

Local Highway Technical Assistance Council

Leading Idaho Local Bridge Program Project



Proposal Number: 23800-99

Project: 200 South Rd over Camas Creek Bridge Replacement

Local Jurisdiction: Camas County

Location: Camas County, ID

Proposal Issued on March 26, 2026

Bids shall be delivered in hardcopy to LHTAC or submitted electronically through QuestCDN

(Attention: Leading Idaho Local Bridge Program Bids)

at 3330 W Grace St., BOISE, ID 83703

before 2:30:00 p.m. MDT on April 16, 2026

Bids will be opened at LHTAC's Office on April 16, 2026, at 3:00 PM MDT, a virtual attendance option will be provided on LHTAC's website

www.lhtac.org

Project Description

Bridge Key No. 23801 200 South Rd over Camas Creek Bridge Replacement, Camas County

This project involves the removal of existing Bridge Key Numbers (KN) 23795 and 23800, and replacement with a single structure spanning the channel. The new structure will be Bridge KN 23801 and will consist of a two-span, 207-foot-long by 30-foot-10-inch-wide prestressed concrete girder bridge featuring a cast-in-place abutment system, wingwalls, and a central pier. The scope of work includes the installation of two 48-inch diameter relief culvert pipes, removal of existing 14-inch and 48-inch diameter culvert pipes and permitted construction of channel modifications and a channel bypass for Camas Creek.

This project is located at 200 S Road between 600 E and 700 E Road, and crosses over Camas Creek. It is located approximately 7.0 miles southeast of Fairfield, Idaho.

[Google Map Link Location](#) 43°18'50.7"N 114°39'26.5"W



Figure 1: Existing Br KN 23795



Figure 2: Existing Br KN 23800



Notice of Letting

Leading Idaho Local Bridge Program project for Camas County, Proposal Number 23800-99. This project involves the removal of existing Bridge Key Numbers (KN) 23795 and 23800, and replacement with a single structure spanning the channel. The new structure will be Bridge KN 23801 and will consist of a two-span, 207-foot-long by 30-foot-10-inch-wide prestressed concrete girder bridge featuring a cast-in-place abutment system, wingwalls, and a central pier. The scope of work includes the installation of two 48-inch diameter relief culvert pipes, removal of existing 14-inch and 48-inch diameter culvert pipes and permitted construction of channel modifications and a channel bypass for Camas Creek.

This project is located at 200 S Road between 600 E and 700 E Road, and crosses over Camas Creek. It is located approximately 7.0 miles southeast of Fairfield, Idaho. The bridge is owned and maintained by Camas County.

Sealed Proposals will be received either electronically through QuestCDN or at the office of the Local Highway Technical Assistance Council, 3330 W Grace Street, Boise, ID 83703 until 2:30 o'clock p.m. MDT on April 16, 2026.

ATTN: Leading Idaho Local Bridge Program Bids

Digital copies of the Plans, Proposals, and Specifications must be downloaded. **Bidders must appear on the LHTAC QuestCDN plan holders list OR identify they received their plans and documents from a Plan Room on the QuestCDN plan holders list for their proposal to be accepted by LHTAC.**

Please contact **QuestCDN.com** at (952) 233-1632 or info@questcdninfo.com for assistance in downloading and working with this digital project information.

The QuestCDN Bid Posting Number is 10131911

LHTAC's QuestCDN Number is 8010870

All questions and contact during the bidding period must be submitted through QuestCDN.

LHTAC BID BOX LOCATION and Hours

The LHTAC Bid Box is located at 3330 W Grace St. Boise, ID 83703. This is the mailing address regardless of delivery method.

Office hours are as follows:

Monday-Thursday 7:30 AM – 5:30 PM Mountain Time

Friday 7:30 AM – 12:30 PM Mountain Time

Saturday – Sunday Closed

Bid openings via MS Teams and/or in Person at 3330 W Grace St. Boise, ID 83703



NOTE: IT IS RECOMMENDED THAT USPS MAIL AND FEDEX/UPS DELIVERIES BE RECEIVED AT THE ABOVE LOCATION AT LEAST 1 DAY PRIOR TO BID OPENING TO AVOID MISSING THE BID OPENING.

For your convenience, bid openings are broadcast electronically, in addition to the in-person opening at the LHTAC Office in a conference room to be determined.

Zoom information can be found starting 48 hours in advance of the bid opening at www.LHTAC.org

Bid results can be found at www.LHTAC.org

Local Highway Technical Assistance Council
Communication Protocol During Construction or Purchasing Bidding
For Leading Idaho Local Bridge Program Projects

Communication between the Contractor (Bidder) and LHTAC:

During the advertisement period, prospective Contractors/Bidders will address all questions to the contact shown on the Notice of Letting.

After Bid Opening and through Contract Award, all communications between LHTAC and the Contractor/Bidder, and any unsuccessful bidders, will be through the LHTAC Administrator (208-344-0565). LHTAC will be unable to share any information, other than as described under the Notification Protocol (see below), related to bid submittals or pending LHTAC decisions during this time.

After contract award, all communications between LHTAC and the Contractor will be through the contact shown on the Notice of Letting.

Contractor Information:

LHTAC will not provide any proprietary bidding information until after contract award.

Notification Protocol:

The following appropriate action will be posted to the LHTAC Bid Results website:

- After the opening of bids, the bid summary results will be posted, along with a notification of “Pending Review”, if applicable.
- After analysis of the bids, irregularities will be posted to the website. The apparent successful bidder will also be notified of irregularity via email, if applicable.
- Once the award letter is issued, the bid abstracts will be posted to the website.

(Abstracts are not posted when there is only 1 regular bid)

- Upon contract award, bid abstracts will be posted to LHTAC’s website for projects with multiple accepted bidders

Instructions to Bidders

All bids must be received prior to 2:30 pm MDT on bid opening day to the address listed below or electronically through QuestCDN. All bidders must be listed on the QuestCDN.com plan holders list by obtaining their proposal documents from QuestCDN.com OR identify they received plans and documents from a Plan Room on the QuestCDN.com plan holders list for their proposal to be accepted by LHTAC. All bids must be submitted by one of the following:

- Hardcopy format in a sealed envelope
- Electronically through QuestCDN

Hardcopy envelopes should be marked on the outside with “Bid Enclosed” and the proposal name and key or proposal number (23800-99), addressed to:

Local Highway Technical Assistance Council

Attn: Leading Idaho Local Bridge Program Bids
3330 W. Grace St.
Boise, ID 83703

Hand-delivered bids must be inserted into the Bid Box located in the lobby at LHTAC’s office at the address listed above.

This solicitation is issued by LHTAC. Notification of Letting may be found on the agency website www.LHTAC.org under the Leading Idaho Local Bridge Program link. Refer to Section 102 of the Standard Specifications for Highway Construction (SSHC) for “Bidding Requirements and Conditions”.

All references to “the Department” in the SSHC, will be interpreted as Local Highway Technical Assistance Council (LHTAC). Statements in the “Instructions to Bidders,” bid documents, or contract documents supersede any conflicting statements within SSHC.

The Bid Packet submitted must include:

- Proposal with General Terms of Contract, Material Testing and Certification statement, and Bidding Deposit statement
- Bidder’s Signature Form with the proper signatures and information
- Completed Bid Schedule with unit prices for each item
- Surety Form with attached Power of Attorney from Bonding Company and Bid Bond
- Addenda acknowledgement (if applicable)

April 13, 2026 at 5:00 pm MDT is the last time technical questions or clarification requests will be accepted. Clarifications, answers, or addenda, if required, will be published no later than April 14, 2026 at 5:00 pm MDT. Non-technical administrative support questions may be asked and answered via telephone or email until the time of bid submittal deadline, although there is no guarantee questions submitted after April 13, 2026 will be answered. It is the Bidder’s responsibility for reviewing all questions and answers prior to submitting bids.

Instructions to Bidders

Continued

Addenda, if required, are uploaded to the QuestCDN.com software and plan holders are then notified to download the addenda. Acknowledgement of each addendum must be included with the submittal of the proposal. The instructions are included in the addendum.

Bids must be accompanied by a Bid Bond issued by an Idaho Licensed Surety Company. You MUST use the Surety Bond (Bid Bond) form provided in the Proposal or your bid will be deemed irregular or accompanied by a certified or cashier's check payable to the Local Highway Technical Assistance Council in an amount no less than five percent (5%) of the total bid. This surety will be forfeited by the bidder should the bidder fail to sign the contract or furnish the required 100% Performance and 100% Payment Bonds.

AIA A-310 Document is not an acceptable bid bond. BID BONDS WITH SIMILAR CONDITIONS TO THE 5% GUARANTEE MAY ALSO NOT BE ACCEPTABLE. Per the 2023 Standard Specifications for Highway Construction (SSHC), Section 102.10 # 3 & 7, you MUST use the Surety Bond (Bid Bond) form provided in the Proposal or your bid will be deemed irregular.

Conditional bid proposals are acceptable for bidding on multiple projects opening on the same day. Instructions for submitting conditional bid proposals are presented in SSHC 102.05. If a bidder submits conditional bid proposals and becomes the apparent low bidder on more than 1 conditional bid proposal, LHTAC's Administrator, in their sole discretion, will choose which contracts to award to that bidder.

Federal funds are not being used for this project; therefore, Davis Bacon wages and Buy America provisions do **not** apply to this project.

SSHC 102.12 Protesting a Proposal is removed and superseded by the following statement:

To protest a determination made by LHTAC regarding the regularity of a bid, irregularity of a bid, or determination of low bid, submit a written protest to LHTAC Program Administrator (Ken Kanownik – kkanownik@lhtac.org) within 7 calendar days of when official bid results are posted to the QuestCDN.com project solicitation page. The protest must set forth in specific terms the reasons why LHTAC's determination is thought to be erroneous.

In response to the received protest, the contract award process will be stayed until resolution of the protest. The LHTAC Administrator will assign an LHTAC engineer not involved in the project development as a hearing officer to review the submitted protest and, if needed, meet with the protesting bidder. The hearing officer will present their review of the protest to the LHTAC Administrator and the LHTAC Administrator will, in their sole discretion, issue a decision on the protest.

Decision making regarding protests will generally follow Idaho Transportation Department Standard Operating Procedure for Bid Protests, allowing consideration of whether a material or trivial mistake was made in the submitted bid.

Instructions to Bidders

Continued

Bidder shall comply with all Equal Employment Opportunity provisions required by state code and/or regulations.

The responsible and successful bidder will be required to provide proof of payment and performance bonds (103.04) and insurance (102.10) per the SSHC prior to award of the contract.

Where minor portions of required work are not noted, detailed, or specified, such work shall be done in accordance with proven construction practice or accepted industry standards at no additional cost to the owner.

Any oral interpretations or clarifications of this proposal will not be relied upon. All changes to this proposal must be in writing and posted to QuestCDN as an addendum to be valid. Alternate bids are not allowed.

All correspondence regarding this proposal must be directed as instructed in the Bidder Communication.

Bid Schedule
Leading Idaho Local Bridge Program
Proposal 23800-99
Bridge Key No. 23801 - 200 S Road over Camas Creek

| Bid Item Number | Bid Item Description | Quantity | Units | Unit Price | Extended Price |
|--------------------------------|---|-----------|-------|------------|----------------|
| ROADWAY | | | | | |
| 107-019A | SURVEY MONUMENT PRESERVATION | 5,000.00 | CA | \$ 1.00 | \$ 5,000.00 |
| 201-005A | CLEARING AND GRUBBING | 0.39 | ACRE | | |
| 203-006A | REMOVAL OF SIGN | 12.00 | EACH | | |
| 203-075A | REMOVAL OF FENCE | 556.00 | FT | | |
| 203-123A | REMOVAL OF MISCELLANEOUS ITEMS - 14" CMP | 31.00 | FT | | |
| 203-123B | REMOVAL OF MISCELLANEOUS ITEMS - 48" CMP | 50.00 | FT | | |
| 205-005A | EXCAVATION (PROPOSED & EXISTING ROADWAY) | 1,993.00 | CY | | |
| 205-005B | EXCAVATION (ABUTMENTS) | 867.00 | CY | | |
| 205-005C | CHANNEL EXCAVATION | 4,148.00 | CY | | |
| 205-045A | GRANULAR BORROW | 6,279.00 | TON | | |
| 212-011A | FIBER WATTLE | 832.00 | FT | | |
| 212-020A | SILT FENCE | 559.00 | FT | | |
| 212-110A | WATER POLLUTION CONTROL MANAGER | 1.00 | LS | | |
| 303-022A | 3/4" AGGREGATE TYPE B FOR BASE | 1,500.00 | TON | | |
| 602-085A | 48" PIPE CULVERT | 190.00 | FT | | |
| 610-015A | FENCE TYPE 1 B | 405.00 | FT | | |
| 621-005A | SEED BED PREPARATION | 0.37 | ACRE | | |
| 621-010A | SEEDING | 0.37 | ACRE | | |
| 621-035A | FERTILIZING | 0.37 | ACRE | | |
| 621-060A | MULCH PLUS TACKIFIER | 0.37 | ACRE | | |
| 624-005A | LOOSE RIPRAP - BRIDGE | 290.00 | CY | | |
| 624-005B | LOOSE RIPRAP - CHANNEL | 560.00 | CY | | |
| 626-100A | MISCELLANEOUS TEMPORARY TRAFFIC CONTROL ITEMS | 3,000.00 | CA | \$ 1.00 | \$ 3,000.00 |
| 640-010A | RIPRAP/EROSION CONTROL GEOTEXTILE | 550.00 | SY | | |
| 675-005A | SURVEY | 1.00 | LS | | |
| 677-005A | RECORD DRAWINGS | 1.00 | LS | | |
| S610-05A | REM & RESET FENCE | 526.00 | FT | | |
| S900-50A | CONTINGENCY AMOUNT - MISCELLANEOUS WORK | 10,000.00 | CA | \$ 1.00 | \$ 10,000.00 |
| S900-50B | CONTINGENCY AMOUNT - MISCELLANEOUS PPP ITEMS | 10,000.00 | CA | \$ 1.00 | \$ 10,000.00 |
| S904-05A | SP TEMPORARY TRAFFIC CONTROL | 1.00 | LS | | |
| Z629-05A | MOBILIZATION | 1.00 | LS | | |
| BRIDGE | | | | | |
| 203-020A | REMOVAL OF BRIDGE - FULL | 2.00 | EACH | | |
| 210-005A | STRUCTURE EXCAVATION SCHEDULE NO. 1 - SOIL AND GRAVEL | 550.00 | CY | | |
| 210-005B | STRUCTURE EXCAVATION SCHEDULE NO. 1 - ROCK | 356.00 | CY | | |
| 210-015A | COMPACTING BACKFILL | 679.00 | CY | | |
| 301-005A | GRANULAR SUBBASE | 1,145.00 | TON | | |
| 502-140A | CONCRETE CLASS 40-A SCHEDULE NO. 1 | 316.00 | CY | | |
| 502-310A | CONCRETE CLASS 40 AF SCHEDULE NO. 2 | 200.40 | CY | | |
| 502-380A | PRESTRESS WF GIRDER (50" DEPTH) | 816.00 | FT | | |
| 502-430A | CONCRETE PARAPET (TYPE SINGLE SLOPE, HEIGHT 42") | 476.00 | FT | | |
| 503-010A | METAL REINFORCEMENT SCHEDULE NO. 1 | 40,024.00 | LB | | |
| 503-015A | METAL REINFORCEMENT SCHEDULE NO. 2 | 15,358.00 | LB | | |
| 503-020A | EPOXY-COATED METAL REINFORCEMENT | 28,534.00 | LB | | |
| 507-010A | ELASTOMERIC BEARINGS LAMINATED (1.25" x 8" x 32") | 16.00 | EACH | | |
| 509-005A | NON-STRUCTURAL CONCRETE CLASS 15 | 111.00 | CY | | |
| 511-005A | CONCRETE WATERPROOF SYSTEM TYPE D | 637.30 | SY | | |
| 560-005A | DEWATERING FOUNDATION | 1.00 | LS | | |
| 566-010A | COMPRESSION EXPANSION JOINT | 62.00 | FT | | |
| SS01-20A | SP BRIDGE - COURSE AGGREGATE DRAIN | 16.00 | EACH | | |
| PROJECT TOTAL BID PRICE | | | | | |

RETURN WITH BID

Proposal

Local Highway Technical Assistance Council

GENERAL TERMS

In compliance with your bid package to be received by April 16, 2026, the undersigned certifies to have examined the location of work and/or materials site(s) and is satisfied as to the condition to be encountered, and that the plans, specifications, contract and method of payment for such work is understood. This project involves the removal of existing Bridge Key Numbers (KN) 23795 and 23800, and replacement with a single structure spanning the channel. The new structure will be Bridge KN 23801 and will consist of a two-span, 207-foot-long by 30-foot-10-inch-wide prestressed concrete girder bridge featuring a cast-in-place abutment system, wingwalls, and a central pier. The scope of work includes the installation of two 48-inch diameter relief culvert pipes, removal of existing 14-inch and 48-inch diameter culvert pipes and permitted construction of channel modifications and a channel bypass for Camas Creek.

This project is located at 200 S Road between 600 E and 700 E Road, and crosses over Camas Creek. It is located approximately 7.0 miles southeast of Fairfield, Idaho.

Work will be in accordance with the applicable contract special provisions, 2023 Idaho Transportation Department Standard Specifications for Highway Construction (SSHC), 2025 Supplementals for the 2023 ITD SSHC, April 2025 ITD Standard Drawings, SP-SA (Special Provisions State Aid), all addenda issued prior to bid opening, and the consideration of the unit prices bid for the items set forth in the attached bid schedule, all components of LHTAC Proposal Number 23800-99.

All references to “the State” or “the Department” in the 2023 SSHC shall be interpreted as the Local Highway Technical Assistance Council.

A signed copy of the cover page of each Addendum notice, if any, must be attached to this proposal. If Addendums are not included in the bid packet, the bid will be deemed irregular.

This is a state of Idaho funded contract/project. Upon identification of low bid, contracts document will require the contractor certify compliance with:

- Idaho Code 67-2346. Anti-boycott against Israel Act.
- Idaho Code 67-2359. Contract with a company owned or operated by the government of China prohibited.
- Idaho Code 67-2302. Prompt payment to subcontractors.

