL IDFG AND PERMITTING REQUIREMENTS. COORDINATE APPROPRIATE STAGING AREAS WITH LANDOWNER.
4. CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 7:00 A.M. AND 6:30 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM THE OWNER.
5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.
6. THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, ROADWAYS, DRAINAGE WAYS, PRIVATE BRIDGES, CULVERTS, AND VEGETATION UNTIL SUCH ITEMS ARE TO BE DISTURBED OR REMOVED AS INDICATED ON THE CONTRACT DOCUMENTS.
7. NOTES AND DETAILS ON THE PLANS SHALL TAKE PRECEDENCE OVER GENERAL NOTES HEREIN.
8. DIMENSION CALLOUTS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE PLANS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS STORED ON-SITE.

GENERAL NOTES:

1. CONTRACTOR SHALL LOCATE ANY UTILITIES ON-SITE PRIOR TO CONSTRUCTION. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTACT DGLINE AT 1-800-342-1585.
2. THE "OWNER" OF THE PROJECT, AS REFERENCED IN THESE NOTES, IS IDAHO FISH AND GAME.
3. UPON COMPLETION OF THE PROJECT, ALL AREAS USED BY CONTRACTOR SHALL BE PROPERLY CLEARED OF ALL TEMPORARY STRUCTURES, RUBBISH, AND WASTE MATERIALS AND PROPERLY GRADED TO DRAIN AND BLEND WITH THE SURROUNDING TERRAIN.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY ITEMS DAMAGED DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL ONLY REMOVE TREES AND SHRUBS THAT ARE ABSOLUTELY NECESSARY FOR THE EXECUTION OF THE WORK AND SHALL MAKE ALL EFFORTS TO MINIMIZE TREE REMOVAL. IN THE EVENT THAT A TREE OR SHRUB OUTSIDE THE IMMEDIATE WORK AREAS MUST BE REMOVED OR DAMAGED, THE CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE OWNER.
6. ANY ORGANIC MATERIAL RESULTING FROM TREE OR BRUSH REMOVAL SHALL NOT BE USED FOR BACKFILL MATERIAL.
7. CONTRACTOR SHALL SALVAGE TOPSOIL AND STOCKPILE FOR RE-USE. UPPER 8" MIN. OF ALL EXCAVATIONS SHALL BE BACKFILLED WITH STOCKPILED TOPSOIL. FINISHED SURFACE SHALL BE GRADED TO MATCH ADJACENT ELEVATIONS, RAKED TO BREAK UP LARGE CLODS AND EXCESSIVE COMPACTION, AND FREE FROM DEBRIS AND ROCKS LARGER THAN 4 INCHES.
8. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS IN ACCORDANCE WITH THE PROVISIONS OUTLINED BY THE PROJECT CONTRACT AND SPECIFICATIONS.
9. THE PROJECT SITE AND ADJACENT AREAS CONTAIN SENSITIVE HABITAT AREAS FOR PROTECTED WILDLIFE, AND MAY INCLUDE ENDANGERED SPECIES. THE CONTRACTOR SHALL PROTECT WILDLIFE AND WATER QUALITY, AND MINIMIZE POSSIBLE AIR, WATERWAY, AND SUBSOIL CONTAMINATION OR POLLUTION OR OTHER UNDESIRABLE EFFECTS.
10. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS OR IN THE SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
11. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THE DRAWINGS, HE SHALL NOTIFY THE CONSTRUCTION MANAGER BEFORE PROCEEDING WITH CONSTRUCTION.

TRAIL USE NOTES:

1. THE CONTRACTOR MAY USE THE TRAIL OF THE COEUR D'ALENE SUBJECT TO THE FOLLOWING CONDITIONS:
 - EQUIPMENT PROPOSED FOR TRANSPORT OR TRAVEL ON THE TRAIL SHALL BE SUBMITTED AND APPROVED BY IDFG PRIOR TO STARTING WORK.
 - THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO MINIMIZE DAMAGE TO THE TRAIL.
 - THE CONTRACTOR SHALL ACCOMMODATE OTHER TRAIL USERS, INCLUDING PEDESTRIANS AND BICYCLISTS.
 - CONTACT IDFG FOR SPECIFIC TRAIL USE REQUIREMENTS.
 - CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE TRAIL THAT THEY CAUSE.

SURVEY NOTES:

1. SURVEY CONTROL AS ESTABLISHED BY USING TWO 5-HOUR GPS STATIC OBSERVATIONS PROCESSED BY THE NATIONAL GEODETIC SURVEY (NGS) ONLINE POSITIONING USER SERVICE (OPUS).

HORIZONTAL DATUM = IDAHO STATE PLANE WEST ZONE, NAD83, US FEET
VERTICAL DATUM = NAVD88
GEOID MODEL: GEOID12B.

ACTUAL CONTROL ONSITE OR NEARBY

DU PT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1001	2135583.824	2435737.49	2164.03	CEM BASE REBAR WITH YELLOW CAP
1036	2137638.494	2438098.85	2139.28	CEM PK NAIL NW BRIDGE
1071	2140976.24	2448090.236	2152.04	USGS BRASS CAP GAGING STATION
1070	2140971.184	2448059.904	2150.22	MECKEL 5/8 PLS 6374 2250/14058

PERMIT NOTES:

1. EVERY REASONABLE EFFORT SHALL BE MADE TO CONDUCT THE ACTIVITIES SHOWN IN THESE PLANS IN A MANNER THAT MINIMIZES THE ADVERSE IMPACT ON WATER QUALITY, FISH AND WILDLIFE, AND THE NATURAL ENVIRONMENT.
2. ALL WORK SHALL BE IN COMPLIANCE WITH PERMIT CONDITIONS ISSUED BY VARIOUS REGULATORY AGENCIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE COPIES OF ALL PERMITS ON THE JOB SITE AND UNDERSTAND AND COMPLY WITH ALL PERMIT CONDITIONS.
3. ALL ACTIVITIES THAT INVOLVE WORK ADJACENT TO OR WITHIN THE WETTED CHANNEL SHALL, AT ALL TIMES, REMAIN CONSISTENT WITH ALL APPLICABLE WATER QUALITY STANDARDS, EFFLUENT LIMITATION AND STANDARDS OF PERFORMANCE, PROHIBITIONS, PRETREATMENT STANDARDS, AND MANAGEMENT PRACTICES ESTABLISHED PURSUANT TO THE CLEAN WATER ACT OR PURSUANT TO APPLICABLE STATE AND LOCAL LAW.
4. IF AT ANY TIME, AS A RESULT OF PROJECT ACTIVITIES, FISH ARE OBSERVED IN DISTRESS, A FISH KILL OCCURS, OR WATER QUALITY PROBLEMS DEVELOP (INCLUDING EQUIPMENT LEAKS OR SPILLS), OPERATIONS SHALL CEASE AND THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE KNOWLEDGEABLE ABOUT THE PROJECT SPECIFICATIONS AND PERMITS. ALL WORK SHALL BE COMPLETED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL HAVE COPIES OF THE MOST CURRENT APPROVED PLANS, SPECIFICATIONS AND PERMIT CONDITIONS ON SITE DURING ALL WORK OPERATIONS.