Upon the acceptance of this proposal for said work, the undersigned will execute the contract in accordance with the bid as accepted, furnish the certifications and qualification information required in Special Provisions, and furnish the Contract Payment and Performance Bonds on the forms provided with approved and sufficient surety within 7 days after the prescribed forms are presented for signature. The bidder further agrees that, if awarded the contract, work will be completed as stated in the Plans, Specifications and Special Provisions, after authority to proceed

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has been given, in conformity with and subject to such extensions as may be authorized by the terms of Extension of Contract Time of the Standard Specifications.

MATERIAL TESTING AND CERTIFICATION

All material testing and certifications are to be provided by the contractor. Material testing must be performed by the Western Alliance for Quality Transportation Construction qualified personnel and qualified labs. Test results and certifications are to be submitted to the Engineer for review and acceptance. Acceptance will be based on the material meeting contract requirements. All costs for material testing and certifications are incidental to the contract.

BIDDING DEPOSIT

A Certified Check or Cashier's Check must accompany the proposal, drawn on an Idaho bank in the amount of five percent of the total amount bid, made payable to the Local Highway Technical Assistance Council, or a Bidder's Bond in the amount of five percent (5%) of the total amount bid.

The undersigned bidder being duly sworn upon oath deposes and says that it complies with the provisions of Section 72-1717 Idaho Code (Drug Free Workplace program).

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SURETY

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we _____ (Bidder's Company)

as Principal, and _____ (Surety Name)

as Surety, are held and firmly bound unto the State of Idaho (hereinafter called the State) in the full and penal sum of Five Percent of the total amount of the proposal of said Principal for the work hereinafter described, for the payment of which will and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, firmly by these presents.

The Condition of this obligation is such that whereas the Principal has this day submitted a sealed proposal for:

Proposal: 23800-99

Proposal Description: Existing Bridge Key Numbers 23795 and 23800 in Camas County and carry 200 S Road over Camas Creek. The bridges are owned and maintained by Camas County and is located approximately 7.0 miles southeast of Fairfield, ID. This proposal is for the contractor to remove two existing bridges and replace them with a two-span pre-stressed concrete girder bridge with cast-in place abutments and central pier. The scope of work includes the installation of two 48-inch diameter relief culvert pipes, removal of existing 14-inch and 48-inch diameter culvert pipes and permitted construction of channel modifications and a channel bypass for Camas Creek.

Local Jurisdiction(s): Camas County

NOW THEREFORE, the above obligation is void if the Principal – (a) obtains relief pursuant to Idaho Code, Section 54-1904B; or (b) upon award by the State of the bid identified above is authorized by State and Federal law or regulation to enter into the contract, executes the contractual documents and provides the bonds required by the terms of the bid as accepted, within 15 days after presentation of the contract; otherwise this proposal bond shall remain in full force and effect.

IN WITNESS WHEREOF, The above bounden parties have executed this

instrument this ____ day of _____, 20__ .

Bidder:

Authorized Signature

Print Name

Title

Corporate Surety:

Surety Company Name

By:

Signature

Print Name

Title

Phone Number

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Bidder's Signature Form

Date:

Legal Company Name:

Company Business Address:

Mailing (Shipping) Address, if different:

Company organized under the state of:

Legal Name of Highest Officer in Company:

Title of Highest Officer in Company:

Contact Name:

Title of Contact:

Contact Phone No.:

Email:

Idaho Public Works License No.:

Exp. Date:

Bid documents received from Plan Room rather
QuestCDN.com (check box if applicable)

AUTHORIZED SIGNATURE

Pursuant to Idaho Code Section 9-1406 "I certify (or declare) under penalty of perjury pursuant to the law of the State of Idaho that the foregoing is true and correct." The undersigned is duly authorized to sign this document on behalf of the above referenced company.

PROPOSAL MUST BE SIGNED

Signature _____

Print Name _____

Title _____

Email Address _____

SPECIAL PROVISIONS
BRIDGE KEY NO 23801

200 S Road over Camas Creek Bridge Replacement

Camas County

This project is to remove the existing two bridges at 200 S Road and replace with a single structure spanning the channel under new Bridge Key Number (KN) 23801. The proposed Bridge KN 23801 will consist of a two-span, 207-foot-long by 30-foot-10-inch-wide prestressed concrete girder bridge featuring a cast-in-place abutment system, wingwalls, and a central pier. The scope of work includes the installation of two 48-inch diameter relief culvert pipes, removal of existing 14-inch and 48-inch diameter culvert pipes and permitted construction of a channel bypass for Camas Creek.

The following special provisions, and all addenda issued, supplement or modify the 2023 Idaho Transportation Department Standard Specifications for Highway Construction, 2025 Supplementals for the 2023 Idaho Transportation Department Standard Specifications for Highway Construction, April 2025 Idaho Transportation Department Standard Drawings, and Special Provision-State-Aid (SP-SA).

CONTRACT TIME AND LIQUIDATED DAMAGES

Work will not start earlier than July 27, 2026, or later than August 7, 2026, and must be completed within 126 working days of starting construction. Once started, work must continuously progress until completion.

Contractor will pay additional costs incurred by the project for failure to meet work milestones, including costs to modify permits, fines charged, and damages to irrigation users. In-stream work needs to be completed before the majority of flow returns to Camas Creek, which generally occurs in March and April with little flow occurring in the summer months. The bridge is to be opened with an aggregate base driving surface by April 15, 2027.

Liquidated Damages

The amount of liquidated damages, for failure to complete the work on time, will be \$5,000 per day.

Liquidated damages provision does not waive the Department's right to seek other remedies for a breach of contract by the awarded Contractor.

CONTRACTOR NOTES

ADDITIONAL SPECIAL PROVISIONS FOR STATE AID APPLICATION

These contract provisions will apply to all work performed on the contract by the contractor with their own organization and with the assistance of workmen under their immediate superintendence and to all work performed on the contract by piece work, station work or by subcontract.

ADJACENT PROPERTIES COORDINATION PROVIDED BY THE CONTRACTOR

The Contractor will coordinate with the adjacent property owner(s) of the project site for access to the property and any work that will or may affect the property owner's property, facilities, or operations.

The Contractor will maintain access to all properties adjacent to the project to the maximum extent feasible. The Contractor will make arrangements with individual property owners to provide acceptable alternative access, or other arrangements, in the event a temporary closure is necessary. A minimum of one week prior to starting construction on affected approaches, contact each property owner in person to discuss the impacts, time frame, and methods of access. Give each property the name and phone number of the Traffic Control Supervisor (TCS) and/or the Superintendent for contact during construction. Submit written documentation to the Engineer outlining the conversation following each property owner contact.

CONSTRUCTION ACCESS AND SEQUENCE

The Contractor will provide the Resident Engineer with a construction schedule prior to starting the work. The status of the schedule will be reviewed at each construction meeting.

CONSTRUCTION SURVEY AND STAKING PROVIDED BY THE CONTRACTOR

Construction survey and staking is the responsibility of the Contractor. Control and base files can be obtained from the Resident Engineer.

CONTRACTOR DOCUMENTATION REQUIREMENTS

As work progresses, payment will not be made on any work or portion thereof as specified in 109.05, until all acceptance documentation (including material certifications, test results, etc.) and quantity calculations have been received and verified by the Engineer. Acceptance documentation and quantity measurement will be in accordance with the contract requirements. The Contractor will have 20 business days after the last charged contract day to submit any outstanding documentation on completed work or the Contractor will forfeit payment. For items that are completed after the last charged contract day, the Contractor will have 20 business days upon the item's completion to submit the required documentation or the Contractor will forfeit payment for that item.

DEWATERING PLANS

The design and implementation of the dewatering plan for this project is the responsibility of the Contractor. The Engineer will measure acceptably completed work by the Lump Sum (LS).

The Contractor will comply with permit conditions in the Idaho Department of Water Resources (IDWR) Stream Channel Alteration (SCA) permit. Contractor to submit its dewatering plan to Engineer for review and acceptance by IDWR. The Contractor will prepare and submit for approval a detailed proposed coffer dam and dewatering plan prepared by a Professional Engineer licensed in the State of Idaho six (6) weeks in advance of the time the Contractor begins the in-stream work. Provide a minimum of 4 weeks for review prior to commencement of construction.

Identify the proposed method of construction; equipment and methods for constructing the coffer dam and maintaining dewatering efforts. Provide structural and hydraulic calculations for the proposed configuration and installation, maintenance and removal instructions. Design temporary retaining structures that meet the most recent AASHTO Guide Specifications for Bridge Temporary Works. Include in the submittal the necessary design flood flow rate and high-water elevation while dewater operations are in place. It is the Contractor's responsibility to obtain design and required inputs for dewatering design.

DOMESTIC MANUFACTURING

The Buy America Act and the Build America, Buy America Act (BABA) do NOT apply to this project.

EMERGENCY SERVICES NOTIFICATION

02/18

The Contractor, no less than 48 hours before implementing any traffic restricting measures, must provide the following entities with specific traffic control methods and dates, all such controls will be in use, along with one phone number with which they will be able to contact the on-site project supervisor at any time during construction. Emergency response agencies:

Idaho State Police Department
218 W. Yakima
Jerome, ID 83338
(208) 342-6000

Camas County Sheriff's Office
119 Willow Ave W,
Fairfield, Idaho, 83327
(208) 764-2261

Fairfield Fire Department
119 W. Willow Avenue
Fairfield, Idaho, 83327
(208) 764-2261

Emergency Phone: 911

Provide the Engineer with copies of communications with the above entities.

EMPLOYMENT

Davis-Bacon Wages do not apply. Comply with State and Federal employment law.

EMPLOYMENT LISTS, LABOR SELECTION, & NON-DISCRIMINATION

A local public employment agency has been designated by the State to prepare the employment lists for the project.

All qualified unskilled labor will be employed insofar as possible from lists furnished the contractor by the employment agency designated in the contract. The contractor may avail themselves of the services of the employment agency for obtaining labor of the intermediate and skilled grade. In the performance of this contract, within the limitations of Subsection 107.01 requiring employment of up to 95% Idaho residents, preference in employment will be given to qualified honorably discharged Veterans of the United States Armed Forces.

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. Compliance with Regulations: The Contractor will comply with the Regulations relative to nondiscrimination in state funded programs.

2. **Nondiscrimination:** The Contractor, with regard to the work performed during the contract, will not discriminate on the grounds of race, color, religion, sex, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Idaho Code, including employment practices when the contract covers a program set forth in Idaho Code.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor, of the Contractor's obligations of this contract and Regulations relative to nondiscrimination on the grounds of race, color, religion, sex, national origin, age, or disability.
4. **Information and Reports:** The Contractor will provide all information and reports required by Idaho Code issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as required by state code. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor will so certify to LHTAC as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event the Contractor is in noncompliance with the nondiscrimination provision of this contract, LHTAC may determine to be appropriate, including, but not limited to:
 - a. Withhold progress payments until it is determined that the contractor is found in compliance;
 - b. Suspend the contract, in whole or in part, until the contractor or subcontractor is found to be in compliance with no progress payment being made during this time and no time extension made;
 - c. Cancel or terminate the contract for cause;
 - d. Assess against the contractor's final payment on this contract or any progress payments on current or future Idaho projects an administrative remedy by reducing the final payment or future progress payment in an amount equal to 10% of this contract or \$7,700, whichever is less.
6. **Incorporation of the Provisions:** The Contractor will include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by Idaho Code, or directives issued pursuant thereto. The Contractor will take such action with respect to subcontractor or procurement as LHTAC may direct as a means of enforcing the provisions, including sanctions for noncompliance, provided, however, that in the event a Contractor becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Contractor may request LHTAC to enter into such litigation to protect the interests of the State.

ENVIRONMENTAL REQUIREMENT – CULTURAL RESOURCE PROTECTION

Non compliance.

Comply with federal, state, and local environmental and cultural resource laws, regulations, and ordinances. Comply with the project permits. Notify the Engineer immediately of:

1. Work that is out of compliance with regulations or permits. Immediately cease non-compliant activities and take corrective action to bring the work into compliance.

2. Discharges of pollutants, discharges exceeding water quality standards, discharges which may endanger health or the environment, or an upset (exceptional incident because of factors beyond the reasonable control of the permittee as defined in 40 CFR 122.41). Perform actions to correct the discharge as soon as possible.
3. A notice of inspection or noncompliance from a state or federal resource agency. Cooperate with inspectors.

If a regulatory agency identifies a failure to comply with the permits and modifications thereto, or other federal, state, or local requirements, the Contractor is responsible for:

1. Penalties, including monetary fines and damages, proposed or assessed to the LHTAC for the Contractor's failure to comply with environmental regulations or permits.
2. Costs to mitigate or remediate violations or environmental damage or for the LHTAC to resolve enforcement actions, including payments made or costs incurred in settlement for alleged violations of applicable laws, regulations, or requirements.

The LHTAC may withhold money due to the Contractor subject to the following:

The LHTAC will withhold money due to the Contractor, in an amount estimated by the LHTAC, to include up to the full amount of penalties and mitigation costs proposed, assessed, or levied as a result of the Contractor's violation of the permits, or federal or state law, regulations, or requirements. Funds will be withheld by the LHTAC until final disposition of these costs has been made. The Contractor will remain liable for the full amount until the potential liability is finally resolved with the entity seeking the penalties.

Instead of the withhold, or if remaining contract value is not enough to cover the penalty, the Contractor may provide a suitable bond in favor of the LHTAC to cover the highest estimated liability for any disputed penalties proposed as a result of the Contractor's violation of the permits, law, regulations, or requirements.

Contractor Support Areas.

Contractor support activities (e.g., material sources, waste, stockpile or staging areas, access or haul roads) will not:

1. Encroach on regulated wetlands as defined by the U.S. Army Corps of Engineers.
2. Affect listed threatened or endangered species or critical habitat.
3. Adversely affect historic properties.

Support areas must receive environmental clearances. If the support area is on public lands, additional coordination will be needed with the land management agency. Allow a minimum of 10 business days to obtain clearance for Contractor Support Areas, provided no cultural sites are located. If sites are found, clearance may be delayed or disallowed. The Contractor will be responsible for the expenses involved in obtaining any clearance not provided by the LHTAC. Any delay created by the clearance and resource agency concurrence will not relieve the Contractor from any contract obligations.

ENVIRONMENTAL REQUIREMENT – REPORTING 404 NATIONWIDE PERMIT 14 (NWP 14)

This project has 404 permit coverage under a US Army Corps of Engineers (USACE) Reporting 404 Nationwide Permit 14 (NWP 14) for Linear Transportation Project (USACE Permit No. NWW-2024-00151, Dated: March 25, 2026), and an Idaho Department of Environmental Quality (IDEQ) Individual 401 Water Quality Certification (Dated: March 9, 2026).

SHEET 5 OF 17

Penalties and Damages

Fines, penalties, and costs to the Department for the Contractor's failure to comply with the Clean Water Act, to mitigate environmental damage, or to resolve regulatory actions will be deducted from moneys due the Contractor.

ENVIRONMENTAL REQUIREMENT – POLLINATOR PROTECTION

Implement the following Best Management Practices to support pollinators and pollinator habitat along roadside corridors:

Protect Existing Habitat: Protect existing stands of native vegetation. Ground disturbing activities will be limited only to those areas deemed necessary for the construction of the project. Disturbing existing areas of native vegetation purely for the convenience of the contractor is prohibited.

Herbicide Use: Reduce the risk of herbicide exposure to pollinators by:

1. Eliminating or reducing herbicide exposure to pollinators by first utilizing non-chemical (manual) methods to eliminate noxious and undesirable weeds.
2. If herbicide use is necessary, spot treat specific weeds with selective herbicides that do not leave residuals in the soil.
3. Treat weeds before they flower, to avoid spraying when pollinators are present.
4. Avoid spray application if winds are above 10 mph.

ENVIRONMENTAL REQUIREMENT – RESTABILIZE AND RESEEDING

If there are areas of disturbed earth outside of pavement that remain at the end of the project, the earth should be restabilized and revegetated with a seed mix that incorporates at least 3 species of native flowering forbs that are beneficial for pollinators, including at least one species of milkweed.

ENVIRONMENTAL REQUIREMENT – STREAM ALTERATION PERMIT

This project has permit coverage under an Idaho Department of Water Resources (IDWR) Stream Alteration Permit (IDWR SCA Permit No. S37-20735, Dated: March 25, 2026), for the bridge replacement of 200 S Road over Camas Creek.

Penalties and Damages

Fines, penalties, and costs to the Department for the Contractor's failure to comply with the Stream Channel Alteration Rules, IDAPA 37.03.07 Minimum Standards (Rule 55), to mitigate environmental damage, or to resolve regulatory actions will be deducted from moneys due the Contractor.

ENVIRONMENTAL REQUIREMENT – WETLAND PROTECTION

Wetlands are present within the project area. Non-compliance with the Clean Water Act may result in enforcement action by federal regulatory agencies. Disturbances to wetland areas not specifically designated on the plans is strictly prohibited. Discharge of pollutants (including sediments) to the wetland or adjacent riparian area is strictly prohibited.

GEOTECHNICAL INFORMATION

A Geotechnical Engineering Report has been prepared by Shannon & Wilson for the project and is available from LHTAC. The Contractor is required to review the findings of the subsurface exploration presented in these reports.

The Contractor will assume all costs for obtaining approvals and materials meeting the requirements for this project.

LABOR PROVISIONS

The wages of labor will be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount without discount or collection charges of any kind. Where checks are used for payment, the contractor will make all necessary arrangements for them to be cashed and will give information regarding such arrangements. No fee of any kind will be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

No employee will be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

Every employee on the work covered by this contract will be permitted to lodge, board and trade where and with whom he elects and neither the contractor nor his agents nor his employees will directly or indirectly require as a condition of employment that an employee will lodge, board or trade at a particular place or with a particular person.

No charge will be made for any transportation furnished by the contractor or his agents to any person employed on the work.

No individual will be employed as a laborer on this contract except on a wage basis, but this will not be construed to prohibit the rental of teams trucks or other equipment from individuals. No such rental agreement or any charges for feed, gasoline, supplies or repairs on account of such agreement, will cause any modifications to wage basis.

MATERIALS

The Contractor is responsible for providing all materials unless specifically identified as an owner provided material. Contractor to assume all costs incurred in obtaining approvals for use of source(s) and ensuring material meets specifications.

MATERIAL SOURCE FOR GRANULAR BORROW

Camas County offers a gravel pit that supplies granular borrow material for the proposed roadway ballast section, providing an alternative to using imported materials. This gravel pit is permitted by the Bureau of Land Management (BLM) and can be found at this location:



Camas County - BLM Gravel Pit.kmz

[Google Link of Location](#)

SHEET 7 OF 17

200 S Road over Camas Creek Bridge Replacement
BRIDGE KEY NO 23801

Camas County

Existing stockpiles are *not* available for project use. The Contractor is required to excavate material directly from the pit and stockpile or transport it immediately to the project site. All costs associated with materials testing and certification for the granular borrow material sourced from the BLM Pit, will be the responsibility of the Contractor. If the Contractor chooses to use this source, they must comply with all BLM requirements for the granular borrow material. The BLM permit associated with this pit is included with the contract documents for this project.

The Contractor will work with Camas County regarding the utilization of the gravel pit. The Contractor will submit a plan to Camas County that details a site layout for project stockpiles and provides a timeline for gravel pit usage.

Camas County Road & Bridge Department – Road Foreman
Josh Ashmead
(208) 764-2271
camascountrysrb@gmail.com

MATERIAL TESTING AND CERTIFICATION

All material testing and certifications are to be provided by the contractor. Material testing must be performed by WAQTC qualified personnel and qualified labs. Test results and certifications are to be submitted to the Engineer for review and acceptance. Acceptance will be based on the material meeting contract requirements. All costs for material testing and certifications are incidental to the contract. Reference Minimum Testing Requirements table for testing and certification requirements.

NON-BID ITEMS

QA pay factors are not included in this contract. Bonus will not be paid on project aggregates. Fuel adjustments will be administered in accordance with ITD references specifications.

PROTECTION OF EXISTING ITEMS

All items including, but not limited to, trees, bushes, fences, gates, mailboxes, utilities, curbs, gutters, sidewalks, paving, pipes, irrigation boxes, driveways, planters, signs, sprinklers, lawns, etc., outside the construction limits must be retained and protected unless specifically noted otherwise.

The Contractor will be solely liable for any damage to any item outside the limits of the construction area as a result of Contractor's operations and to any item to be retained and protected within the construction area. Any damage to any item must be promptly repaired by the Contractor. The cost of completing such repairs will be considered incidental to the cost of the project and no additional payment will be made.

UTILITY COORDINATION PROVIDED BY THE CONTRACTOR

Provide an individual whose responsibility is to coordinate the work with each utility company and property owner that will or may affect the utility company's or property owner's property, facilities, or operations. Ensure this individual is readily available by telephone whenever there is work being done by the Contractor, subcontractor, lower-tier subcontractor, utility company, or property owner.

The Department will not make a separate payment for coordinating the work that affects each utility company's or property owner's property, facilities, or operations. This work coordination is incidental and included in the ground disturbing construction pay items.

Ensure this individual is responsible for the following activities and makes documents generated by these activities available to the Contractor, utility company, property owner, and the engineer:

1. Maintaining and posting a list of emergency telephone numbers for the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, property owner, and the Engineer.
2. Notifying the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, property owner, and the Engineer of a method, including telephone number, to contact the utility coordination individual. An alternate contact person with a telephone number will be provided for situations when the utility coordination individual is not available.
3. Maintaining and documenting in writing or printed format the proposed and actual time schedules of work on utility or property owner property or facilities. Time schedules are to show the Contractor and its subcontractors (including lower-tier subcontractors), and each utility company or property owner activities.
4. Maintaining and documenting in writing a diary of work each day that involves utility or property owner property or facilities, and any work that has or may affect the utility or property owner operations.
5. Coordinating with each utility company and the Engineer to resolve utility conflict and for any needed change orders to address utility conflicts.

ON PAGE 19, SUBSECTION 101.04 – DEFINITIONS

Delete the following under Working Day.:

4. Days during December, January, and February.

ON PAGE 28, SUBSECTION 104.01B – CONSTRUCTION PARTNERING

Delete the entire section

ON PAGE 35, SUBSECTION 105.02 – PLANS AND WORKING DRAWING

04/23

Add the END OF THE THIRD PARAGRAPH STARTING WITH “Submittals must...”

For products designed by the fabricator, all shop drawing sheets must be stamped by an Engineer licensed in Idaho in addition to the cover sheet for the design calculations. When the shop drawings are for a product that is designed by the Engineer of Record, the shop drawings do not need to be stamped.

ON PAGE 37, SUBSECTION 105.07 – UTILITY FACILITIES

11/23

Add the following to the end of the subsection:

The following utility companies have facilities within the project limits:

Idaho Power Company (IPCO)
Ethan Morgan

IPCO has existing facilities that will be in conflict with the proposed improvements. IPCO will relocate existing facilities in conjunction with project construction. The Contractor will be responsible for coordination efforts with IPCO which includes verifying with IPCO at minimum 2 weeks prior to start of Project Construction for IPCO utility work and mobilization schedule. Contractor to retain and protect Idaho Power Facilities unless specifically noted otherwise.

ON PAGE 77, SUBSECTION 107.171 – INADVERTENT DISCOVERY OF CULTURAL RESOURCES INCLUDING HUMAN REMAINS

Delete the section and replace with the following:

Items that could potentially be cultural resources or human remains are to be treated as if they are cultural resources and/or human remains until a clear determination is made by the LHTAC's Cultural Resource Specialist (LHTAC CRS). The Contractor will notify the Engineer that potential resources have been identified during the work. The Engineer will then immediately notify the LHTAC CRS of any cultural resources and/or human remains or items that could potentially be cultural resources and/or human remains. In the event cultural resources or human remains are discovered within the project site, the Contractor as directed by the Engineer will implement the appropriate protocol outlined below:

1. Cultural Resources.

- a. In the event that cultural resources are discovered within the project site, at locations associated with the project, or planned for use on the project; all work within 50 feet in all directions will cease and the area will be cleared of all unnecessary personnel. The Contractor as directed by the Engineer will secure the area.
- b. The Contractor will immediately notify the Engineer. The Engineer will notify the LHTAC CRS.
- c. The LHTAC CRS will notify the State Historic Preservation Office (SHPO), the appropriate Tribal Historic Preservation Office (THPO), and/or Native American Tribes.

2. Human Remains.

- a. In the event that human remains (with or without associated cultural resources) are discovered within the project site, at locations associated with the work, or at locations planned for use; work within 150 feet of the human remains will cease and the area will be cleared of all personnel other than one or two Contractor employees or CE&I staff who will stay with the human remains until the LHTAC CRS is notified. The Contractor or the CE&I staff will secure the area and immediately notify the Engineer, who will then contact the LHTAC CRS, and if necessary, the LHTAC CRS will contact the appropriate law enforcement personnel.
- b. The LHTAC CRS will notify the SHPO and Native American Tribes, if any.
- c. Photography of human remains is not allowed. This applies to cameras, cell phones, or any other devices having photo capabilities.

- d. The human remains will be completely covered with a tarp or plain piece of cloth (e.g., rug, towel, blanket). New ground disturbance should not occur within 100 feet.
- e. The human remains will not be touched, moved, or in any way caused to change position from that noted upon discovery.
- f. All information related to the discovery will be held in strictest confidence.
- g. All information related to the discovery known to the Contractor or staff will be provided to the LHTAC CRS, and/or law enforcement.

3. Confidentiality.

In either case (i.e., discovery of cultural resources or human remains), the Contractor or the CE&I staff will keep all information strictly confidential. If information is shared with the Contractor or its subcontractor, that person will be fully informed about the confidentiality requirements and will agree to keep the information confidential. The SHA will consult with appropriate parties to determine an appropriate course of action.

4. Proceeding with Construction.

After an inadvertent discovery, some areas may be specified for close monitoring or 'no work zones'. Any such areas will be identified by the LHTAC CRS, and locations made available to the Contractor and the Engineer. Additional cultural resources investigations may be required.

ON PAGE 78, SUBSECTION 107.17J – STORMWATER POLLUTION PREVENTION

Delete the section and replace with the following:

This project requires coverage under the Construction General Permit and requires an associated Storm Water Pollution Prevention Plan. With engineer approval, a Low Erosivity Waiver (LEW) may be obtained for the project, in lieu of construction general permit coverage, if the total project disturbances are less than 5.0 acres and the Environmental Protection Agency calculated rainfall erosivity R factor is less than 5.0. If approved, a pollution prevention plan (PPP) ITD-2788 form will be required. Include all LEW documentation in the PPP and retain on site.

If anticipated construction time is extended and the Rainfall Erosivity R factor will exceed 5.0 the project will no longer be eligible for a LEW. A SWPPP must be submitted for review and certification. When certified a Notice of Intent must be filed and construction general permit coverage obtained no less than 14 days prior to desired permit coverage.

For R value calculations see:

<https://lew.epa.gov/>

Meet applicable requirements of Section 212.

1. The Contractor will prepare the entire SWPPP OR PPP using the LILB PPP form as a template provided by the Engineer.
2. Conduct inspections by a person who is knowledgeable in erosion and sediment control and pollution prevention practices.
3. Document the inspections using the ITD-2802 for a SWPPP or the ITD-2786 for a PPP. Forms are available online. Conduct inspections every 7 calendar days unless otherwise approved by the Engineer.

Submit the SWPPP or PPP and plan revisions for approval. The Engineer may also require submittal of an electronic, editable version of the plan. Allow 7 calendar days for review, unless otherwise specified. Revise to address comments and resubmit. Adjustments in cost or time are not allowed for SWPPP or PPP approval. Once approved, the Engineer and Contractor will sign the plan. Obtain approval before commencing pollutant-generating activities. Provide the SWPPP or PPP including all associated inspections upon request. Construction activities, construction support activities, or other pollutant-generating activities not covered under another discharge permit are not allowed beyond the project site without being included in the approved SWPPP or PPP.

If not itemized separately in bid schedule, preparation, maintenance, and inspection of SWPPP or PPP are incidental to the project.

ON PAGE 82, SUBSECTION 107.19 – SURVEY MONUMENT PRESERVATION 04/23

Under subsection 107.19.2, add the following after the first full sentence:

Research within the project limits in the MCPD for survey monuments within the work zone to determine the possible existence of survey monuments to preserve and protect or to be reestablished after construction. Document that this research has been completed.

ON PAGE 84, SUBSECTION 107.19 – SURVEY MONUMENT PRESERVATION 04/23

Under subsection 107.19.9.g., add the following at the end of the subsection:

The provisions of Section 107.08 will apply.

ON PAGE 87, SUBSECTION 108.01 – SUBLETTING OF CONTRACT 05/23

Delete the second sentence and substitute the following:

If the Engineer consents to subletting a portion of the work, the Contractor will use its own organization to perform work amounting to at least 30 percent of the original contract amount.

ON PAGE 112, SUBSECTION 109.05 – PARTIAL PAYMENTS

Delete the 2nd sentence and replace with the following:

Partial payments will be made once each month as the work progresses and only if the Contractor performs work in accordance with the contract or as directed.

Delete the 3rd sentence.

ON PAGE 134 SUBSECTION 203.03B – CONSTRUCTION REQUIREMENTS

Add to the 2nd paragraph of Part B Removal of Bridge, Culverts and Other Drainage Structures.

Netting, tarps, or other suitable material will be used under the bridges to capture contaminants that would otherwise fall into the water or drainage area below to prevent damage to water quality. This is incidental to miscellaneous removals.

ON PAGE 164, SUBSECTION 210.02 – MATERIALS

Delete “Granular Borrow”.

ON PAGE 380, SUBSECTION 511.01B – QUALIFICATIONS

Delete the text within Bullet 1 and replace with the following:

Manufacturer Representative. Should be on site at the option of the Contractor. If present, submit the representative’s written report daily. The report should include membrane related activities, test results, observations, repairs, tack coat timing issues, and contaminated tack repairs. The absence of a manufacturer representative does not provide allowance for deficient materials or installation.

Follow the manufacturer’s written instructions when installing the membrane system, as provided in this specification.

ON PAGE 517, SUBSECTION 621.03 – CONSTRUCTION REQUIREMENTS **04/23**

Add the following before the first paragraph of 621.03.A:

Seed between Sept 15th and Nov 30th, or as directed.

ON PAGE 519, SUBSECTION 621.03 – CONSTRUCTION REQUIREMENTS

Delete the third paragraph of Part D and substitute the following:

Furnish seed according to subsection 711.05.

ON PAGE 678, SUBSECTION 711.05 – SEED

Delete this subsection and substitute the following:

711.05 – Seed. Provide seed with a minimum of three eco-regional native plant species that has been collected or harvested within 2 years of the targeted seeding date. Provide all seed in pure live seed (PLS) unless otherwise directed.

Ensure each bag or container of individual seed species has labeling indicating seed classification (genus and species), lot number, purity, germination, percentage of weeds found, percentage of noxious weeds found, and test date.

For certified or non-certified seed:

1. Noxious weed seeds prohibited.
2. Less than 1 percent by weight weed seeds including restricted noxious weed seed.
3. Less than 3 percent by weight of allowable cheat, chess, or downy brome seed.

To obtain the PLS rating, use this formula:

$$\text{PLS rating} = (\text{purity \%}) \times (\text{germination \%}) / 100$$

To obtain the bulk seed needed:

Bulk pounds of seed needed per acre = (PLS lb/acre required)/ PLS rating

Add 2 PLS lb/acre of milkweed seed.

- A. Approval.** The Engineer will verify that all seed comply with certification tags for each species before approval. Once approved, deliver seed to the project site unopened, in original and individually packaged bags or containers according to species type (i.e. one species per bag or container). If seed is received in opened packages, packages without certification tags, or packages or containers containing multiple species, the seed will not be approved for use.
- B. Random Sampling.** The Engineer may conduct random onsite sampling to verify species, purity percentage, germination percentage, and restricted and prohibited noxious weed seeds. The Engineer will weigh seed according to size, approximately 125 gram samples of mostly native seed (550 gram samples of grain or similar size seed) from unblended and individually packaged seed containers of each species. Samples will be submitted to the ISDA for analysis and verification. The Engineer will reject seed not meeting specifications. Do not plant until the seed is accepted and the application method is approved. Measure and mix individual unopened seed packages onsite in the Engineer's presence at the specified proportions.

S501-20A SP BRIDGE – COARSE AGGREGATE DRAIN

Description This item will compensate the Contractor for materials and installation of the drainage geotextile and coarse aggregate drain as directed at the locations shown on the plans.

Materials Provide material in accordance with the ITD Standard Specifications.

Drainage geotextile in accordance with Section 718.05.

Coarse Aggregate in accordance with Section 703.02.C.

Construction Requirements The intent behind the coarse aggregate drain is to both facilitate drainage and prevent the overlay material from falling through the deck drains. Coarse aggregate is to be fully wrapped in drainage geotextile.

Method of Measurement The Engineer will measure acceptably completed work by each drain installed (EACH).

Basis of Payment The Department will pay for the accepted quantities at the contract unit price as follows:

| Pay Item | Pay Unit |
|------------------------------------|-----------------|
| SP Bridge – Coarse Aggregate Drain | EACH |

No separate payment will be made for other items necessary to complete the construction of the coarse aggregate drain, including haul. The cost of these items is incidental and included in the contract unit price bid for this item.

S610-05A REM & RESET FENCE

Description Remove and reset the existing fence as shown on the project drawings or as directed.

Materials Provide material in accordance with the ITD Standard Specifications Section 610.02. Reuse existing fencing materials if in fair or better condition. Replace with new like-existing materials as directed by the Engineer

Construction Requirements Remove existing fencing materials from the existing posts enough to accommodate embankment construction at the location shown in the project drawings. Fencing need not to be cut but moved far enough away from the construction operation to avoid damage. Fence posts may be left in place if desired or removed, stockpiled, and reset following final grading at Contractor's discretion. For chain link fence posts, remove existing concrete and set posts for chain-link fence in Class 22 concrete. Crown the surface of the concrete to drain.

Any fence damaged or stolen during construction will be replaced in like kind by the Contractor at his expense. Any permits, licenses, fees, or insurance coverage required to remove and reset a complete length of fence will be the sole responsibility of the Contractor.

Method of Measurement Payment will be measured by the foot of fence reset (FT).

Basis of Payment The Department will pay for the accepted quantities at the contract unit price as follows:

| Pay Item | Pay Unit |
|------------------------|-----------------|
| Remove and Reset Fence | FT |

S900-50A CONTINGENCY AMOUNT – MISCELLANEOUS WORK

Description This item will compensate the Contractor for minor work or material not specified in the project documents that is necessary to the work as directed by the Engineer.

Materials Provide material as directed by the Engineer and in accordance with the ITD Standard Specifications.

Construction Requirements Complete construction as directed by the Engineer and in accordance with the ITD Standard Specifications.

Method of Measurement The Engineer will measure acceptably completed work by the Contingency Amount (CA).

Basis of Payment The Department will pay for the accepted quantities at the contract unit price as follows:

| Pay Item | Pay Unit |
|-----------------|-----------------|
|-----------------|-----------------|

S900-50A CONTINGENCY AMOUNT – MISCELLANEOUS PPP ITEMS

Description This item will compensate the Contractor for Pollution Prevention Plan not specified in the project documents that is necessary to the work as directed by the Engineer including the re-establishment of vegetation at disturbed areas.

Materials Provide material as directed by the Engineer and in accordance with the ITD Standard Specifications. Contractor will submit material reports planned for use on site for approval by the Engineer prior to the use of the material on site.

Construction Requirements Complete construction as directed by the Engineer and in accordance with the ITD Standard Specifications.

Method of Measurement The Engineer will measure acceptably completed work by the Contingency Amount (CA).

Basis of Payment The Department will pay for the accepted quantities at the contract unit price as follows:

| Pay Item | Pay Unit |
|--|-----------------|
| Contingency Amount – Miscellaneous PPP Items | CA |

S904-05A SP TEMPORARY TRAFFIC CONTROL

Description Provide traffic control operations for work performed under this contract as show in the plans, as specified in 626, or as directed by the Engineer.

Materials Use material as specified in 107.06 and 626.02. Materials will be certified to meet the Manual on Uniform Traffic Control Devices (MUTCD), and/or NCHRP 350 or AASHTO MASH requirements.

Construction Requirements Comply with the contract requirements specified in 626 and 630.

Correct traffic control deficiencies within 1 hour of receiving notification from the Engineer of requested corrective action.