EROSION, SEDIMENT CONTROL, AND WATER MANAGEMENT NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL TEMPORARY EROSION CONTROL MEASURES. THE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PERFORMANCE OF THE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT.
2. A SEDIMENT AND EROSION CONTROL PLAN WILL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL BY OWNER AND/OR THE ENGINEER BEFORE ANY CONSTRUCTION MAY BEGIN. THE SEDIMENT AND EROSION CONTROL PLAN WILL IDENTIFY BEST MANAGEMENT PRACTICES TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
3. ACTIVITIES SHALL BE DESIGNED AND CONSTRUCTED TO AVOID AND MINIMIZE ADVERSE IMPACTS TO WATERS OF THE UNITED STATES TO THE MAXIMUM EXTENT PRACTICAL THROUGH THE USE OF PRACTICAL ALTERNATIVES. ALTERNATIVES THAT SHALL BE CONSIDERED INCLUDE THOSE THAT MINIMIZE THE NUMBER AND EXTENT OF IN-WATER WORK AND EQUIPMENT CROSSINGS OF WETTED CHANNELS.
4. AT NO TIME SHALL SEDIMENT-LADEN WATER BE DISCHARGED OR PUMPED DIRECTLY INTO THE ADJACENT RIVERS, STREAMS, OR WETLANDS. WATER SHALL BE DISCHARGED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE PROJECT PERMITS AND / OR SPECIFICATIONS.
5. IF HIGH WATER LEVEL CONDITIONS THAT CAUSE SITUATION OR EROSION ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL STOP UNTIL THE WATER LEVEL SUBSIDES.
6. CONTRACTOR SHALL LIMIT MACHINERY MOVEMENT TO CONSTRUCTION AREAS DEFINED ON SITE PLAN OR IDENTIFIED AS ACCEPTABLE BY THE ENGINEER OR OWNER.
7. ALL EXTERNAL GREASE AND OIL SHALL BE PRESSURE-WASHED OFF THE EQUIPMENT PRIOR TO TRANSPORT TO THE SITE.
8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO PETROLEUM PRODUCTS, HYDRAULIC FLUID, SEDIMENTS, SEDIMENT-LADEN WATER, CHEMICALS, OR ANY OTHER TOXIC OR DELETERIOUS MATERIALS ARE ALLOWED TO ENTER OR LEACH INTO ADJACENT RIVERS, STREAMS, OR WETLANDS.
9. THE CONTRACTOR SHALL HAVE AN EMERGENCY SPILL KIT ON-SITE AT ALL TIMES.
10. FOLLOWING CONSTRUCTION, EQUIPMENT AND EXCESS SUPPLIES WILL BE REMOVED AND THE WORK AREA WILL BE CLEANED.
11. THE PROJECT DISTURBANCE IS APPROXIMATELY:
 - BLACK ROCK SLOUGH WCS: 0.5 ACRES
 - BLACK ROCK POND OUTLET: 0.1 ACRES
 - WEST PIPE OUTLET: 0.05 ACRES
12. PROJECT RE-SEEDING WILL BE BY CONTRACTOR PER THE SPECIFICATIONS. SEED MIX TO BE SPECIFIED BY IDFG.

OWNER OPERATING NOTES:

1. THE WCS PIPE, PARTICULARLY THE LOWER PIPE, MAY BE PRONE TO DEPOSITION AND PLUGGING. OWNER SHALL CLEAN OUT OR USE HIGH SLOUGH FLOWS TO PERIODICALLY FLUSH CULVERTS.
2. TRAIL/RAILROAD EMBANKMENT HAS NOT BEEN ANALYZED OR EVALUATED BY DUCKS UNLIMITED OR RIVER STRUCTURES CONSULTING, INC., FOR USE AS A LEVEE AND WERE NOT WITHIN THE AUTHORIZED DESIGN SCOPE. OWNER SHALL MONITOR THE EMBANKMENT FOR SIGNS OF SEEPAGE OR INSTABILITY DURING RISING OR HIGH RIVER FLOWS.

DESIGN CRITERIA:

COEUR D'ALENE RIVER:	
SUMMER WSEL (ASSUMED)	2129.608 FT
WINTER WSEL (ASSUMED)	<2123.60 FT
TRAIL OVERTOPPING ELEVATION (EXISTING)	2138.508 FT
BLACK ROCK SLOUGH WCS:	
AUXILIARY SPILLWAY CREST ELEVATION	2137.00 FT
AUXILIARY SPILLWAY CAPACITY AT TRAIL OVERTOPPING	258 CFS
CULVERT CAPACITY (EITHER DIRECTION)	180 CFS
TYPICAL WETLAND OPERATING RANGE	2128 - 2130 FT
MAXIMUM WETLAND OPERATING HEIGHT (TOP STOPLOG CHANNELS)	2133.00 FT

DATE	ISSUED FOR CONSTRUCTION	DESCRIPTION
8/14/19	CCB	ISSUED FOR CONSTRUCTION

WARNING



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.