Construction Traffic Control Maintenance. Furnish, install, maintain, reset, and remove traffic control devices used for the purpose of regulating, warning, or directing traffic as all work locations.

Comply with ITD Standard Specifications Section 105.14.

If the Contractor chooses to submit an alternate Temporary Traffic Control Plan, submittal will include all authorities having jurisdiction over the local roads impacted by this project, and written approval by all jurisdictions is required before work that impacts traffic begins. Allow at least 10 working days for agency review. Traffic Control Plans are required to meet all standards of the MUTCD as adopted by the

State of Idaho. Include all sign placements, placement of flaggers, all channelizing and channelization devices, placement of all arrow boards, and placement of all Portable Changeable Message (PCM) signs for each phase of construction. The Traffic Control Plan needs to be drawn in a form acceptable to the Engineer.

Work that impacts traffic is prohibited until the Traffic Control Plan has been approved.

Method of Measurement The Engineer will measure acceptable completed work by the lump sum. This work includes, but is not limited to the following:

1. Construction signs
2. Drums
3. Barricades
4. Arrow boards
5. Temporary pavement markings
6. Miscellaneous traffic control items, including high visibility sign flags and flashing beacons
7. Traffic control maintenance
8. Flagger control
9. Portable Changeable Message (PCM) signs
10. Temporary Rigid Raised Reflective Markers
11. Temporary Barrier and Anchoring
12. Tubular Markers
13. Temporary Traffic Control Signals

Basis of Payment Payment for accepted work will be made as follows:

| Pay Item | Pay Unit |
|--------------------------------|-----------------|
| SP – Temporary Traffic Control | LS |

Proposal Revision Instructions

The Local Highway Technical Assistance Council will accept revisions to submitted proposals with the following instructions:

All revisions must be submitted following the same instructions given in the “Instructions to Bidders” section of this solicitation with the following modifications:

1. Revisions to items from the “Bid Schedule” (pages X-X of this proposal) must be submitted with an updated “Bid Schedule” and “Signature Page” (page X of this proposal)
2. On the sealed envelope, change the “Bid Enclosed” label to “Bid Revision Enclosed”. Include all other required labeling.

All Revisions must be received by the deadline outlined in this proposal. No late revisions will be accepted and the original bid, or most recent accepted revision will be the recorded bid from the contractor.

Request to Withdraw Bid Prior to Bid Opening

Email to bridge@LHTAC.org

For hard copy bids a bidder may withdraw a proposal after it has been deposited with LHTAC, provided the request for such withdraw is received before the time set for the Bid Opening. The withdrawal must be on this form or on Company letterhead following the same format, providing the same information and signed by a representative of the bidder, authorized to sign contract documents.

Date _____

To: Local Highway Technical Assistance Council

Attn: Leading Idaho Local Bridge Program Proposal No. _____

Proposal Project Name: _____

Withdrawal Statement: "Enclosed please find our request to withdraw our bid previously submitted."

Company Name as it appears on your bid:

Signature

Printed Name and Title

Company address as it appears on your bid

Phone Number _____

Email Address _____

STATE-FUNDED CONTRACT ACKNOWLEDGEMENT

Failure to comply with the terms of the referenced Idaho Code may result in breach of contract.

Idaho 95% Resident Workforce Clause

The Contractor must comply with Idaho Code, §§44-1001 through 44-1005, which requires ninety-five percent (95%) of persons employed on the project be *bona fide* Idaho residents, except for projects with fifty (50) or fewer employees. For projects with fifty (50) or fewer employees, up to ten percent (10%) may be nonresidents, provided the Contractor gives employment preference to Idaho residents. If there are questions about the statutes or compliance, seek legal counsel. Section 107.01.B of the 2023 Idaho Transportation Department Standard Specifications for Highway Construction takes precedence over any supplemental specifications referenced in the project Special Provisions.

LILB Minimum Testing Requirements

The requirements listed in this document are contractual and must be provided for acceptance and payment.

Volume units must be measured by Contractor survey for acceptance.



Products, with the exception of those within specification sections 503, 505, 512, 612, and 613, can be accepted by inclusion on the ITD QPL. QPL print out required for project files.

| BID # | MATERIAL | PURPOSE OF TESTING | SPEC. REF. | TEST METHOD | REQUIRED REPORT FORM NO. | MINIMUM FREQUENCY | REMARKS, NOTES, OR ADDITIONAL INSTRUCTIONS | BID QUANTITY | MINIMUM NO. TESTS/ CERTS REQ. |
|--|---|----------------------|---------------------|---------------------|--------------------------|---------------------|--|--------------|-------------------------------|
| | | | SAMPLED BY | TESTED BY | | | | | |
| BID ITEM NO. & DESCRIPTION: 107-019A - Survey Monument Preservation | | | | | | | | | |
| 107-019A | Survey Monument Preservation | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 5,000.00 CA | DIARY |
| BID ITEM NO. & DESCRIPTION: 201-005A - Clearing & Grubbing | | | | | | | | | |
| 201-005A | Clearing & Grubbing | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 0.39 ACRE | DIARY |
| BID ITEM NO. & DESCRIPTION: 203-006A - Removal of Sign | | | | | | | | | |
| 203-006A | Removal of Sign | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 12.00 EACH | DIARY |
| BID ITEM NO. & DESCRIPTION: 203-020A - Removal of Bridge - Full | | | | | | | | | |
| 203-020A | Removal of Bridge | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 2.00 EACH | DIARY |
| BID ITEM NO. & DESCRIPTION: 203-075A - Removal of Fence | | | | | | | | | |
| 203-075A | Removal of Fence | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 556.00 FT | DIARY |
| BID ITEM NO. & DESCRIPTION: 203-123A - Removal of Miscellaneous Items - 14" Corrugated Metal Pipe Culvert | | | | | | | | | |
| 203-123A | Removal of Misc Items - 14" CMP Culvert | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 31.00 FT | DIARY |

| BID ITEM NO. & DESCRIPTION: 203-123B - Removal of Miscellaneous Items - 48" Corrugated Metal Pipe Culvert | | | | | | | | | |
|---|---|--------------------------------|---------------------|---|---------|--|--|-------------|-------|
| 203-123B | Removal of Misc Items - 48" CMP Culvert | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 50.00 FT | DIARY |
| BID ITEM NO. & DESCRIPTION: 205-005A - Excavation (Proposed & Existing Roadway) | | | | | | | | | |
| 205-005A | Excavation Class C Compaction Excavated to top of Subgrade or below natural ground under embankments | ACCEPTANCE In-Place Density | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 | ITD-025 | | RE to document compaction effort/proof roll. | 1,993.00 CY | TQP |
| | | | Project Personnel | Project Personnel | | | | | |
| | Excavation Subgrade Embankment Fill | | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 AASHTO T 310 | ITD-850 | Each 2,500 CY or 4,000 tons but not less than one test per lift for each bottom two and each top lift and no less than one test per three lifts. | Document Compaction effort (equipment, number of passes etc.) for lifts not tested. After remedial efforts, obtain check tests withing 10 feet and at same depth as original test. | | |
| | | | Contractor | Contractor | | | | | |

| BID ITEM NO. & DESCRIPTION: 205-005B - Excavation (Abutments) | | | | | | | | | |
|---|---|--------------------------------|-------------------|---|---------|--|--|-------------|-----|
| 205-005B | Excavation Class C Compaction Excavated to top of Subgrade or below natural ground under embankments | ACCEPTANCE In-Place Density | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 | ITD-025 | | RE to document compaction effort/proof roll. | 867.00 CY | TQP |
| | | | Project Personnel | Project Personnel | | | | | |
| | Excavation Subgrade Embankment Fill | | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 AASHTO T 310 | ITD-850 | Each 2,500 CY or 4,000 tons but not less than one test per lift for each bottom two and each top lift and no less than one test per three lifts. | Document Compaction effort (equipment, number of passes etc.) for lifts not tested. After remedial efforts, obtain check tests withing 10 feet and at same depth as original test. | | |
| | | | Contractor | Contractor | | | | | |
| BID ITEM NO. & DESCRIPTION: 205-005C - Channel Excavation | | | | | | | | | |
| 205-005C | Excavation Class C Compaction Excavated to top of Subgrade or below natural ground under embankments | ACCEPTANCE In-Place Density | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 | ITD-025 | | RE to document compaction effort/proof roll. | 4,148.00 CY | TQP |
| | | | Project Personnel | Project Personnel | | | | | |
| | Excavation Subgrade Embankment Fill | | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 AASHTO T 310 | ITD-850 | Each 2,500 CY or 4,000 tons but not less than one test per lift for each bottom two and each top lift and no less than one test per three lifts. | Document Compaction effort (equipment, number of passes etc.) for lifts not tested. After remedial efforts, obtain check tests withing 10 feet and at same depth as original test. | | |
| | | | Contractor | Contractor | | | | | |

| BID ITEM NO. & DESCRIPTION: 205-045A - Granular Borrow | | | | | | | | | |
|--|-------------------------------------|--------------------------------|---------------------|---|---------|--|--|--------------|-------|
| 205-045A | Granular Borrow | ACCEPTANCE In-Place Density | 205.03F | AASHTO T 99 AASHTO T 180 AASHTO T 272 Idaho IT-74 AASHTO T 310 | ITD-850 | Each 5,000 CY but not less than one test per lift for each bottom 3 and each top 3 lifts | Document Compaction effort (equipment, number of passes etc.) for lifts not tested. After remedial efforts, obtain check tests withing 10 feet and at same depth as original test. | 6,279.00 TON | TQP |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Sand Equivalent | 205.02 | AASHTO T 27 AASHTO T 11 AASHTO T 176 | ITD-901 | Each 10,000 CY | Sand equivalent requirements do not apply to RAP used as Granular Borrow | | TQP |
| | | | Contractor | Contractor | | | | | |
| BID ITEM NO. & DESCRIPTION: 210-005A - Structure Excavation Schedule No. 1 - Soil & Gravel | | | | | | | | | |
| 210-005A | Structure Excavation Schedule No. 1 | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 550.00 CY | DIARY |
| BID ITEM NO. & DESCRIPTION: 210-005B - Structure Excavation Schedule No. 1 - Rock | | | | | | | | | |
| 210-005B | Structure Excavation Schedule No. 1 | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 356.00 CY | DIARY |
| BID ITEM NO. & DESCRIPTION: 210-015A - Compacting Backfill | | | | | | | | | |
| 210-015A | Compacting Backfill | ACCEPTANCE In-Place Density | 210.03 | AASHTO T 99 AASHTO T180 AASHTO T 272 Idaho IT-74 AASHTO T 310 Method B | ITD-850 | Each 2,500 CY or 4,000 tons for each structure component. Abutments for Bridge approach slabs not less than one test per 2 8in compacted lift. | Document compaction effort for each lift. Obtain check tests within 10 feet (3m) and at same depth as original test. | 679.00 CY | TQP |
| | | | Contractor | Contractor | | | | | |
| BID ITEM NO. & DESCRIPTION: 212-011A - Fiber Wattle | | | | | | | | | |
| 212-011A | Fiber Wattle | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 832.00 FT | DIARY |

| BID ITEM NO. & DESCRIPTION: 212-020A - Silt Fence | | | | | | | | | |
|--|------------------------------------|--|------------------------|---|---------|---|---|--------------|-------|
| 212-020A | Silt Fence | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 559.00 FT | DIARY |
| BID ITEM NO. & DESCRIPTION: 212-110A - Water Pollution Control Manager | | | | | | | | | |
| 212-110A | Water Pollution Control Manager | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 1.00 LS | DIARY |
| BID ITEM NO. & DESCRIPTION: 301-005A - Granular Subbase | | | | | | | | | |
| 301-005A | Granular Subbase | ACCEPTANCE In-Place Density | 301.02 | AASHTO T 180 Idaho IT-74 AASHTO T 310 Method B | ITD-850 | No less than one per bridge approach | Contractor is responsible for providing an Idaho T-74 density curve | 1,145.00 TON | TQP |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Gradation Sand Equivalent | 301-02 703.11 | AASHTO R 90 AASHTO R 76 AASHTO T 27 AASHTO T 255 AASHTO T 265 AASHTO T 176 Alt Method 2, Mechanical | ITD-901 | Each 5,000 Tons or 3,000 CY | Acceptance from windrow or roadway. Wash method not required Moisture percent required for payment only | | |
| | | | Contractor | Contractor | | | | | |

BID ITEM NO. & DESCRIPTION: 303-022A - 3/4" Aggregate Type B for Base

| | | | | | | | | | |
|------------|----------------------|--|------------|---|---------|--|---|--------------|-----|
| 303-022A | Aggregate | ACCEPTANCE Gradation Sand Equivalent Fracture Count | 303.02 | FOP for AASHTO R 90 FOP for AASHTO R 76 FOP for AASHTO T 27 FOP for AASHTO T 11 FOP for AASHTO T 255 FOP for AASHTO T 265 FOP for AASHTO T 176 Alt. Method 2, Mechanical FOP for AASHTO T 335 Method 1 | ITD-901 | Each 700 CY or 1,000 Tons | Acceptance from windrow or roadway. Moisture percent required for payment only | 1,500.00 TON | TQP |
| | | | 703.04 | | | | | | |
| | Contractor | Contractor | | | | | | | |
| | Compacted Roadway | ACCEPTANCE In-Place Density | 303.02 | AASHTO T 310 Method B | ITD-850 | Each 700 CY or 1,000 Tons, but no less than one per bridge approach | Contractor is responsible for providing an Idaho T-74 density curve | | |
| Contractor | | | Contractor | | | | | | |

BID ITEM NO. & DESCRIPTION: 502-140A - Concrete CL 40-A Schedule No. 1

| | | | | | | | | | |
|------------|---|--|----------------------------|---|------------------------|---|---|-----------|-----|
| 502-140A | Concrete Ready Mix Plant Inspection | | Project Personnel | Project Personnel | ITD-893 or equivalent | 1 per project | Inspection of plant is valid for 1 year | 316.00 CY | TQP |
| | Mix Design | ACCEPTANCE Admixtures (Approved List) | 709.02 | ATM C494 AASHTO M 154 | QPL | | | | |
| | | | 709.03 709.04 709.05 | | | | | | |
| | Cement | ACCEPTANCE Certification | 701.01 | AASHTO M 85 | Supplier Certification | Each week concrete is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| | Fly Ash | ACCEPTANCE Certification | 714 | | Supplier Certification | Each week fly ash is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| | Concrete Production of 3,500 psi or greater | FIELD ACCEPTANCE Slump Air Content Temperature Unit Weight Cement Factor | 502.02 | WAQTC TM 2 AASHTO T 119 AASHTO T121 AASHTO 309 AASHTO T 152 | ITD-70 | First load, then randomly each 50 CY until quantity exceeds 100 CY. Thereafter randomly every 100 CY but not less than one per day. | | | |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Compressive Strength Surface Resistivity | 502.02 | AASHTO T 22 AASHTO T 23 AASHTO T 358 | ITD-845 | 1 Set of three 28 day cylinders and 1 set of two 7 day cylinders. Not less than 1 per day. | A single sample of concrete must be sufficient size for cylinders, air, slump, and unit weight testing. | | |
| Contractor | | | Contractor | | | | | | |

BID ITEM NO. & DESCRIPTION: 502-310A - Concrete Class 40 AF Schedule No. 2

| | | | | | | | | | |
|------------|---|--|----------------------------|---|------------------------|---|---|-----------|-----|
| 502-310A | Concrete Ready Mix Plant Inspection | | Project Personnel | Project Personnel | ITD-893 or equivalent | 1 per project | Inspection of plant is valid for 1 year | 200.40 CY | TQP |
| | Mix Design | ACCEPTANCE Admixtures (Approved List) | 709.02 | ATM C494 AASHTO M 154 | QPL | | | | |
| | | | 709.03 709.04 709.05 | | | | | | |
| | Cement | ACCEPTANCE Certification | 701.01 | AASHTO M 85 | Supplier Certification | Each week concrete is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| | Fly Ash | ACCEPTANCE Certification | 714 | | Supplier Certification | Each week fly ash is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| | Concrete Production of 3,500 psi or greater | FIELD ACCEPTANCE Slump Air Content Temperature Unit Weight Cement Factor | 502.02 | WAQTC TM 2 AASHTO T 119 AASHTO T121 AASHTO 309 AASHTO T 152 | ITD-70 | First load, then randomly each 50 CY until quantity exceeds 100 CY. Thereafter randomly every 100 CY but not less than one per day. | | | |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Compressive Strength Surface Resistivity | 502.02 | AASHTO T 22 AASHTO T 23 AASHTO T 358 | ITD-845 | 1 Set of three 28 day cylinders and 1 set of two 7 day cylinders. Not less than 1 per day. | A single sample of concrete must be sufficient size for cylinders, air, slump, and unit weight testing. | | |
| Contractor | | | Contractor | | | | | | |

| BID ITEM NO. & DESCRIPTION: 502-380A - Prestress WF Girder (50" Depth) | | | | | | | | | |
|--|--|---|------------|--|---------------------------------------|--|---------------------------------------|--------------|--------------|
| 502-380A | Pre-cast Stringers, Prestressed Members | FIELD ACCEPTANCE Slump Air Content Temperature Unit Weight | 502.02 | AASHTO T119 AASHTO T152 AASHTO T309 AASHTO T121 | ITD-70 | One (1) per member | | 816.00 FT | TQP |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Compressive Strength | 502.02 | AASHTO T22 AASHTO T23 | ITD-845 | One (1) set of three (3) 28-day cylinders and One (1) set of two (2) 7-day QC cylinders per member | | | |
| | | | Contractor | Contractor | | | | | |
| | Reinforcing Steel and Prestressing Steel | ACCEPTANCE Certification | 503.02 | AASHTO M 31 | Mill Certification with Field Tags | Total Quantity Paid | Provide Manufacturer Certification | | |
| | | | 708.02 | | | | | Manufacturer | Manufacturer |