River Structures
CONSULTING

PO BOX 1643 | BOISE, ID 83701 | (208) 918-0627



DUCKS
UNLIMITED



IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT

GENERAL CIVIL & ESC NOTES

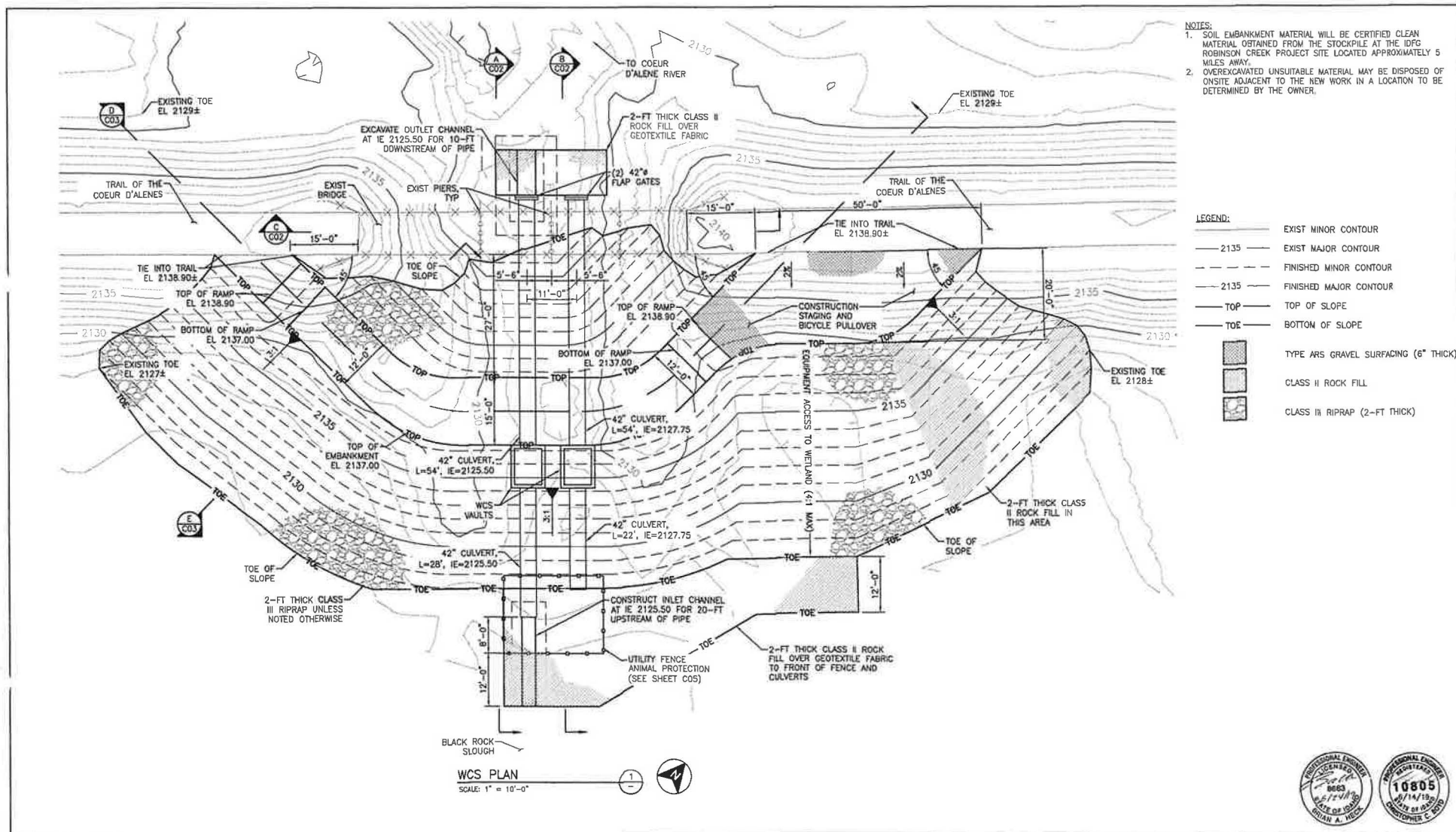


DESIGNED BY: C. BOYD
DRAWN BY: ZIMMERMAN
CHECKED BY: ZIMMERMAN
ISSUED DATE: 8/14/19

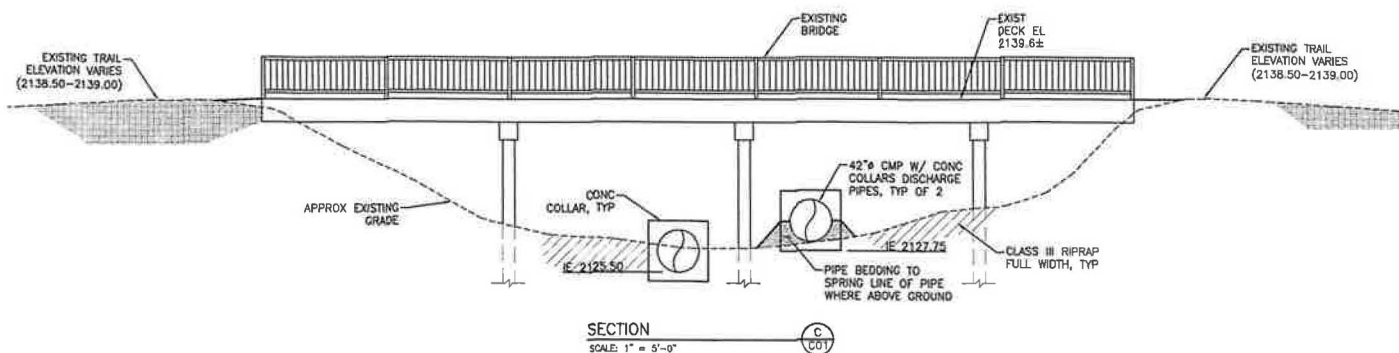
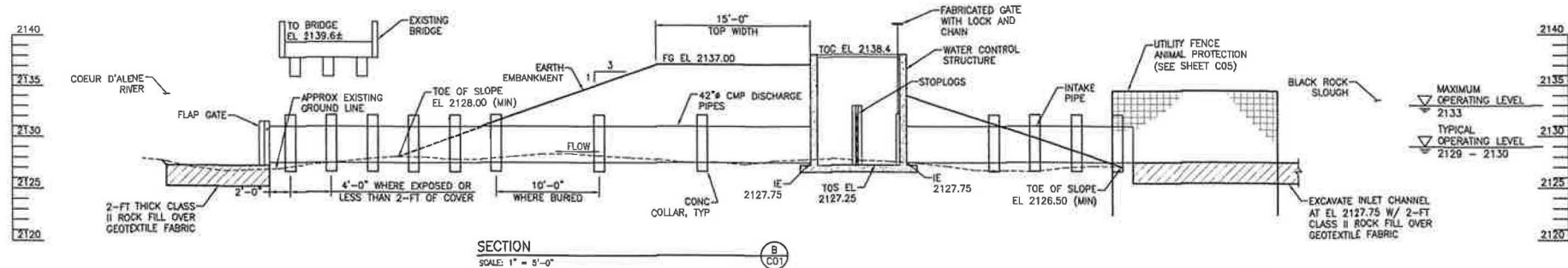
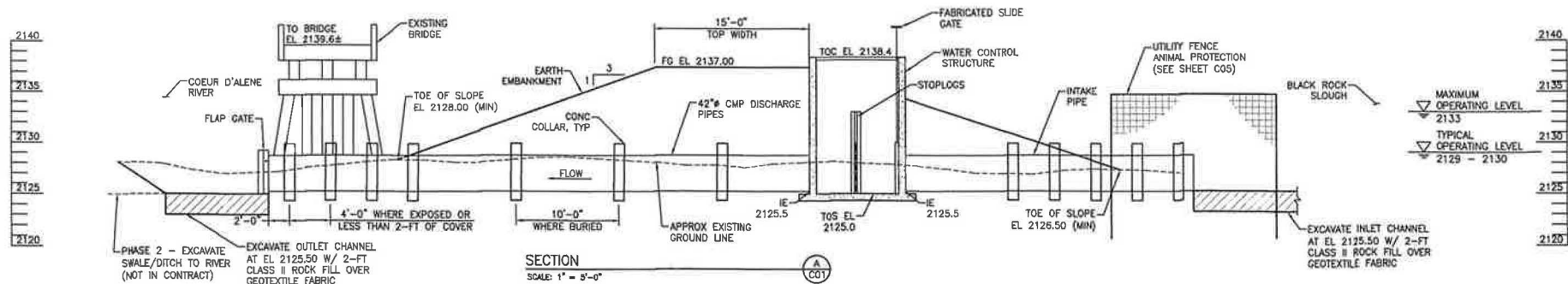
DRAWING

GC1

SCALE: AS NOTED



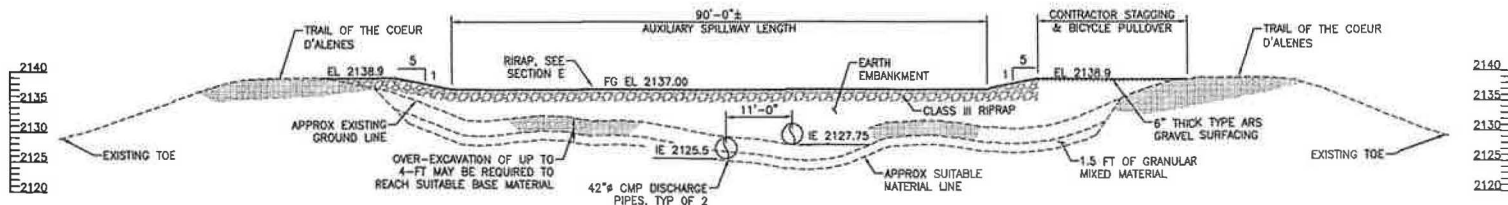
WARNING IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE 0 9/14/19 CCB ISSUED FOR CONSTRUCTION REV DATE BY DESCRIPTION	River Structures CONSULTING P.O. BOX 1643 BOISE, ID 83701 (208) 918-0627	DUCKS UNLIMITED IDAHO DEPARTMENT OF FISH & GAME	IDAHO DEPARTMENT OF FISH & GAME BLACK ROCK SLOUGH ENHANCEMENT PROJECT WCS PLAN	DESIGNED C. BOYD DRAWN W. ZIMMERMAN CHECKED W. ZIMMERMAN ISSUED DATE 6/14/19 DRAWING C01 SCALE: AS NOTED
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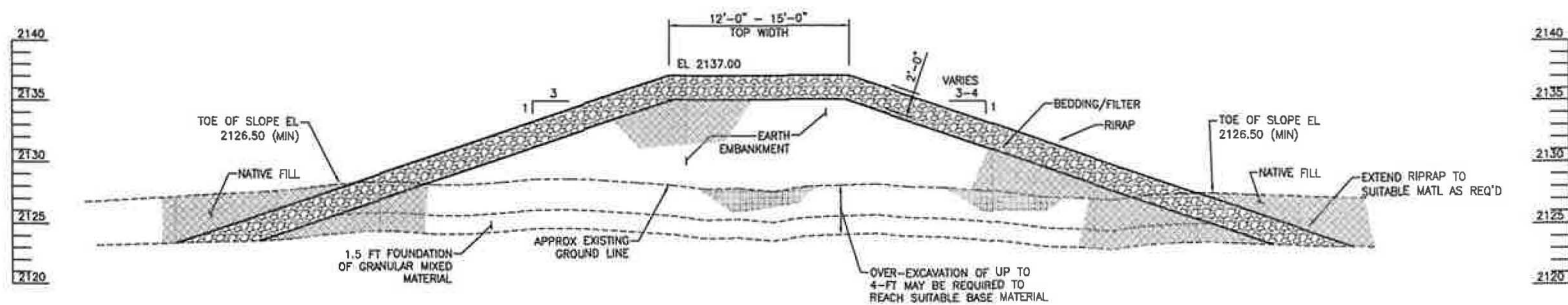
- NOTES:
1. SEE SECTION E ON C03 FOR TYPICAL EMBANKMENT SECTION.
 2. SOIL EMBANKMENT MATERIAL SHALL BE CERTIFIED CLEAN MATERIAL OBTAINED FROM THE STOCKPILE AT THE IDFG ROBINSON CREEK PROJECT SITE LOCATED APPROXIMATELY 5 MILES AWAY.