| BID ITEM NO. & DESCRIPTION: 502-430A - Concrete Parapet (Type Single Slope, Height 42") | | | | | | | | | |
|--|--|---|---|------------------------------------|---|--|---|--------------|------|
| 502-430A | Concrete Ready Mix Plant Inspection | | Project Personnel | Project Personnel | ITD-893 or equivalent | 1 per project | Inspection of plant is valid for 1 year | 476.00 FT | TQP |
| | Mix Design | ACCEPTANCE Admixtures (Approved List) | 709.02 | ATM C494 AASHTO M 154 | QPL | | | | |
| | | | 709.03 709.04 709.05 | | | | | | |
| | Cement | ACCEPTANCE Certification | 701.01 | AASHTO M 85 | Supplier Certification | Each week concrete is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| | Fly Ash | ACCEPTANCE Certification | 714 | | Supplier Certification | Each week fly ash is placed representing the amount used | Supplier Certification | | |
| | | | Manufacturer | Manufacturer | | | | | |
| Concrete Production of 3,500 psi or greater | FIELD ACCEPTANCE Slump Air Content Temperature Unit Weight Cement Factor | 502.02 | WAQTC TM 2 AASHTO T 119 AASHTO T121 AASHTO 309 AASHTO T 152 | ITD-70 | First load, then randomly each 50 CY until quantity exceeds 100 CY. Thereafter randomly every 100 CY but not less than one per day. | | | | |
| | | Contractor | Contractor | | | | | | |
| | ACCEPTANCE Compressive Strength Surface Resistivity | 502.02 | AASHTO T 22 AASHTO T 23 AASHTO T 358 | ITD-845 | 1 Set of three 28 day cylinders and 1 set of two 7 day cylinders. Not less than 1 per day. | A single sample of concrete must be sufficient size3 for cylinders, air, slump, and unit weight testing. | | | |
| | | Contractor | Contractor | | | | | | |
| Metal Reinforcement | ACCEPTANCE Certification | 503.02 | AASHTO M 31 | Mill Certification with Field Tags | Total Quantity Paid | Provide Manufacturer Certification | | | |
| | | 708.02 | | | | | Manufacturer | Manufacturer | |
| BID ITEM NO. & DESCRIPTION: 503-010A - Metal Reinforcement Schedule No. 1 | | | | | | | | | |
| 503-010A | Metal Reinforcement Schedule No. 1 | ACCEPTANCE Certification | 503.02 | AASHTO M 31 | Mill Certification with Field Tags | Total Quantity Paid | Provide Manufacturer Certification | 40,024.00 LB | CERT |
| | | | 708.02 | | | | | | |
| BID ITEM NO. & DESCRIPTION: 503-015A - Metal Reinforcement Schedule No. 2 | | | | | | | | | |
| 503-015A | Metal Reinforcement Schedule No. 2 | ACCEPTANCE Certification | 503.02 | AASHTO M 31 | Mill Certification with Field Tags | Total Quantity Paid | Provide Manufacturer Certification | 15,358.00 LB | CERT |
| | | | 708.02 | | | | | | |

| BID ITEM NO. & DESCRIPTION: 503-020A - Epoxy-Coated Metal Reinforcement | | | | | | | | | |
|---|--|--------------------------|---------------------|---------------------|------------------------------------|---------------------|------------------------------------|--------------|-------|
| 503-020A | Epoxy Coated Metal Reinforcement | ACCEPTANCE Certification | 503.02 | AASHTO M 31 | Mill Certification with Field Tags | Total Quantity Paid | Provide Manufacturer Certification | 28,534.00 LB | CERT |
| | | | 708.02 | Manufacturer | | | | | |
| BID ITEM NO. & DESCRIPTION: 507-010A - Elastomeric Bearings Laminated (1.25" x 8" x 32") | | | | | | | | | |
| 507-010A | Self-Lubricating Bronze Bearing Plates | ACCEPTANCE Certification | 507.02 | | ITD-851 | Total Quantity Paid | Provide Manufacturer Certification | 16.00 EACH | CERT |
| | | | 708.29 | Manufacturer | | | | | |
| | Neoprene Bearing Pads | ACCEPTANCE Visual | 507.02 | AASHTO M 251 | ITD-025 | Total Quantity Paid | Provide Manufacturer Certification | | DIARY |
| | | | 720.02 | Manufacturer | | | | | |
| BID ITEM NO. & DESCRIPTION: 509-005A - Non-Structural Concrete Class 15 | | | | | | | | | |
| 509-005A | Non Structural Concrete | ACCEPTANCE Testing | 509.02 | | Passing QC Breaks | Total Quantity Paid | | 111.00 CY | TQP |
| | | | | Concrete Supplier | | | | | |
| BID ITEM NO. & DESCRIPTION: 511-005A - Concrete Waterproof System Type D | | | | | | | | | |
| 511-005A | Concrete Waterproof System Type D | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | Provide Manufacturer Submittal | 637.30 SY | DIARY |
| BID ITEM NO. & DESCRIPTION: 560-005A - Dewatering Foundation | | | | | | | | | |
| 560-005A | Dewatering Foundation | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 1.00 LS | DIARY |
| BID ITEM NO. & DESCRIPTION: 566-010A - Compression Expansion Joint | | | | | | | | | |
| 566-010A | Compression Expansion Joint | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 62.00 FT | DIARY |

| BID ITEM NO. & DESCRIPTION: 602-085A - 48" Pipe Culvert | | | | | | | | | |
|--|---|--|--------------------------------|---|------------------------|---|--|-----------|------------|
| 602-085A | Concrete Pipe | ACCEPTANCE Certification | 502.01(B) Concrete Supplier | Concrete Supplier | Supplier Certification | Total Quantity Paid | Concrete Supplier Certification | 190.00 FT | CERT / TOP |
| | PVC/HDPE/Steel Pipe | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | | |
| | Fly Ash | ACCEPTANCE Certification | 714 Manufacturer | Manufacturer | Supplier Certification | Each week concrete is placed representing the amount used | Concrete Supplier Certification | | |
| | Concrete Production of 3,500 psi or greater | FIELD ACCEPTANCE Slump Air Content Temperature Unit Weight Cement Factor | 502.02 | WAQTC TM 2 AASHTO T 119 AASHTO T121 AASHTO 309 AASHTO T 152 | ITD-70 | First load, then randomly each 50 CY until quantity exceeds 100 CY. Thereafter randomly every 100 CY but not less than one per day. | | | |
| | | | Contractor | Contractor | | | | | |
| | | ACCEPTANCE Compressive Strength Surface Resistivity | 502.02 | AASHTO T 22 AASHTO T 23 AASHTO T 358 | ITD-845 | 1 Set of three 28 day cylinders and 1 set of two & day cylinders. Not less than 1 per day. | A single sample of concrete must be sufficient size3 for cylinders, air, slump, and unit weight testing. | | |
| Contractor | Contractor | | | | | | | | |
| BID ITEM NO. & DESCRIPTION: 610-015A - Fence Type 1 B | | | | | | | | | |
| 610-015A | Barbed Wire | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 405.00 FT | DIARY |
| | Metal Posts for all fence types | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | | |
| BID ITEM NO. & DESCRIPTION: 621-005A - Seed Bed Preparation | | | | | | | | | |
| 621-005A | Seed Bed Preparation | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 0.37 ACRE | DIARY |
| BID ITEM NO. & DESCRIPTION: 621-010A - Seeding | | | | | | | | | |
| 621-010A | Seeding | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 0.37 ACRE | DIARY |

| BID ITEM NO. & DESCRIPTION: 621-035A - Fertilizing | | | | | | | | | |
|---|---|-----------------------------|------------------------|--|--|---------------------|---|-------------|-------|
| 621-035A | Fertilizing | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 0.37 ACRE | DIARY |
| BID ITEM NO. & DESCRIPTION: 621-060A - Mulch Plus Tackifier | | | | | | | | | |
| 621-060A | Fertilizing | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 0.37 ACRE | DIARY |
| BID ITEM NO. & DESCRIPTION: 624-005A - Loose Riprap - Bridge | | | | | | | | | |
| 624-005A | Loose Riprap | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | Initial Testing required for Apparent Specific Gravity, Absorption & Coarse Durability Index | 290.00 CY | DIARY |
| BID ITEM NO. & DESCRIPTION: 624-005B - Loose Riprap - Channel | | | | | | | | | |
| 624-005B | Loose Riprap | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | Initial Testing required for Apparent Specific Gravity, Absorption & Coarse Durability Index | 560.00 CY | DIARY |
| BID ITEM NO. & DESCRIPTION: 626-100A - Miscellaneous Temporary Traffic Control | | | | | | | | | |
| 626-100A | Miscellaneous Temporary Traffic Control | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | Provide Manufacturer MASH/NCHRP Certification | 3,000.00 CA | DIARY |
| BID ITEM NO. & DESCRIPTION: 640-010A - Riprap/Erosion Control Geotextile | | | | | | | | | |
| 640-010A | Riprap/Erosion Control Geotextile | ACCEPTANCE Certification | 718.07 | ASTM D4632 ASTM D6241 ASTM D4533 ASTM D4751 ASTM D4491 | ITD-851 or 849 for Structural Applications or Inclusion on ITD QPL (requires print out of QPL for files) | Total Quantity Paid | Provide Manufacturer Certification | 550.00 SY | CERT |
| | | | Manufacturer | Manufacturer | | | | | |
| BID ITEM NO. & DESCRIPTION: 675-005A - Survey | | | | | | | | | |
| 675-005A | Survey | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 1.00 LS | DIARY |

| BID ITEM NO. & DESCRIPTION: 677-005A - Record Drawings | | | | | | | | | |
|--|---|--------------------------------|------------------------|--|--|---------------------|--|--------------|-------|
| 677-005A | Record Drawings | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 1.00 LS | DIARY |
| BID ITEM NO. & DESCRIPTION: S501-20A - SP Bridge - Coarse Aggregate Drain | | | | | | | | | |
| S501-20A | Aggregate | ACCEPTANCE In-Place Density | 303.02 703.02.C | FOP for AASHTO T-310 Method B | ITD-850 | Each 1,000 Tons | Class D compaction | 16.00 EACH | TQP |
| | | | Contractor | Contractor | | | | | |
| | Drainage Geotextile | ACCEPTANCE Certification | 718.05 | ASTM D4632 ASTM D6241 ASTM D4533 ASTM D4751 ASTM D4491 | ITD-851 or 849 for Structural Applications or Inclusion on ITD QPL (requires print out of QPL for files) | Total Quantity Paid | Provide Manufacturer Certification | | CERT |
| | | | Manufacturer | Manufacturer | | | | | |
| BID ITEM NO. & DESCRIPTION: S610-05A - Rem & Reset Fence | | | | | | | | | |
| S610-05A | Remove and Reset Fence | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 526.00 FT | DIARY |
| BID ITEM NO. & DESCRIPTION: S900-50A - Contingency Amount - Miscellaneous Work | | | | | | | | | |
| S900-50A | Contingency Amount Miscellaneous Work | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 10,000.00 CA | DIARY |
| BID ITEM NO. & DESCRIPTION: S900-50B - Contingency Amount - Miscellaneous PPP Items | | | | | | | | | |
| S900-50B | Contingency Amount Miscellaneous PPP Items | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 10,000.00 CA | DIARY |
| BID ITEM NO. & DESCRIPTION: S904-05A - SP Temporary Traffic Control | | | | | | | | | |
| S904-05A | SP Temporary Traffic Control | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | Provide Manufacturer MASH/NCHRP Certification on Devices | 1.00 LS | DIARY |

| BID ITEM NO. & DESCRIPTION: Z629-05A - Mobilization | | | | | | | | | |
|---|--------------|----------------------|------------------------|---------------------|---------|---------------------|--|---------|-------|
| Z629-05A | Mobilization | ACCEPTANCE Visual | No Testing Required | No Testing Required | ITD-025 | Total Quantity Paid | | 1.00 LS | DIARY |

Pollution Prevention Plan Leading Idaho Local Bridge Program



Instructions

The Pollution Prevention Plan (PPP) is a requirement for Leading Idaho Local Bridge projects which do not have coverage under the National Pollutant Discharge Elimination System (NPDES/IPDES) Construction General Permit (CGP).

Prior to ground disturbing activities, the Contractor designated support areas shall be identified and the disturbed area shall be recalculated to determine if the project is still exempt from NPDES/IPDES permitting requirements.

To help you develop the PPP use the following template. This template is designed to guide you through the PPP development process and help ensure that your PPP addresses all the necessary elements. EPA's 2007 guidance document titled *Developing Your Stormwater Pollution Prevention Plan* can also be used to help you develop your PPP. This guide can be found at: <https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp>. On the ITD's stormwater management website: <http://itd.idaho.gov/env/> other useful information including the Best Management Practices Manual, Standard Drawings, and other stormwater forms and templates is available.

Using the LILB PPP Template: This template was developed so that you can easily add text or tables. Some sections may require only a brief description while others may require more extensive explanation. Modify this template so that it meets the specific needs of your project.

The Best Management Practices (BMPs) from ITD's BMP Manual are listed in tables throughout the template. Refer to the manual for further guidance on each BMP. The link is provided above.

Applicable Federal, Tribal, State, or Local Programs

The PPP shall be consistent with all applicable federal, state, tribal, and/or local requirements or ordinances, including MS4 requirements, for erosion control and stormwater management and compliance.

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Pollution Prevention Plan Project Site Information

| | | | |
|------------------|--------------|--------|----------|
| Bridge Number | Project Name | | |
| Location/Address | City | County | Zip Code |

Contact Information

Construction Engineering and Inspection Resident Engineer

| | | |
|---|----------------|----------|
| Construction Engineering and Inspection contact | | Title |
| Office Address | City | Zip Code |
| Telephone Number | E-mail Address | |

Local Highway Jurisdiction

| | | |
|----------------------|----------------|----------|
| Organization Name | Contact Name | |
| Organization Address | City | Zip Code |
| Telephone Number | E-mail Address | |

Contractor's PPP and 24-Hour Emergency Contact Information

| | | | |
|---|-----------------------------|-------|----------|
| Company/Organization Name | Site Manager's Printed Name | | |
| Company/Organization Address | City | State | Zip Code |
| Telephone Number for 24/7/365 Availability | E-mail Address | | |
| Area of Control (if there is more than one operator at the site, insert area of control for each) | | | |

Estimated Project Start Date

Estimated Project End Date

Section 1 - Project/Site Information

General Scope of Work or Project Description

| Project Type | Check Applicable |
|--------------------|--------------------------|
| Bridge Repair | <input type="checkbox"/> |
| Bridge Replacement | <input type="checkbox"/> |

Construction Site Estimates

The following are estimates of the project disturbance. Show acreage to the nearest 0.25 acre

| Project Area | Acres (nearest 0.25) |
|--|----------------------|
| Project Site | |
| Waste Site | |
| Borrow Site | |
| Staging Area (outside of Project Site) | |
| Total Project Disturbed Area | |

If total project disturbed areas exceed 1.0 acres, a Construction General Permi will likely be required. Apply for a Notice of Intent (NOI) for NPDES/IPDES permitting and complete a project Storm Water Pollution Prevention Plan (SWPPP) as required by the NOI permitting authority.

Site Features and Sensitive Areas that Require Protection

Provide a description of any unique features (such as wetlands) that require protection (if applicable), see attached site plan for location.

If applicable, describe measures to protect these unique features

PPP Plans and Site Maps

The PPP will show the following locations:

- Temporary and permanent BMPS
- On-site staging areas, off-site material, waste, borrow or equipment storage or staging areas
- Locations of all ITD defined hazardous materials
- Waters of the United States including wetlands
- Storm sewer inlets

Insert a copy of all applicable Plan Sheets and/or Site Maps in **Appendix A**

Potential Sources of Pollution

The table lists potential pollutants and sources, other than sediment, to stormwater runoff

| Trade Name Material | Stormwater Pollutants |
|-------------------------|-----------------------|
| Fuels and/or Lubricants | Petroleum Distillates |
| Hydraulic Oils | Mineral Oil |

| | |
|---------------------------|---------------------------------|
| Asphalts | Petroleum Distillates |
| Concrete/Curing Compounds | pH |
| Anti-freeze | Glycol, Heavy Metals |
| Paints | Organic Chemicals, VOCs |
| Fertilizers | Nutrients-Nitrogen, Phosphorous |
| Sanitary Toilets | Bacteria, Viruses, Parasites |
| | |

Add additional rows as needed by hitting Tab in the last cell of the table

Each of the pollutants listed in the table above must be addressed with a specific BMP.

Section 2 - Erosion and Sediment Control BMPs

In the tables provided below, check the boxes of the BMPs that will be used on your project. Delete the BMPs that will not be used, or leave unchecked. Add any BMPS that might be required to meet your project needs.

BMPs should be implemented as needed at all designated staging and storage areas, source and borrow sites, and disposal/excess material/waste sites prior to initiating any ground disturbance activities in these areas.

➔ Note: In the following tables, ITD SD SPECS and Drawings, and BMP Numbers from ITD BMP Manual are referenced beside each BMP

Minimize Disturbed Area and Protect Natural Features and Soil

Preservation of natural existing vegetation shall be utilized throughout the project, where practical, to minimize erosion potential, minimize total ground disturbance, and minimize stormwater movement off site.