0 8/14/19 CCM ISSUED FOR CONSTRUCTION REV. DATE BY DESCRIPTION	WARNING IF THIS BAR DOES NOT MEASURE 1" THIS DRAWING IS NOT TO SCALE. River Structures CONSULTING PO BOX 1643 BOISE, ID 83701 (208) 918-0627	DUCKS UNLIMITED IDAHO DEPARTMENT OF FISH & GAME	IDAHO DEPARTMENT OF FISH & GAME BLACK ROCK SLOUGH ENHANCEMENT PROJECT WCS SECTIONS 1	DESIGNED C. BOYD DRAWN W. ZIMMERMAN CHECKED W. ZIMMERMAN ISSUED DATE 8/14/19 DRAWING C02 SCALE: AS NOTED
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SECTION
SCALE: 1" = 10'-0"



SECTION
SCALE: 1" = 5'-0"

NOTES:
1. SEE EARTHWORK SPECIFICATION FOR MATERIAL GRADATIONS AND REQUIREMENTS.

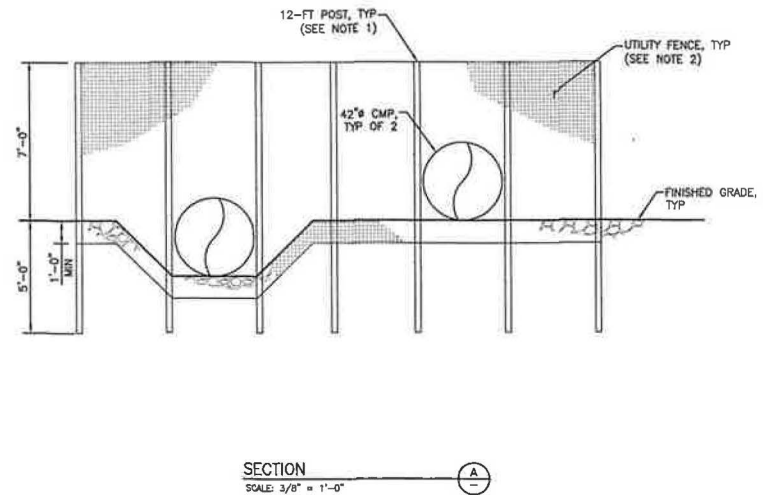
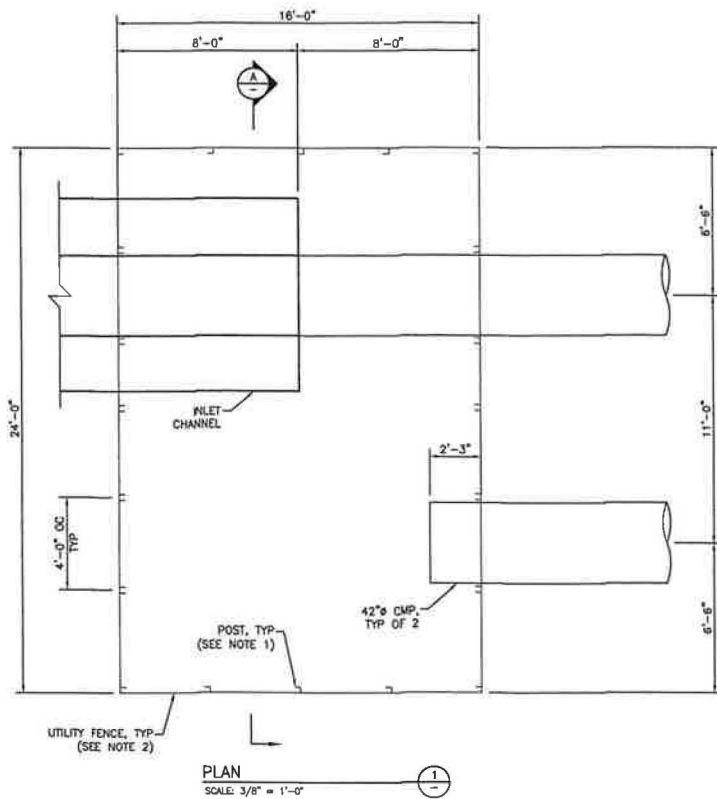
LEGEND:

- EXISTING SOIL
- RIPRAP
- RIPRAP BEDDING/FILTER
- SUITABLE EARTH FILL



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0 6/14/19 CCB ISSUED FOR CONSTRUCTION REV. DATE BY DESCRIPTION WARNING  1/2" IF THIS BAR DOES NOT MEASURE 1" THIS DRAWING IS NOT TO SCALE.  River Structures CONSULTING PO BOX 1643 BOISE, ID 83701 (208) 918-0627  DUCKS UNLIMITED  IDAHO FISH & GAME			IDAHO DEPARTMENT OF FISH & GAME BLACK ROCK SLOUGH ENHANCEMENT PROJECT WCS DETAILS 1		DESIGNED <u>G. BOYO</u> DRAWN <u>W. ZIMMERMAN</u> CHECKED <u>W. ZIMMERMAN</u> ISSUED DATE <u>6/14/19</u>	DRAWING C04 SCALE: AS NOTED
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- NOTES:
1. POSTS SHALL BE STEEL 3 LB/FT U-CHANNEL POSTS, GREEN IN COLOR OR APPROVED EQUAL. POSTS SHALL BE 12'-FT TALL.
 2. UTILITY FENCE SHALL BE 8'-FT TALL WITH 4" SQUARE OPENINGS, AND CONSTRUCTED FROM GALVANIZED 6 GAUGE WIRE. OVERLAP/SPLICE FENCING AT LOWER CHANNEL AS REQUIRED TO MAINTAIN 1'-FT MINIMUM EMBEDMENT.

REV.	DATE	BY	DESCRIPTION
0	9/14/19	CCB	ISSUED FOR CONSTRUCTION

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

River Structures
CONSULTING
PO BOX 1643 | BOISE, ID 83701 | (208) 918-0627

DUCKS
UNLIMITED

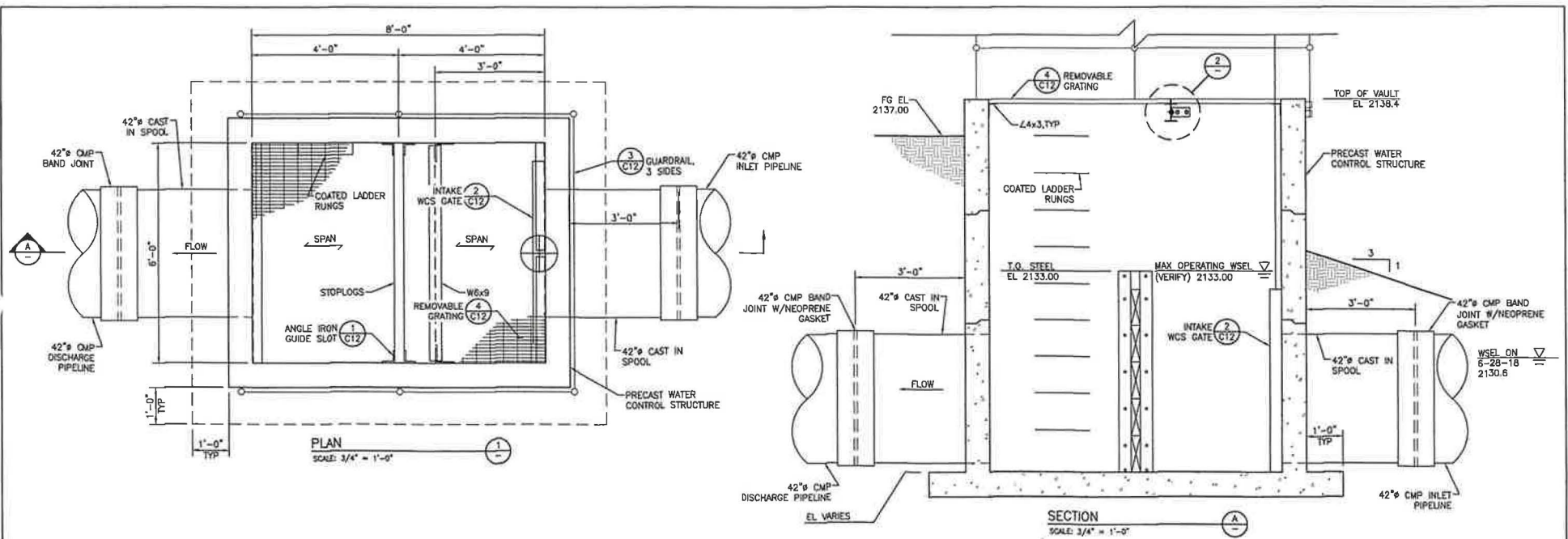


IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT
WCS
ANIMAL PROTECTION FENCE

DESIGNED: C. BOYD
DRAWN: W. ZIMMERMAN
CHECKED: W. ZIMMERMAN
ISSUED DATE: 9/14/19

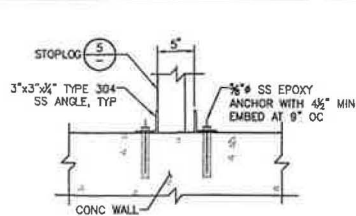


DRAWING
C05
SCALE: AS NOTED

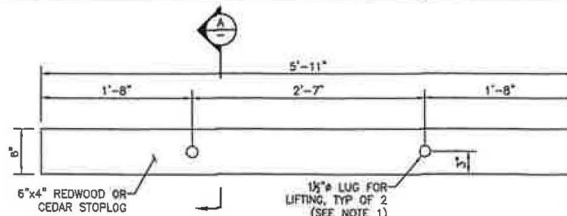


WARNING 1/2" IF THIS SIGN DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.	River Structures CONSULTING PO BOX 1643 BOISE, ID 83701 (208) 918-0627	DUCKS UNLIMITED	IDAHO DEPARTMENT OF FISH & GAME BLACK ROCK SLOUGH ENHANCEMENT PROJECT WATER CONTROL STRUCTURE PLAN AND SECTIONS	DESIGNED: C. BOYD DRAWN: W. ZIMMERMAN CHECKED: W. ZIMMERMAN ISSUED DATE: 8/14/18 DRAWING C11 SCALE: AS NOTED
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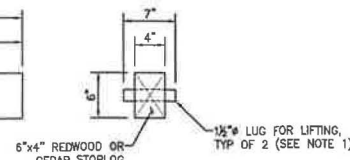




GUIDE SLOT
SCALE: 1 1/2"=1'-0" C11

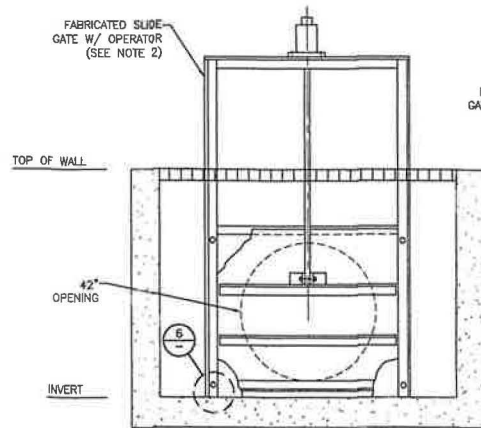


STOPLOG
SCALE: 1 1/2"=1'-0" 5

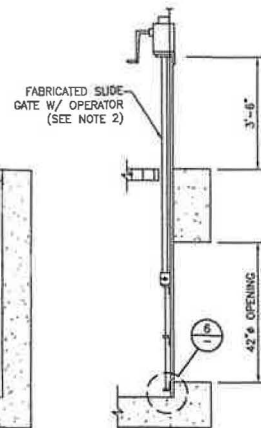


SECTION
SCALE: 1 1/2"=1'-0" A

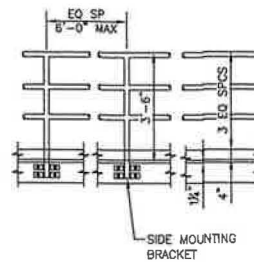
- NOTES:
1. LIFTING LUGS SHALL BE ALUMINUM OR TYPE 304 STAINLESS STEEL. HOLE FOR LUG SHALL BE SLIGHTLY SMALLER THAN 1 1/2" SUCH THAT LUGS CAN BE PRESSED INTO PLACE.
 2. SEE SPECIFICATIONS FOR WCS GATE REQUIREMENTS. DETAILS SHOWN ARE SCHEMATIC IN NATURE AND FINAL DETAILS SHALL BE PROVIDED BY SELECTED MANUFACTURER.



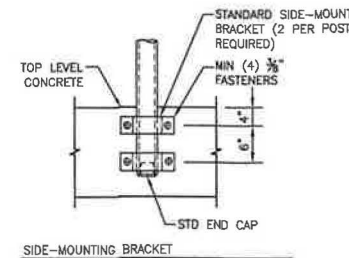
FABRICATED SLIDE GATE
SCALE: NTS



2 C11



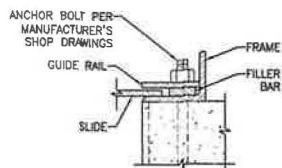
GUARDRAIL
SCALE: NTS



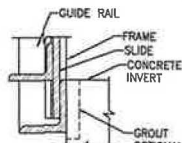
SIDE-MOUNTING BRACKET

- NOTES:
1. POSTS AND RAILING SHALL BE 1 1/2" STANDARD PIPE AND GALV AFTER FABRICATION.
 2. ALL RAILING TO HAVE A 4" KICK PLATE UNLESS NOTED OTHERWISE.

3 C11



SECTION - SIDE FRAME

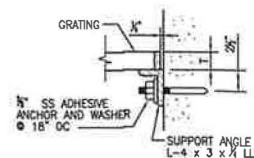


SECTION - BOTTOM FRAME

- NOTE:
1. FOR ACTUAL DIMENSIONS SEE MANUFACTURER'S SHOP DRAWINGS.
 2. MATERIALS AS SPECIFIED.