Temporary Best Management Practices

| BMP | Specification(s)/ITD BMP reference | Check if Used |
|--|---|--------------------------|
| Coffer and Tarp Dams / Water Filled Bladders/ Aprons | - SD SPECS (210 and 501) - EC-3 | <input type="checkbox"/> |
| Interceptor Ditches / Diversion Channels/Ditches | - SD SPECS (208, 209, and 212) - SD Drawings (P-1-D, P-1-E, and P-2-E) - EC-4 | <input type="checkbox"/> |
| Slope Drains | - SD SPECS (212 and 706) - SD Drawings (P-1-A) - EC-5 | <input type="checkbox"/> |
| Dikes / Berms | - SD SPECS (205, 209, and 212) - SD Drawings P-1-F and P-1-E - SC-1 | <input type="checkbox"/> |
| Channel Protection: | - Check Dams / Flexible Liners / Rigid Liners - SD SPECS (209, 212, 512, 623, 624, 711, 715, and 718) - SD Drawings (P-1-D, P-2-A, P-2-B, P-2-C, and P-2-D) - SC-2, PC-3, PC-4 | <input type="checkbox"/> |
| Retention/Detention Sediment Basin(s)/Trap(s) | - SD SPECS (205 and 212) - SD Drawings (P-1-A, P-1-C, P-1-D, P-1-E, P- 4-A, and P-4-B) - SC-10 | <input type="checkbox"/> |
| Clear Water Diversion | - SD SPECS (N/A) - NS-5 | <input type="checkbox"/> |

| BMP | Specification(s)/ITD BMP reference | Check if Used |
|--|---|--------------------------|
| Hydraulically Applied Erosion Control Products | - SD SPECS (212, 621, and 711) - EC-6 | <input type="checkbox"/> |
| Hydroseeding | - SD SPECS (621 and 711) - EC-7 | <input type="checkbox"/> |
| Soil Binders | - SD SPECS (212) - EC-8 | <input type="checkbox"/> |
| Straw Mulch | - SD SPECS (212, 621, and 711) - EC-9 | <input type="checkbox"/> |
| Wood Mulch | - SD SPECS (212, 621, and 711) - EC-10 | <input type="checkbox"/> |
| Geotextiles, Plastic Covers, and Erosion Control Blanket | - SD SPECS (212, 621, and 711) - EC-11 | <input type="checkbox"/> |
| Vegetation-Seeding | - SD SPECS (212 and 621) - EC-12 | <input type="checkbox"/> |
| Dust Control | - SD SPECS (104, 106, 107, 205, 212, 621, and 711) - EC-13 | <input type="checkbox"/> |
| Wind Erosion Control | - SD SPECS (205 and 212) - EC-14 | <input type="checkbox"/> |
| Inlet/Outlet Protection | - SD SPECS (212, 640, 711, and 718) - SC-6 | <input type="checkbox"/> |
| Barriers/berms | - SD SPECS (212) - SC-3, 5 | <input type="checkbox"/> |
| Silt Fence | - SD SPECS (212 and 718) - SC-7 | <input type="checkbox"/> |
| Sediment Retention Fiber Rolls | - SD SPECS (N/A) - SC-8 | <input type="checkbox"/> |
| Retention / Detention Sediment Basin(s) / Trap(s) | - SD SPECS (205 and 212) - SD Drawings (P-1-A, P-1-C, P-1-D, P-1-E, P-4-A, and P-4-B) - SC-10 | <input type="checkbox"/> |
| Street Sweeping and Vacuuming | - SD SPECS (N/A) - SC-4 | <input type="checkbox"/> |
| Temporary Construction Entrances | - SD SPECS (104, 205, and 212) - SD Drawings (P-1-F) - SC-11 | <input type="checkbox"/> |
| Temporary Roads | - SD SPECS (104, 107, 205, and 212) - SC-12 | <input type="checkbox"/> |
| Temporary Stream Crossing/Work Bridge | - SD SPECS (602) - NS-4 | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

Add additional rows as needed by hitting Tab in the last cell of the table

Section 3 – Contractor Support Areas

All staging areas, material storage/stockpile sites, source sites, disposal/excess material/waste sites, haul roads, temporary roads, construction entrances and exits, and any other disturbed soil areas not defined within the contract documents must be approved by the Construction Engineering, Inspection Resident Engineer and LHTAC Environmental Staff and have BMPs implemented prior to approved use. All sites require appropriate erosion, sediment, and pollution prevention control BMPs installed prior to initiation of construction and throughout the length of construction activities. The Contractor is responsible for attaching a record of Environmental Clearance/Approvals and for obtaining any permitting for any Contractor designated sites, including cultural resources, ESA, etc.

Contractor Support Area Best Management Practices

| BMP | Specification(s) | Check if Used |
|--|---|--------------------------|
| Staging and Materials Site Management | - SD SPECS (107) - SD Drawings (P-1-D, P-3-E, and P-5-A) - WM-1 | <input type="checkbox"/> |
| Solid Waste Management | - SD SPECS (N/A) - WM-6 | <input type="checkbox"/> |
| Concrete Curing | - SD SPECS (N/A) - NS-12 | <input type="checkbox"/> |
| Material and Equipment Use Over Water | - SD SPECS (N/A) - NS-13 | <input type="checkbox"/> |
| Concrete Finishing | - SD SPECS (N/A) - NS-14 | <input type="checkbox"/> |
| Structure Demolition-Removal Over or Adjacent to Water | - SD SPECS (N/A) - NS-15 | <input type="checkbox"/> |
| Material Delivery and Storage | - SD SPECS (N/A) - WM-2 | <input type="checkbox"/> |
| Material Use | - SD SPECS (N/A) - WM-3 | <input type="checkbox"/> |
| Stockpile Management | - SD SPECS (N/A) - WM-4 | <input type="checkbox"/> |
| Concrete Waste Management | - SD SPECS (N/A) - SD Drawings (P-5-B) - WM-9 | <input type="checkbox"/> |
| Vehicle and Equipment Fueling | - SD SPECS (N/A) - SD Drawings (P-5-E) - NS-9 | <input type="checkbox"/> |
| Vehicle and Equipment Maintenance | - SD SPECS (N/A) - NS-10 | <input type="checkbox"/> |
| Pile Driving Operations | - SD SPECS (N/A) - NS-11 | <input type="checkbox"/> |
| Sanitary-Septic Waste Management | - SD SPECS (N/A) - WM-10 | <input type="checkbox"/> |
| Contaminated Soil Management | - SD SPECS (N/A) - WM-8 | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

Add additional rows as needed by hitting Tab in the last cell of the table

List allowable non-stormwater discharges marked above and the measures used to eliminate or reduce them and to prevent them from becoming contaminated:

| Allowable Non-Stormwater Discharges | Measures to be Implemented to Eliminate or Reduce Contamination |
|-------------------------------------|---|
| | |

Add additional rows as needed by hitting Tab in the last cell of the table

Spill Prevention

Drip pans and drip cloths shall be used to drain and replace fluids. Spill prevention kits shall be located on site at all times and readily available in case of a leak, spill, or discharge and used when needed to contain and minimize unwanted and unnecessary leak, spill, or discharge impacts.

Fueling activities should be located at least 150’ away from surface water features. If site features do not allow this minimum setback, additional controls may be necessary. Additionally, if more stringent standards are required by permitting agencies or local entities, those standards shall be met.

Vehicles and construction equipment shall be monitored for leaks and receive regular preventative maintenance, and fueled on site using a portable service truck with a portable fuel tank or temporary storage tanks. Fueling shall occur within a hazardous materials containment staging area as approved by the Construction Engineering and Inspection Resident Engineer.

Section 4 - Permanent Erosion or Sediment Control BMPs

Permanent erosion and sediment control BMPs shall be designated and referenced on the project bid plans in association to their placement locations and amounts, lengths, and types used and as specified by the Engineer. The following permanent erosion and sediment control BMPs or combination of control BMPs will be installed and used to collect, retain, and treat stormwater runoff and pollutant discharges and to provide permanent stabilization of disturbed soils. In the table provided below, check the boxes of the BMPs that will be used on your project and insert implementation/installation times. Delete the BMPs that will not be used, or leave unchecked.

| BMP | Specification(s) | Check if Used |
|--|---|--------------------------|
| Channel Protection - Check Dams/liners | - SD SPECS (212) - SD Drawings (P-2-B) - PC-1 | <input type="checkbox"/> |
| Dikes and Berms | - SD SPECS (205, 209, and 212) - SD Drawings (P-1-E and P-1-F) - PC-5 | <input type="checkbox"/> |
| Inlet-Outlet Protection | - SD SPECS (212, 608, 609, 640, 711, 718) - SD Drawings (D-1-A, D-1-B, P-1-A, P-1-H, and P-2-F) - PC-15 | <input type="checkbox"/> |
| Retaining Walls | - SD SPECS (210 and 512) - PC-17 | <input type="checkbox"/> |
| Stormwater Basins | - SD SPECS (205 and 212) - SD Drawings (P-1-C and P-4-A) - PC-18 | <input type="checkbox"/> |
| Rock Armor / Mulch – Turf Reinforced Mat | - SD SPECS (N/A) - PC-30 | <input type="checkbox"/> |
| Topsoil Management | - SD SPECS (213 and 711.09) - PC-33 | <input type="checkbox"/> |
| Vegetation-Seeding | - SD SPECS (621, 711.05, 711.12, 711.06) - PC-34 | <input type="checkbox"/> |
| Vegetation-Planting | - SD SPECS (620 and 711.06) - PC-35 | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

Section 5 - Inspection and Maintenance Requirements

Contractor shall inspect and maintain all structural and non-structural control measures for functionality on a regular basis.

Section 6 - Certification and Notification

| CEI Representative's Printed Name | Title | Signature | Approval Date |
|-----------------------------------|-------|-----------|---------------|
| | | | |

Contractor Certification Statement

As an operator, I certify that this Pollution Prevention Plan (PPP) narrative and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. As an operator, I certify that I understand requirements of the Clean Water Act as it relates to my activities and will, to the maximum extent practicable, implement BMPs to minimize release of pollutants into the environment.

| Contractor's Printed Name | Title | Signature | Date |
|---------------------------|-------|-----------|------|
| | | | |

Place all signed copies of the Subcontractor Certification/Agreement form in **Appendix E**.

Appendices

Appendix A – PPP Plan Sheets and Site Maps

Appendix B – Inspection Reports

Appendix C – Subcontractor Certifications/Agreements

Subcontractor Certification for Pollution Prevention Plan

| | | |
|----------------|--------------|-------------|
| Project Number | Project Name | Operator(s) |
|----------------|--------------|-------------|

As a subcontractor, you are required to comply with the Pollution Prevention Plan (PPP) for any work that you perform on-site. Any person or group who violates any condition of the PPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the PPP. A copy of the PPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the PPP for the above designated project and agree to follow the BMPs and practices described in the PPP.

This certification is hereby signed in reference to the above named project.

| | | | | |
|------------------|-------------------------------------|-----------|-------|----------|
| Company Name | Address | City | State | Zip Code |
| Telephone Number | Construction Service to be Provided | | | |
| Printed Name | Title | Signature | Date | |

Appendix D – Additional Environmental Clearance Documentation for Contractor Support Areas and Environmental Permit Documentation



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
BOISE REGULATORY OFFICE
720 EAST PARK BOULEVARD, SUITE 245
BOISE, IDAHO 83712-7757

March 23, 2026

WALLA WALLA DISTRICT
REGULATORY DIVISION

SUBJECT: NWW-2024-00151, LILB Bridge No. 23795 & 23800 Removal and Replacement, Camas Creek

Josh Ashmead
Camas County Road & Bridge
PO Box 430
Fairfield, Idaho 83327

Dear Mr. Ashmead:

We have determined that your proposed project LILB Bridge No. 23795 & 23800 Removal and Replacement, Camas Creek, is authorized in accordance with Department of the Army (DA) **Nationwide Permit (NWP) No. 14: Linear Transportation Projects**. This project is located within Section 22 of Township 1 South, Range 15 East, near coordinates 43.314446° N latitude and -114.657970° W longitude and coordinates 43.314006° N latitude and -114.657315° W longitude, in Fairfield, Camas County, Idaho. Please refer to File Number NWW-2024-00151 in all future correspondence with our office regarding this project.

Project activities include replacing two aging and structurally deficient bridges (Bridge 23795 and Bridge 23800) on 200 South Road over Camas Creek with a single 207-ft long and 30-ft wide bridge. The work will involve the discharge of fill material into Camas Creek, a perennial stream, and adjacent PEM wetlands, all of which may be considered waters of the United States.

Site preparation will include the construction of a temporary access road and crane platform, installation of appropriate BMPs to protect wetlands, and may include dewatering if needed. Construction activities will occur in two phases in order to minimize traffic disruption. In the first phase, the north half of the new bridge and associated infrastructure will be constructed. In the second phase, the two existing bridges will be removed, and the construction of the remaining portion of the new bridge and associated infrastructure will be completed. The stream channel will be graded and realigned and will connect with the main channel downstream of the new bridge. Riprap will be placed to direct flows into the regraded side channel and for scour prevention. Once construction is complete, all temporary structures will be removed, and

temporarily disturbed areas will be restored. Approximately 3,382 cubic yards of fill material will be discharged into 0.27 acres of streambed and 0.08 acres of wetlands. All work shall be done in accordance with the enclosed drawings, titled: *LILB 200 S Road over Camas Creek Replacement*.

AUTHORITY

DA permit authorization is necessary because your project may involve the discharge of fill material into waters of the U.S. This authorization is outlined in Section 404 of the Clean Water Act (33 U.S.C. 1344).

PERMIT CONDITIONS

You must comply with all general, regional, and special conditions, for this verification letter to remain valid and to avoid possible enforcement actions. The general and regional permit conditions for *NWP No. 14: Linear Transportation Projects* are attached and also available online¹. In addition, you must also comply with the special conditions listed below.

Special Condition 1: The permittee is responsible for all work done by any contractor. Permittee shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of this authorization. Permittee shall also ensure these terms and conditions are incorporated into engineering plans and contract specifications.

Special Condition 2: Your permit has been issued while Suckley's Cuckoo Bumble Bee is proposed as "endangered" under the Endangered Species Act (ESA). Should the Suckley's Cuckoo Bumble Bee be listed under the ESA prior to the completion of the authorized activities, please contact the U.S. Army Corps of Engineers for an evaluation of effect determination.

Special Condition 3: Your permit has been issued while Monarch Butterfly is proposed as "threatened" under the Endangered Species Act (ESA). Should the Monarch Butterfly be listed under the ESA prior to the completion of authorized activities, please contact the U.S. Army Corps of Engineers for an evaluation of effect determination.

¹ <http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/>

WATER QUALITY CERTIFICATION

You must also comply with the conditions detailed in the attached Section 401 Water Quality Certification (WQC) issued for this project on March 9, 2026, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the conditions set forth in the WQC, please contact IDEQ directly at 208-373-0550, Boise Regional Office.

COMPLIANCE CERTIFICATION

Nationwide Permit General Condition 30 (Compliance Certification) requires that every permittee who has received NWP verification must submit a signed certification regarding the completed work and any required mitigation. This Compliance Certification form is enclosed for your convenience and must be completed and returned to us within 30 days of your project's completion.

LIMITATIONS OF THIS VERIFICATION

This letter of authorization does not convey any property rights, or any exclusive privileges and does not authorize any injury to property or excuse you from compliance with other Federal, State, or local statutes, ordinances, regulations, or requirements which may affect this work.

EXPIRATION OF THIS VERIFICATION

This verification is valid until **March 15, 2031**, unless the NWP is modified, suspended or revoked. If your project, as permitted under this NWP verification, is modified in any way you must contact our office prior to commencing any work activities. In the event that you have not completed construction of your project by **March 15, 2031**, please contact us at least 60-days prior to this date. A new application and verification may be required.

SERVICE SURVEY

We actively use feedback to improve our delivery and provide you with the best possible service. If you would like to provide feedback, please take our online survey². If you have questions or if you would like a paper copy of the survey, please contact the Walla Walla District Regulatory. For more information about the Walla Walla District Regulatory program, you can visit us online³.

² <https://regulatory.ops.usace.army.mil/customer-service-survey/>

³ <http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/>

If you have any questions or need additional information about this permit authorization, you can contact me by phone at 208-433-4469, by mail at the address in the letterhead, or email at Sarah.V.Windham@usace.army.mil. For informational purposes, a copy of this letter has been sent to: Sean Woodhead with the Idaho Department of Environmental Quality, Katie Gible with the Idaho Department of Water Resources, LHTAC, and Patrick A Wickman, M.S., designated agent with Forsgren Associates.

Sincerely,

A handwritten signature in cursive script that reads "Sarah V. Windham".

Sarah V. Windham
Project Manager, Regulatory Division

Encls

Transfer of Nationwide Permit Form
Compliance Certification

Maps and Drawings: *LILB 200 S Road over Camas Creek Replacement.*

Nationwide Permit No. 14: Linear Transportation Projects General and Regional
Conditions

IDEQ Individual Water Quality Certification dated March 9, 2026

TRANSFER OF NATIONWIDE PERMIT

When the structures or work authorized by this Nationwide Permit, **NWW-2024-00151 LILB Bridge No. 23795 & 23800 Removal and Replacement, Camas Creek**, are still in existence at the time the property is transferred. The terms and conditions of this Nationwide Permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this Nationwide Permit, the associated liabilities and compliance with the terms and conditions the transferee must sign and date below.