FRAME DETAILS
SCALE: NTS

6



GRATING
SCALE: NTS

NOTES:

1. UNLESS INDICATED OTHERWISE, ALL GRATING SHALL BE GALVANIZED STEEL PLANK GRATING.
2. GRATING DEPTH TO BE DETERMINED BY MANUFACTURER AND APPROVED BY ENGINEER (UNO)
3. ALL ENDS AND OPENINGS SHALL BE Banded
4. WEIGHT OF GRATING SECTION SHALL NOT EXCEED 80 LBS
5. MATERIALS:
 - a. GALVANIZED STEEL GRATING - USE STEEL ANGLE SUPPORTS, BOLTS AND CUPS. GALVANIZE AFTER FABRICATION

4 C11

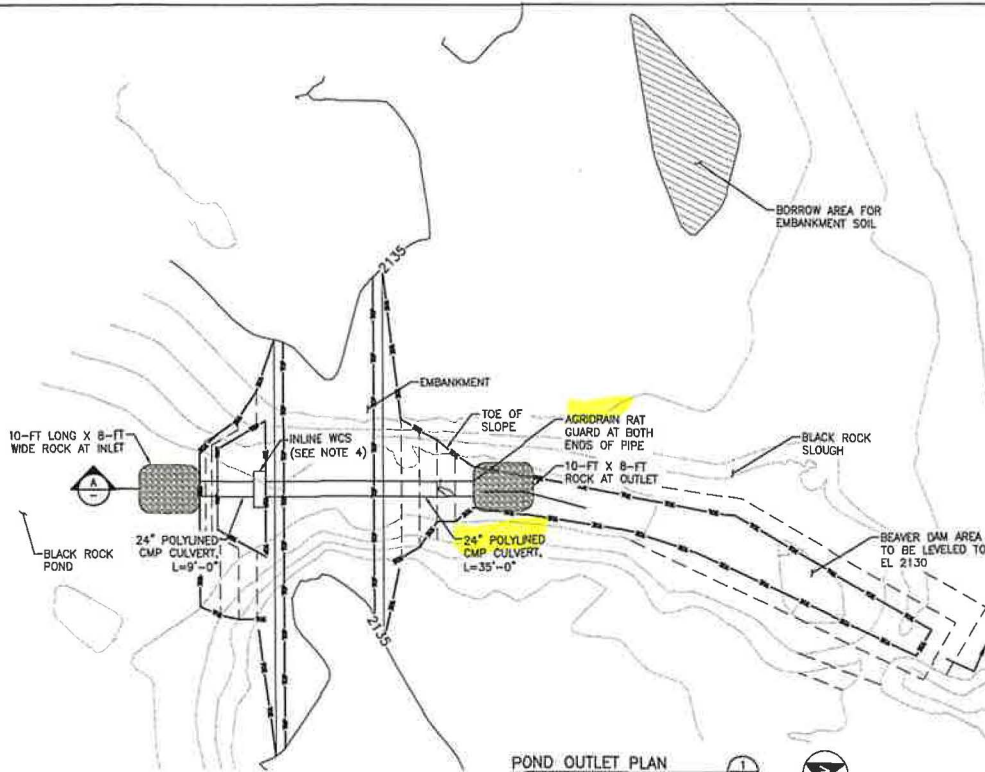


WARNING IF THIS DRAWING IS NOT TO SCALE 0 6/14/19 CDD ISSUED FOR CONSTRUCTION REV. DATE BY DESCRIPTION	PO BOX 1643 BOISE, ID 83701 (208) 918-0627 River Structures CONSULTING DUCKS UNLIMITED	IDAHO DEPARTMENT OF FISH & GAME BLACK ROCK SLOUGH ENHANCEMENT PROJECT WATER CONTROL STRUCTURE DETAILS 1	DESIGNED G. BOYD DRAWN W. ZIMMERMAN CHECKED W. ZIMMERMAN ISSUED DATE 6/14/19	DRAWING C12 SCALE: AS NOTED
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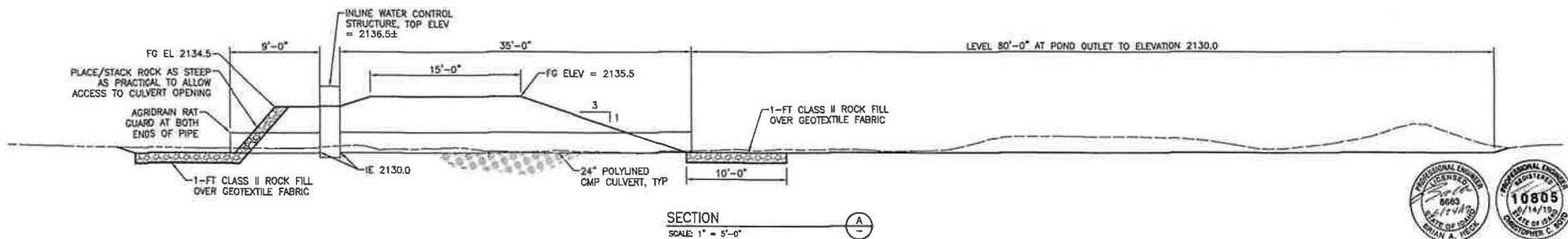
SHEET NOTES:

1. CONTRACTOR SHALL INSTALL WATER CONTROL STRUCTURE (AGRIDRAIN, OR APPROVED EQUAL), NEW POLYLINE CMP CULVERT, AND RAT GUARDS (AGRIDRAIN, OR APPROVED EQUAL), AS SHOWN.
2. SUITABLE ON-SITE NATIVE FILL MAY BE USED AS FILL AROUND THE WATER CONTROL STRUCTURE AND PIPE EXTENSION. COORDINATE BORROW SOURCE WITH THE OWNER IN THE FIELD.
3. BLEND EMBANKMENT SOILS INTO EXISTING EMBANKMENT.

NOT Developed



POND OUTLET PLAN
SCALE: 1" = 10'-0"



SECTION
SCALE: 1" = 5'-0"



REV	DATE	BY	DESCRIPTION
0	6/14/19	CCB	ISSUED FOR CONSTRUCTION

WARNING
IF THIS DRAWING DOES NOT INCLUDE 1" OVER DRAWING IS NOT TO SCALE.



River Structures
CONSULTING

PO BOX 1643 | BOISE, ID 83701 | (208) 918-0627



IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT

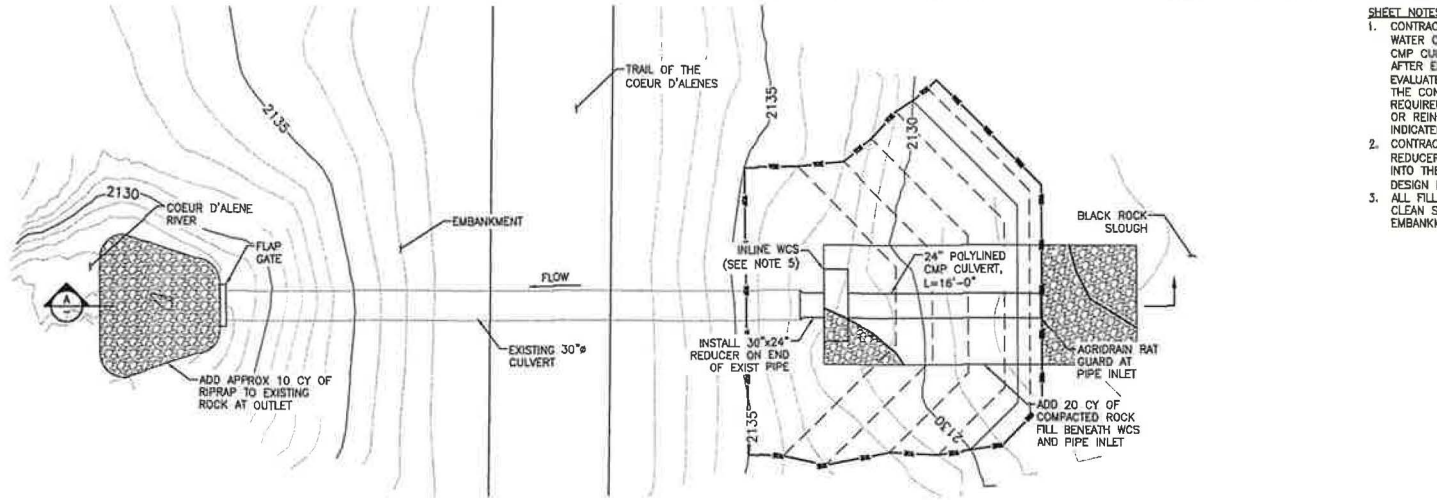
BLACK ROCK POND OUTLET
PLAN & PROFILE

DESIGNED: C. BOYD
DRAWN: W. ZIMMERMAN
CHECKED: W. ZIMMERMAN
ISSUED DATE: 6/16/19

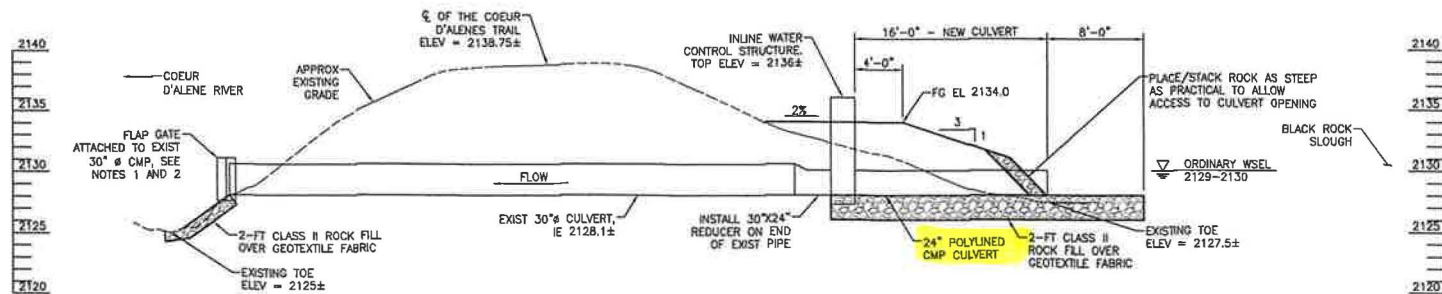
DRAWING
C21
SCALE: AS NOTED

SHEET NOTES:

1. CONTRACTOR SHALL INSTALL FLAP GATE (SEE SPECIFICATIONS), 30"x24" REDUCER, WATER CONTROL STRUCTURE (AGRIDRAIN, OR APPROVED EQUAL), NEW POLYLINE CMP CULVERT, AND RAT GUARD (AGRIDRAIN, OR APPROVED EQUAL) AS SHOWN. AFTER ENDS OF EXISTING CMP CULVERT ARE EXPOSED, THE CONDITION SHALL BE EVALUATED BY THE CONTRACTOR AND THE OWNER'S REPRESENTATIVE TO ASSES THE CONDITION OF THE CULVERT FOR ATTACHMENT TO THE NEW FEATURES. IF REQUIRED, THE CONTRACTOR SHALL FIELD MODIFY THE CULVERT BY CUTTING BACK OR REINFORCING AS REQUIRED SO THAT THE FINISHED CULVERT OPERATES AS INDICATED ON THE CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL FABRICATE A 30" DIAMETER TO 24" DIAMETER CULVERT REDUCER PROVIDING A 2'-FT SECTION OF 24" DIAMETER CULVERT TO COUPLE INTO THE WATER CONTROL STRUCTURE. CONTRACTOR SHALL PROVIDE A PROPOSED DESIGN FOR THE ENGINEER'S APPROVAL PRIOR TO FABRICATION.
3. ALL FILL MATERIAL SHALL BE ON SITE BORROW OR IMPORTED AND CERTIFIED CLEAN SOIL PRIOR TO USE. BLEND EMBANKMENT SOILS INTO EXISTING EMBANKMENT.



WEST PIPE PLAN
SCALE: 1" = 5'-0"



SECTION
SCALE: 1" = 5'-0"



REV	DATE	BY	DESCRIPTION
0	8/14/19	CCB	ISSUED FOR CONSTRUCTION



River Structures
CONSULTING

PO BOX 1643 | BOISE, ID 83701 | (208) 918-0627

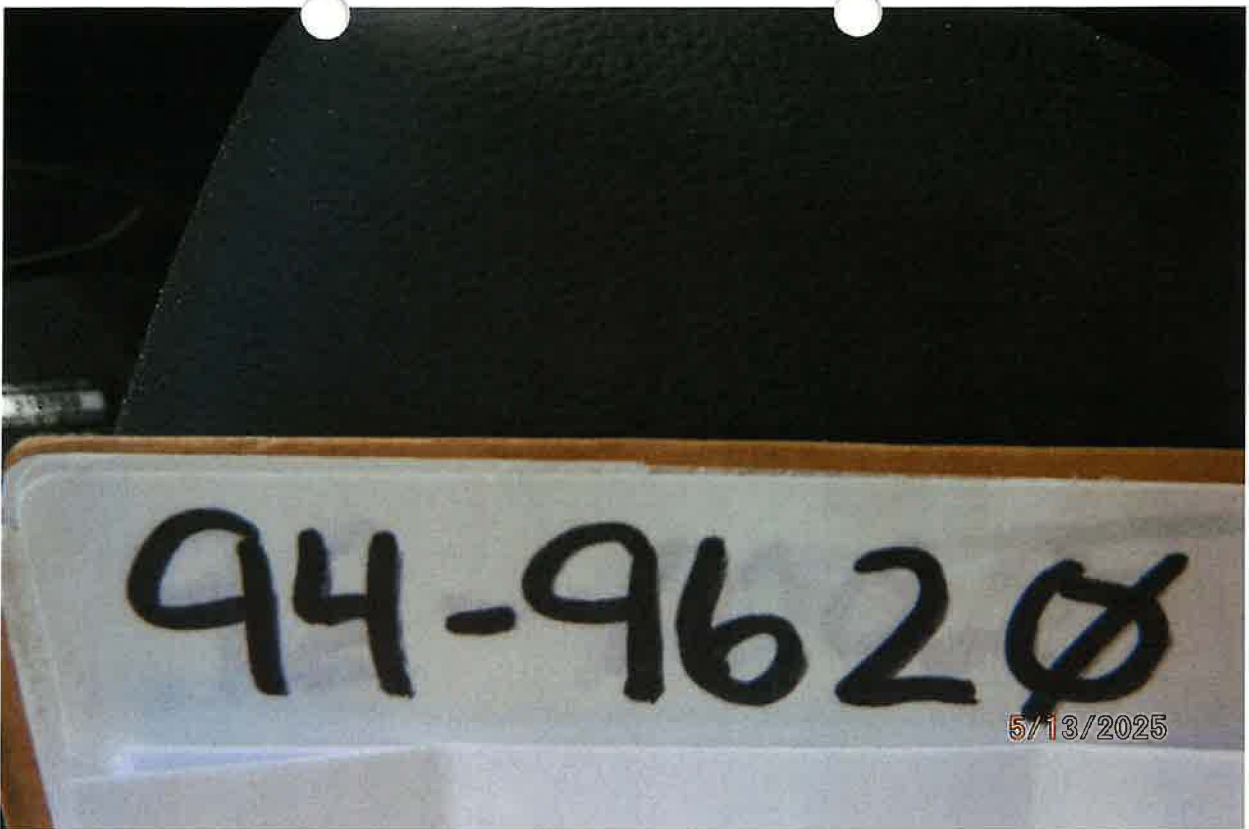


IDAHO DEPARTMENT OF FISH & GAME
BLACK ROCK SLOUGH ENHANCEMENT PROJECT

WEST PIPE PLAN & PROFILE

DESIGNED: C. BOYD
DRAWN: W. ZIMMERMAN
CHECKED: W. ZIMMERMAN
ISSUED DATE: 8/14/19

DRAWING
C31
SCALE: AS NOTED



BENEFICIAL USE FIELD EXAM DATE 5/13/2025



2 EA POD(s) – PRIMARY FLOW CONTROL STRUCTURES FOR BLACK ROCK SLOUGH
ENHANCEMENT PROJECT



POD 1: BULL RUN CREEK SOURCE 42-INCH CULVERT WITH CONCRECT COLLAR SET TO ELEVATION 2127.75 FT (REF CONSTRUCTION CAD SCHEMATICS)