Name of New Owner:

Street Address:

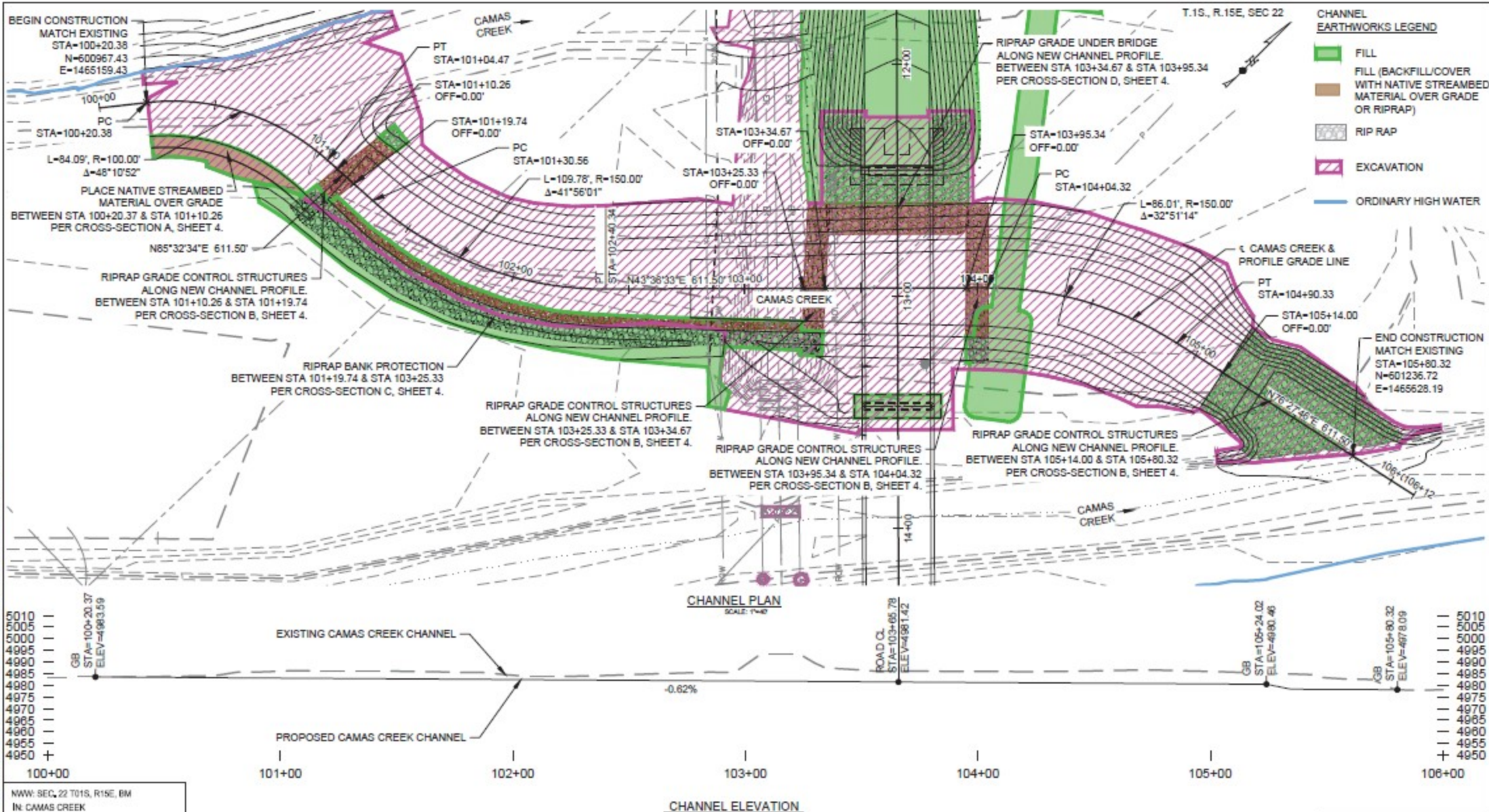
Mailing Address:

City, State, Zip:

Phone Number:

Signature of TRANSFEREE

DATE



- CHANNEL EARTHWORKS LEGEND**
- FILL
 - FILL (BACKFILL/COVER WITH NATIVE STREAMBED MATERIAL OVER GRADE OR RIPRAP)
 - RIP RAP
 - EXCAVATION
 - ORDINARY HIGH WATER

NW 1/4 SEC. 22 T01S, R15E, BM
 IN: CAMAS CREEK
 IN NEAR: FAIRFIELD BRIDGE 23801
 CAMAS COUNTY, IDAHO
 DATE: 12/31/2025 SHEET: 3 OF 4
 APPLICATION BY:
 CAMAS COUNTY

| NO. | REVISIONS | BY | DATE |
|-----|-----------|----|------|
| | | | |

| | | |
|----------|-------|--|
| DRAWN | _____ | SCALES SHOWN ARE FOR 11"x17" PRINTS ONLY |
| DESIGNED | _____ | COUNTY |
| APPROVED | _____ | CAMAS |
| QA | _____ | BRIDGE KEY NUMBER |
| | | 23801 |

LEADING IDAHO LOCAL BRIDGE PROGRAM

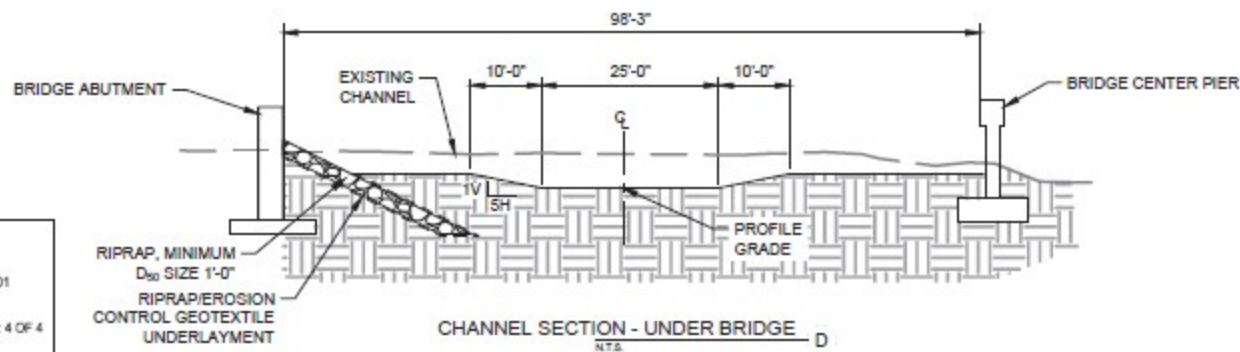
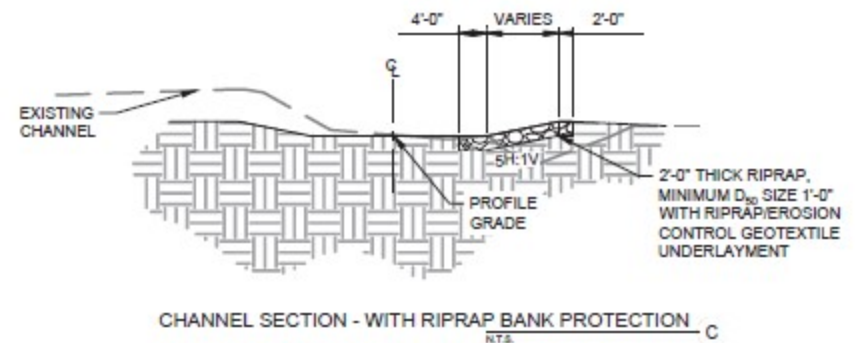
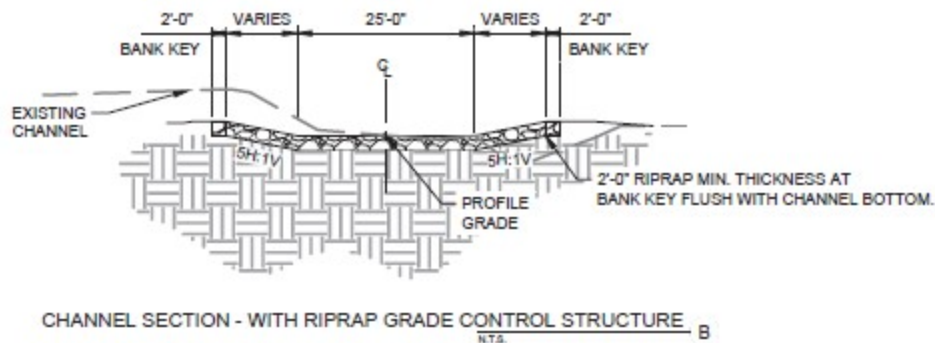
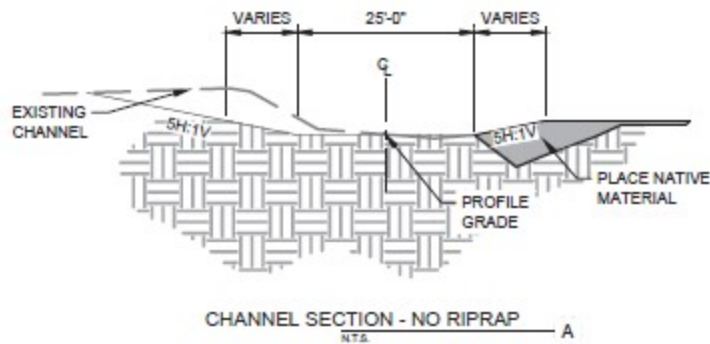


FILL & EXCAVATION FROM CHANNEL REALIGNMENT
 200 S ROAD OVER CAMAS CREEK

| | |
|-------------|------------|
| PROJECT NO: | 02-23-0135 |
| DRAWING NO: | 18294 |
| DATE: | 12/31/25 |
| SHEET NO: | 3 OF 4 |

PRELIMINARY
DRAWING
NOT FOR
CONSTRUCTION

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 Date: 12/31/2025 9:05 AM



NW: SEC. 22 T01S, R15E, BM
IN: CAMAS CREEK
LINEAR: FAIRFIELD - BRIDGE 23801
CAMAS COUNTY, IDAHO
DATE: 12/31/2025 SHEET: 4 OF 4
APPLICATION BY:
CAMAS COUNTY

| | | | |
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| DRAWN | _____ | DATE | _____ |
| DESIGNED | _____ | DATE | _____ |
| APPROVED | _____ | DATE | _____ |
| QA | _____ | DATE | _____ |

SCALES SHOWN
ARE FOR 11"x17"
PRINTS ONLY
COUNTY
CAMAS
BRIDGE KEY NUMBER
23801

LEADING IDAHO
LOCAL BRIDGE
PROGRAM



CHANNEL SECTIONS
200 S ROAD OVER CAMAS CREEK

| | |
|-------------|------------|
| PROJECT NO: | 02-23-0135 |
| DRAWING NO: | 18294 |
| DATE: | 12/31/25 |
| SHEET NO: | 4 OF 4 |

**PRELIMINARY
DRAWING
NOT FOR
CONSTRUCTION**

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NATIONWIDE PERMIT 14

Linear Transportation:

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

WATER QUALITY CERTIFICATION, NWP 14:

Agency responsible for administration of water quality, based on project location is listed below. If **DENIED**, then an Individual Water Quality Certification or Waiver of Certification is required, prior to the commencement of any work activities and/or issuance of a DA verification, authorization and/or permit.

State of Idaho: PARTIALLY DENIED for activities that:

- Result in more than 0.1 acre of permanent loss of waters of the United States
- Cause permanent loss of more than 300 linear feet of streambed
- Occur in high-quality (Class 1) wetlands

Coeur d'Alene Tribal Lands: DENIED

Shoshone-Bannock Tribal Lands: DENIED

Shoshone-Paiute Tribal Lands: WAIVED

U.S. Environmental Protection Agency for all other Tribal Lands: PARTIALLY DENIED

- The project must not involve a discharge into special aquatic resources
 - The project must meet the general or NWP specific certification conditions
 - If the project requires a Pre-Construction Notification (PCN) it must meet the detailed requirements for plan development, implementation, and reporting as specified in Condition 1
 - Bridge projects must adhere to specific design and construction standards, including using established hydraulic design tools, spanning at least 1.2 times the bankfull width, and placing crossings perpendicular to the streamflow where feasible.
-

**2026 Nationwide Permits
Regional Conditions
Walla Walla District Regulatory Division (State of Idaho)**

March 15, 2026

The following Nationwide Permit (NWP) regional conditions are required in the state of Idaho and apply to all 2026 NWPs.¹ Regional conditions are established by individual Corps Districts to ensure projects result in no more than minimal adverse impacts to the aquatic environment and to address local resources concerns. This document also includes regional notes to the NWP General Conditions with local agency contact information and online resources for applicants.

The term “pre-construction notification” or “PCN” used in this document refers to a request submitted by a project proponent to the Corps for confirmation that a particular activity is authorized by NWP. A PCN may be required by the terms and conditions of an NWP (e.g., general conditions) or by regional condition.

REGIONAL CONDITIONS

A. Single and Complete Projects

- When a PCN is required for a project involving multiple phases, the applicant shall include information about previously authorized discharges of fill material into waters of the United States in order for the District to determine the “single and complete project” (defined at 33 CFR 330.2(i)) and evaluate cumulative impacts, as appropriate.
- Discharges of dredged or fill material into waters of the U.S., including wetlands, for the purpose of meeting local setback requirements are not authorized under an NWP.

B. Vegetation Preservation and Replanting

- To avoid impacts to aquatic habitat and to reduce sedimentation and erosion, permittee shall avoid and minimize the removal of vegetation in waters of the U.S. to the maximum extent practicable. Areas subject to temporary vegetation removal in waters of the U.S. during construction shall be replanted with appropriate native² species by the end of the first growing season, unless conditioned otherwise. Permittee shall avoid introducing or spreading noxious or invasive plants.³

1 For the list of 2026 Nationwide Permits please see: <https://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/>

2 Idaho Department of Transportation, Native Plants for Idaho Roadside Restoration and Revegetation Programs: https://itd.idaho.gov/wp-content/uploads/2016/06/RP171Roadside_Revegetation.pdf

3 Idaho’s Noxious Weeds, 10th Edition, 2022, published by the University of Idaho with Idaho State Dept. of

C. De-watering & Re-watering (as applicable)

- Cofferdams shall be constructed of non-erosive material such as concrete jersey barriers, bulk bags, water bladders, sheet pile, and other similar non-erosive devices. Cofferdams may not be constructed by using mechanized equipment to push streambed material through flowing water.
- Diversion channels constructed to bypass flow around the construction site shall be lined with plastic, large rock, pipe or otherwise protected from erosion prior to releasing flows into or through the diversion channel.
- Water removed from within the coffered area shall be pumped to a sediment basin or otherwise treated to remove suspended sediments prior to its return to the waterway.
- To prevent unwanted passage of fish, if present, from the coffered area, water pipe intakes shall be screened with openings measuring < 3/32 inch to prevent entrainment of fish trapped in the coffered area.
- Should fish be present within the coffered areas, the applicant shall contact their local Idaho Department of Fish and Game (IDFG) office prior to performing fish removal or salvage. Fish shall be collected by electrofishing, seining or dip net, or otherwise removed and returned to the waterway upstream of the project area. If electrofishing is used, the National Marine Fisheries Service (NMFS) guidelines for electrofishing should be followed⁴, unless conditioned otherwise.
- Stream channels that have been dewatered during project construction shall be re-watered slowly to avoid lateral and vertical erosion of the de-watered channel, prevent damage to recently reclaimed work areas and/or damage to permitted work.

D. In-Water Structures and Complexes

- PCN notification in accordance with General Condition 32 is required for all non-federal applicants with activities involving gabion baskets placed below the ordinary high water mark.
- Designs for stream meanders, riffle and pool complexes, pool stream structures, rock/log barbs, rock J-hooks, drop structures, sills, engineered log jams or similar structures/features shall be based on site-specific conditions and include a

Agriculture, Bureau of Land Management, U.S. Forest Service: <https://www.uidaho.edu/-/media/uidaho-responsive/files/extension/publications/bul/bul0816.pdf?la=en&rev=c13c535d5c0748c6be789f99dcd0a110>.

⁴ Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (June 2000): <https://media.fisheries.noaa.gov/dam-migration/electro2000.pdf>

rationale for the proposed structures/features.

E. Temporary Sidecasting

- Excavated materials from trenching activities may not be temporarily sidecast into flowing waters, unless waived by the district engineer, to prevent the release of sediment. Material temporarily sidecast within waters of the U.S., including wetlands, shall be removed within 30 days, unless waived by the District. All practicable measures shall be implemented and maintained during temporary sidecasting activities within waters of the U.S, including wetlands (e.g., utilization of cofferdams, construction mats for equipment access across wetlands, sidecasting material while the ground is frozen, etc.).

F. Suitability of Sediments for Open Water Disposal and use as Fill Material

- Sampling for determination of suitability of sediments for open water disposal or for use as fill, must comply with the Sediment Evaluation Framework for the Pacific Northwest (SEF).⁵

G. Erosion Control

- During construction, and until the site is stabilized, the permittee shall ensure all practicable measures are implemented and maintained to prevent erosion and runoff. Temporary stockpiles of excavated or dredged material shall be stabilized to prevent erosion. Once soils or slopes have been stabilized, permittee shall completely remove and properly dispose of or re-use all non-biodegradable components of installed control measures.
- Permanent erosion control blanket or fabric used to stabilize the banks of waters of the U.S. shall be comprised of biodegradable material, to ensure decomposition and reduced risk to fish, wildlife and public safety, unless waived by the District. If non-biodegradable materials are proposed, the applicant must demonstrate how the use of such materials will not cause harm to fish, wildlife and public safety. Temporary erosion control blanket or fabric may be non-biodegradable.

H. Reporting of Wetland Credits Purchased by Federal Permittees under EO 11990

- Federal agencies with projects that require compensatory mitigation for loss of wetlands under Executive Order 11990: Protection of Wetlands, and who propose to purchase credits from an approved wetland and/or stream mitigation bank must provide proof of purchase to the Corps within 30 days of when the credits are purchased. Purchase of credits from an approved mitigation bank

⁵ Northwest Regional Sediment Evaluation Team (RSET). Sediment Evaluation Framework for the Pacific Northwest. Prepared by the RSET Agencies, finalized May 2018: <https://www.nwd.usace.army.mil/Missions/Civil-Works/Navigation/RSET/>.

must be in accordance with the Mitigation Banking Instrument of Record. This condition applies to all federal projects with wetland credit purchases, even when a PCN is not required.

REGIONAL NOTES TO THE GENERAL CONDITIONS

General Condition 4. Migratory Bird Breeding Areas. For additional information please contact the U.S. Fish and Wildlife Service at (208) 918-2155. Contact information is also available online at: <https://www.fws.gov/office/idaho-fish-and-wildlife/contact-us>.

General Condition 9. Management of Water Flows. To obtain information on the State of Idaho's definition of high water, please refer to Idaho Department of Water Resources (IDAPA 37.03.07. Rule 62.03.04.a). For culverts or bridges located in a community qualifying for the national flood insurance program, the minimum size culvert shall accommodate the 100-year flood design flow frequency (IDAPA 37.03.07. Rule 62.03.04.c).

General Condition 12. Soil Erosion and Sediment Controls. For additional information refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties, available online at: <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/guidance/>. (Note: Use the search tool for "Storm Water Program".)

General Condition 18. Endangered Species. For information on Endangered Species Act (ESA) listed species in Idaho, please contact the U.S. Fish and Wildlife Service (USFWS) at (208) 918-2155, or the National Marine Fisheries Service (NMFS) at (208) 378-5696. The USFWS manages terrestrial and freshwater species, while the NMFS manages marine and anadromous species under the ESA. To help determine the presence of listed species and/or their critical habitat, online mapping resources are also available at:

- USFWS Information for Planning and Consultation (IPaC): <https://ipac.ecosphere.fws.gov/>.
- NMFS National ESA Critical Habitat Mapper: <https://www.fisheries.noaa.gov/resource/map/national-esa-critical-habitat-mapper>.
- NMFS Essential Fish Habitat (EFH) Mapper: <https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>.

General Condition 20. Historic Properties. Property is generally considered "historic" if it is at least 50 years old and is not limited to buildings. For additional information on the potential for cultural resources in proximity to the project site, please contact the Idaho State Historic Preservation Office, located in Boise, Idaho, at (208) 334-3847.