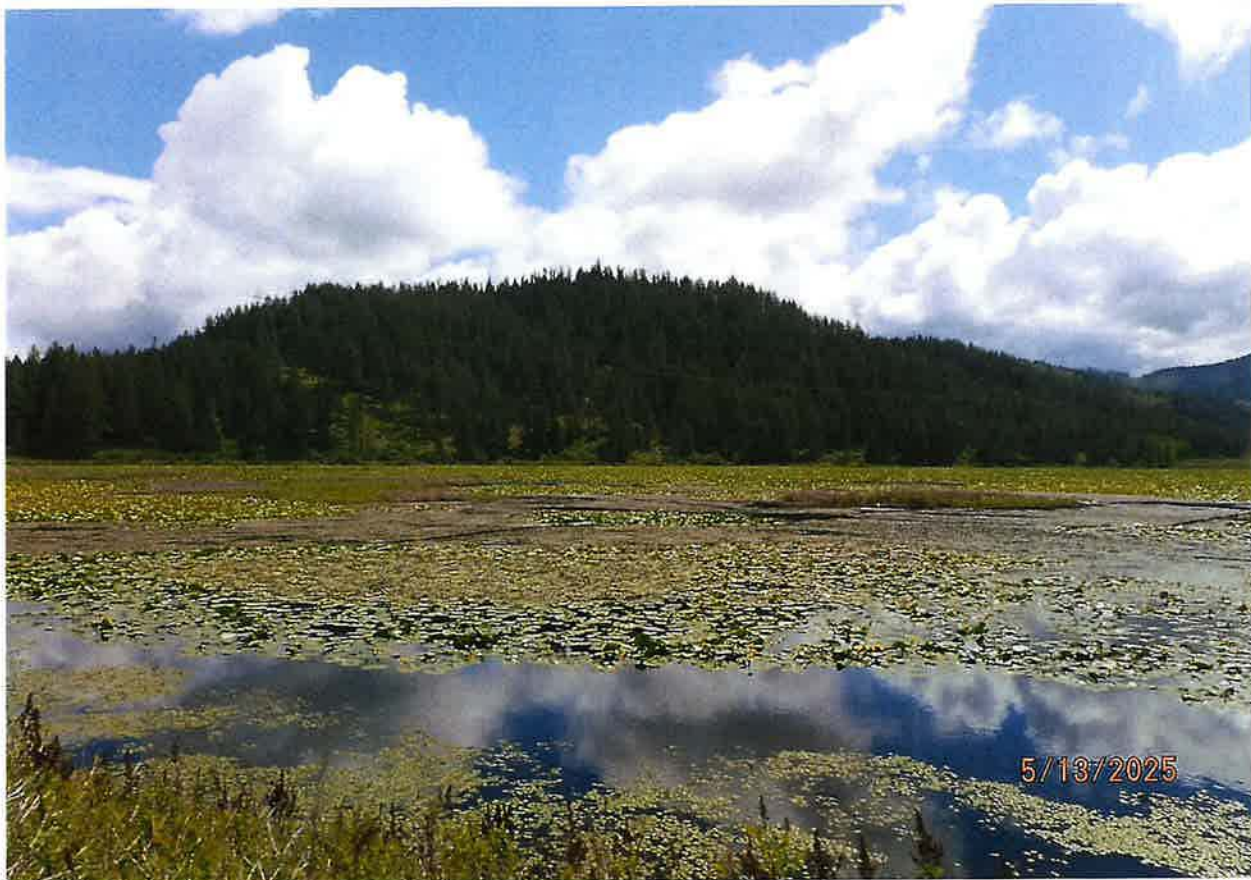
POD 2: BLACKROCK GULCH SOURCE HAS SAME POD BUILT OUT AS POD 1, BUT SET TO ELEVATION 2125.50 (REF CONSTRUCTION CAD SCHEMATICS)



POD 1: WATER CONTROL STRUCTURE – CONCRETE SHAFT WITH SLIDE GATE AND STOPLOGS INSTALLED WITHIN GATE STRUCTURE. POD 2: SAME DEVELOPMENT AS POD 1.

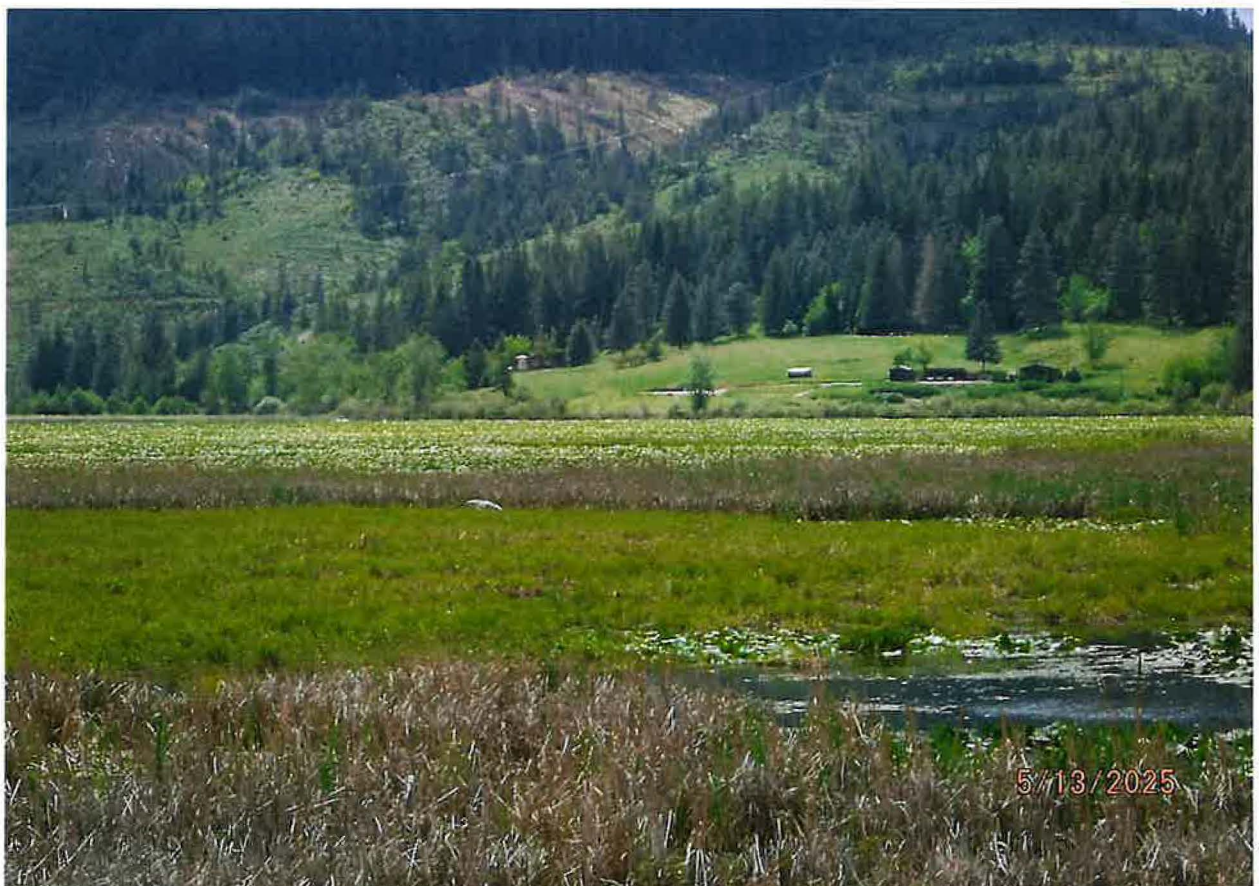


POU – WILDLIFE STORAGE – BLACK ROCK SLOUGH ENHANCEMENT PROJECT





POU – WILDLIFE STORAGE



ABUNDANT WATERFOWL PRESENT THROUGHOUT EXAM



SECONDARY "WEST PIPE" AGRIDRAIN FENCED INFLOW (SLOUGH SIDE) WITH 24-INCH CULVERT INSTALLED WITH DIRECT CONNECTION TO THE COEUR D'ALENE RIVER





AGRIDRAIN CORPORATION COMPANY BADGE ON WEST PIPE DEVELOPMENT



24-INCH OUTFLOW FROM SLOUGH TO RIVER. CUVLERT CLOSED TO MITIGATE BACKCHANNEL FLOW FROM RIVER



WILDLIFE STORAGE POU