2026 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. **Navigation**. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements**. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the

movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. **Spawning Areas**. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas**. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds**. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material**. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. **Water Supply Intakes**. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects From Impoundments**. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows**. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows, including tidal flows. The activity must not restrict or impede the passage of normal or high flows, including tidal flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100-Year Floodplains**. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment**. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance. If mats are used to minimize soil disturbance, the affected areas must be returned to pre-construction elevations, and revegetated as appropriate. In circumstances where the use of mats has caused significant soil compaction, efforts using techniques (e.g., soil reaeration techniques) to break up the

compaction should be employed to return the soil to a pre-construction state prior to returning to pre-construction elevations.

12. **Soil Erosion and Sediment Controls**. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. **Removal of Temporary Structures and Fills**. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance**. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project**. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers**. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. **Tribal Rights**. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species**. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal permittee should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. **Historic Properties.** (a) No activity is authorized under any NWP which may have the potential to cause effects on properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects on any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects on historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activities authorized by NWP's, must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the federal, tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWP's only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, because streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area

along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWP, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed activity which may result in any discharge from a point source into waters of the United States must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by the certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed activity

which may result in any discharge from a point source into waters of the United States in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed activity which may result in any discharge from a point source into waters of the United States is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge into waters of the United States, the permittee must submit a copy of the certification to the district engineer. The discharge into waters of the United States is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied (i.e., by the issuance of a water quality certification or a waiver and completion of the Section 401(a)(2) process).

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the division engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) The total acreage loss of waters of the United States for a single and complete project cannot exceed the acreage limit of the NWP with the highest specified acreage limit when multiple NWPs are used to authorize an activity.

(b) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States for that single and complete project cannot exceed that specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14 (which has an acreage limit of 1/3 acre in tidal waters), with associated bank stabilization authorized by NWP 13 (which does not have a

specified acreage limit), the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(c) If two or more of the NWP's used to authorize the single and complete project have specified acreage limits, the acreage loss of waters of the United States authorized by each of those NWP's cannot exceed the specified acreage limits of each of those NWP's. For example, if a commercial development is constructed under NWP 39 (which has a 1/2-acre limit), and the single and complete project includes the filling of a ditch authorized by NWP 46 (which has a 1-acre limit), the maximum acreage loss of waters of the United States for the construction of the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States caused by the combination of the NWP 39 and NWP 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The successful completion of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has

been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of waters, wetlands, and other special aquatic sites on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does

the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate. For NWP 27 activities that require PCNs because of other general conditions or regional conditions imposed by division engineers, see Note 2 of that NWP;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the compensatory mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and

supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP's and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWP's, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases where the prospective permittee is not a federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

B. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add activity-specific conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed NWP activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. However, compensatory mitigation shall not be required for activities authorized by NWP 27 because those activities must result in net increases in aquatic resource functions and services (see the text of NWP 27). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal when determining whether the net adverse environmental effects of the proposed NWP activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the

district engineer determines that the proposed activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed NWP activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN review period (unless additional time is required to comply with general conditions 16, 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

C. Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWP's do not grant any property rights or exclusive privileges.
4. NWP's do not authorize any injury to the property or rights of others.
5. NWP's do not authorize interference with any existing or proposed Federal project (see general condition 31).

D. Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic ecosystem restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on: (1) the structure, functions, and dynamics of an aquatic ecosystem type or a riparian area type that currently exists in the region; (2) the structure, functions, and dynamics of an aquatic ecosystem type or riparian area type that existed in the region in the past; and/or (3) indigenous and local ecological knowledge that apply to the aquatic ecosystem type or riparian area type (i.e., a cultural ecosystem). Cultural ecosystems are ecosystems that have developed under the joint influence of natural processes and human management activities (e.g., fire stewardship). An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Nature-based solutions: Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWP, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-

establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. The substrate may also be comprised, in part, of organic matter, such as large or small wood fragments, leaves, algae, and other organic materials. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a “water of the United States.” If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).



March 25, 2026

Josh Ashmead
Camas County Road & Bridge
PO Box 430
Fairfield, ID 83327

RE: Joint Application for Permit No. S37-20735
Camas Creek – Bridge Replacement

Dear Mr. Ashmead,

The Idaho Department of Water Resources (IDWR) has reviewed your above referenced application for a permit to alter Camas Creek and has prepared a decision as provided for in Section 42-3805, Idaho Code. The conditions set forth in this permit are intended to prevent degradation of water quality, protect fish and wildlife habitat, and protect the long-term stability of the stream channel. If you cannot meet the conditions set forth in the permit, please contact this office for further consideration.

You may consider this letter a permit to construct your project according to your application, received January 9, 2026, including diagrams. Project activities include replacing two bridges with a single bridge to span the flow of Camas Creek, constructing two relief culverts, and realigning a 600-foot segment of channel to convey more flow under the new single bridge span. The low chord of the bridge span has been designed to pass the 1% flow with at least 1-foot of freeboard. The project will result in the permanent discharge of approximately 800-cubic yards of rock, 200-cubic yards of concrete, and 2,372-cubic yards of dirt and earth with granular fill. The project location is within Township 01 South, Range 15 East, Section 22, Boise Meridian, Camas County, Idaho.

Failure to adhere to the conditions as set forth herein can result in legal action as provided for in Section 42-3809, Idaho Code. This project is subject to the following Minimum Standards, Special and General Conditions.

MINIMUM STANDARDS:

These standards are established in the Administrative Rules of the Idaho Water Resources Board; Stream Channel Alteration Rules, IDAPA 37.03.07 dated March 18, 2022, and are enclosed with this permit.

Rule 56 – Construction Procedures
Rule 59 – Culverts and Bridges

SPECIAL CONDITIONS:

- 1. All work shall be completed in accordance with the descriptions and methods on the application and diagrams, attached herewith. This office must approve any changes prior to construction.**
- 2. All construction activities shall take place during low flow and in the dry to minimize turbidity, protect water quality, and comply with Idaho water quality standards. No uncured concrete shall come into contact with surface water.**
- 3. The bridge shall be installed so the low chord is a minimum of one foot above the 1% flow elevation.**
- 4. A final dewatering plan shall be submitted to IDWR for approval prior to construction below the Ordinary High Water Mark.**
- 5. Katie Gible, IDWR Stream Protection Program 208-287-4823, shall be contacted within fourteen (14) business days after completion of work.**
- 6. Silt fencing or other erosion/sediment control measures shall be installed between any area of earth disturbance and the water. Erosion and sediment control measures must be installed during construction, according to the manufacturer's specifications, and must be maintained until construction is completed and the disturbed ground is revegetated and stable.**
- 7. All excess excavated material and vegetative or construction debris shall be disposed of out of the stream channel where it cannot reenter the channel. All construction debris shall be removed from the site and disposed of properly.**
- 8. All fuel, oil, and other hazardous materials shall be stored and equipment refueled away from the stream channel to ensure that a spill will not enter the waterway. Equipment must be free of fuel and lubricant leaks. The operator shall have spill control materials available at all times during this project. These spill control materials shall include, but not be limited to, fuel and/or oil absorbent booms and absorbent pads. In the event of a release greater than 25 gallons of fuel or oil to the ground or to surface waters, the Idaho State EMS Communications Center, or StateComm, shall be contacted at 1-877-554-3367 or 208-846-7610.**
- 9. Permittee is responsible for all work done by any contractor or sub-contractor and shall ensure any contractor who performs the work is informed of and follows all the terms and conditions of this authorization.**
- 10. This permit shall expire December 31, 2028.**

GENERAL CONDITIONS:

1. This permit does not constitute any of the following:
 - a. An easement or right-of-way to trespass or work upon property belonging to others.
 - b. Other approval that may be required by Local, State or Federal Government, unless specifically stated in the special conditions above.
 - c. Responsibility of IDWR for damage to any properties due to work done.

- d. Compliance with the Federal Flood Insurance Program, FEMA regulations, or approval of the local Planning and Zoning authority.
2. In accordance with Sections 55-2201 - 55-2210, Idaho Code, the applicant and/or contractors must contact Digline statewide phone number 1-800-342-1585 (Boise area 208-342-1585) not less than three working days prior to the start of any excavation for this project.
3. The permit holder or operator must have a copy of this permit at the alteration site, available for inspection at all times.
4. IDWR may cancel this permit at any time that it determines such action is necessary to minimize adverse impact on the stream channel.

Failure to adhere to conditions as set forth herein can result in legal action as provided for in Section 42-3809, Idaho Code.

If you object to the decision issuing this permit with the above conditions, you have 15 days in which to notify this office in writing that you request a formal hearing on the matter. If an objection has not been received within 15 days, the decision will be final under the provisions of IDAPA 37.03.07 (Rule 70).

Please contact Katie Gibble 208-287-4823 or katie.gibble@idwr.idaho.gov if you have any questions regarding this matter.

Sincerely,



Katie Gibble
Stream Channel Protection
Idaho Department of Water Resources

cc: Patrick Wickman, Forsgren Associates, Boise
Dwight Butlin, Camas County
Sean Woodhead, Idaho Department of Environmental Quality, Twin Falls
Bradley Dawson, Idaho Department of Fish and Game, Jerome
Randal Brunmeir, Idaho Department of Lands, Jerome
U.S. Army Corps of Engineers, Idaho Falls
Aaron Golart, Idaho Department of Water Resources, Boise

056. CONSTRUCTION PROCEDURES (RULE 56).

01. Conformance to Procedures. Construction shall be done in accordance with the following procedures unless specific approval of other procedures has been given by the Director. When an applicant desires to proceed in a manner different from the following, such procedures should be described on the application. (3-18-22)

02. Operation of Construction Equipment. No construction equipment shall be operated below the existing water surface without specific approval from the Director except as follows: Forging the stream at one (1) location only will be permitted unless otherwise specified; however, vehicles and equipment will not be permitted to push or pull material along the streambed below the existing water level. Work below the water which is essential for preparation of culvert bedding or approved footing installations shall be permitted to the extent that it does not create unnecessary turbidity or stream channel disturbance. Frequent forging will not be permitted in areas where extensive turbidity will be created. (3-18-22)

03. Temporary Structures. Any temporary crossings, bridge supports, cofferdams, or other structures that will be needed during the period of construction shall be designed to handle high flows that could be anticipated during the construction period. All structures shall be completely removed from the stream channel at the conclusion of construction and the area shall be restored to a natural appearance. (3-18-22)

04. Minimizing Disturbance of Area. Care shall be taken to cause only the minimum necessary disturbance to the natural appearance of the area. Streambank vegetation shall be protected except where its removal is absolutely necessary for completion of the work adjacent to the stream channel. (3-18-22)

05. Disposal of Removed Materials. Any vegetation, debris, or other material removed during construction shall be disposed of at some location out of the stream channel where it cannot reenter the channel during high stream flows. (3-18-22)

06. New Cut of Fill Slopes. All new cut or fill slopes that will not be protected with some form of riprap shall be seeded with grass and planted with native vegetation to prevent erosion. (3-18-22)

07. Fill Material. All fill material shall be placed and compacted in horizontal lifts. Areas to be filled shall be cleared of all vegetation, debris and other materials that would be objectionable in the fill. (3-18-22)

08. Limitations on Construction Period. The Director may limit the period of construction as needed to minimize conflicts with fish migration and spawning, recreation use, and other uses. (3-18-22)

059. CULVERTS AND BRIDGES (RULE 59).

01. Culverts and Bridges. Culverts and bridges shall be capable of carrying streamflows and shall not significantly alter conditions upstream or downstream by causing flooding, turbidity, or other problems. The appearance of such installations shall not detract from the natural surroundings of the area. (3-18-22)

02. Location of Culverts and Bridges. Culverts and bridges should be located so that a direct line of approach exists at both the entrance and exit. Abrupt bends at the entrance or exit shall not exist unless suitable erosion protection is provided. (3-18-22)

03. Ideal Gradient. The ideal gradient (bottom slope) is one which is steep enough to prevent silting but flat enough to prevent scouring due to high velocity flows. It is often advisable to make the gradient of a culvert coincide with the average streambed gradient. (3-18-22)

a. Where a culvert is installed on a slope steeper than twenty percent (20%), provisions to anchor the culvert in position will be required. Such provisions shall be included in the application and may involve the use of collars, headwall structures, etc. Smooth concrete pipe having no protruding bell joints or other irregularities shall have such anchoring provisions if the gradient exceeds ten percent (10%). (3-18-22)

04. Size of Culvert or Bridge Opening. The size of the culvert or bridge opening shall be such that it is capable of passing design flows without overtopping the streambank or causing flooding or other damage. (3-18-22)

a. Design flows shall be based upon the following minimum criteria:

| Drainage Area | Design Flow Frequency |
|-------------------------|--|
| Less than 50 sq. mi. | 25 Years |
| Over 50 sq. mi. or more | 50 years or greatest flow of record, whichever is more |

(3-18-22)

b. For culverts and bridges located on U.S. Forest Service or other federal lands, the sizing should comply with the Forest Practices Act as adopted by the federal agencies or the Department of Lands. (3-18-22)

c. For culverts or bridges located in a community qualifying for the national flood issuance program, the minimum size culvert shall accommodate the one hundred (100) year design flow frequency. (3-18-22)

d. If the culvert or bridge design is impractical for the site, the crossing may be designed with additional flow capacity outside the actual crossing structure, provided there is no increase in the Base Flood Elevation.

(NOTE: When flow data on a particular stream is unavailable, it is almost always safe to maintain the existing gradient and cross-section area present in the existing stream channel. Comparing the proposed crossing size with others upstream or downstream is also a valuable means of obtaining information regarding the size needed for a proposed crossing.) (3-18-22)

e. Minimum clearance shall be at least one (1) foot at all bridges. This may need to be increased substantially in the areas where ice passage or debris may be a problem. Minimum culvert sizes required for stream crossings: (3-18-22)

i. Eighteen (18) inch diameter for culverts up to seventy (70) feet long; (3-18-22)

ii. Twenty-four (24) inch diameter for all culverts over seventy (70) feet long. (3-18-22)

f. In streams where fish passage is of concern as determined by the director, an applicant shall comply with the following provisions and/or other approved criteria to ensure that passage will not be prevented by a proposed crossing. (3-18-22)

g. Minimum water depth shall be approximately eight (8) inches for salmon and steelhead and at least three (3) inches in all other cases. (3-18-22)

h. Maximum flow velocities for streams shall not exceed those shown in Figure 17 in APPENDIX H, located at the end of this chapter, for more than a forty-eight (48) hour period. The curve used will depend on the type of fish to be passed. (3-18-22)

i. Where it is not feasible to adjust the size or slope to obtain permissible velocities, the following precautions may be utilized to achieve the desired situation. (3-18-22)

j. Baffles downstream or inside the culvert may be utilized to increase depth and reduce velocity. Design criteria may be obtained from the Idaho Fish and Game Department. (3-18-22)

k. Where multiple openings for flow are provided, baffles or other measures used in one (1) opening only shall be adequate provided that the opening is designed to carry the main flow during low-flow periods. (3-18-22)

05. Construction of Crossings. When crossings are constructed in erodible material, upstream and downstream ends shall be protected from erosive damage through the use of such methods as dumped rock riprap, headwall structures, etc., and such protection shall extend below the erodible streambed and into the banks at least two (2) feet unless some other provisions are made to prevent undermining. (3-18-22)

a. Where fish passage must be provided, upstream drops at the entrance to a culvert will not be permitted and a maximum drop of one (1) foot will be permitted at the downstream end if an adequate jumping pool is maintained below the drop. (3-18-22)

b. Downstream control structures such as are shown in Figure 18 in APPENDIX I, located at the end of this chapter, can be used to reduce downstream erosion and improve fish passage. They may be constructed with gabions, pilings and rock drop structures. (3-18-22)

06. Multiple Openings. Where a multiple opening will consist of two (2) or more separate culvert structures, they shall be spaced far enough apart to allow proper compaction of the fill between the individual structures. The minimum spacing in all situations shall be one (1) foot. In areas where fish passage must be provided, only one (1) opening shall be constructed to carry all low flows. Low flow baffles may be required to facilitate fish passage. (3-18-22)

07. Areas to be Filled. All areas to be filled shall be cleared of vegetation, topsoil, and other unsuitable material prior to placing fill. Material cleared from the site shall be disposed of above the high water line of the stream. Fill material shall be reasonably well-graded and compacted and shall not contain large quantities of silt, sand, organic matter, or debris. In locations where silty or sandy material must be utilized for fill material, it will be necessary to construct impervious sections both upstream and downstream to prevent the erodible sand or silt from being carried away (see Figure 19, APPENDIX J, located at the end of this chapter), Sideslopes for fills shall not exceed one and one half to one (1.5:1). Minimum cover over all culvert pipes and arches shall be one (1) foot. (3-18-22)

08. Installation of Pipe and Arch Culvert. All pipe and arch culverts shall be installed in accordance with manufacturer's recommendations. (3-18-22)

a. The culvert shall be designed so that headwaters will not rise above the top of the culvert entrance unless a headworks is provided. (3-18-22)

JOINT APPLICATION FOR PERMITS

U.S. ARMY CORPS OF ENGINEERS - IDAHO DEPARTMENT OF WATER RESOURCES - IDAHO DEPARTMENT OF LANDS

Authorities: The Department of Army Corps of Engineers (Corps), Idaho Department of Water Resources (IDWR), and Idaho Department of Lands (IDL) established a joint process for activities impacting jurisdictional waterways that require review and/or approval of both the Corps and State of Idaho. Department of Army permits are required by Section 10 of the Rivers & Harbors Act of 1899 for any structure(s) or work in or affecting navigable waters of the United States and by Section 404 of the Clean Water Act for the discharge of dredged or fill materials into waters of the United States, including adjacent wetlands. State permits are required under the State of Idaho, Stream Protection Act (Title 42, Chapter 38, Idaho Code and Lake Protection Act (Section 58, Chapter 13 et seq., Idaho Code). In addition the information will be used to determine compliance with Section 401 of the Clean Water Act by the appropriate State, Tribal or Federal entity.

Joint Application: Information provided on this application will be used in evaluating the proposed activities. Disclosure of requested information is voluntary. Failure to supply the requested information may delay processing and issuance of the appropriate permit or authorization. **Applicant will need to send a completed application, along with one (1) set of legible, black and white (8 1/2"x11"), reproducible drawings that illustrate the location and character of the proposed project / activities to both the Corps and the State of Idaho.**

See Instruction Guide for assistance with Application. Accurate submission of requested information can prevent delays in reviewing and permitting your application. Drawings including vicinity maps, plan-view and section-view drawings must be submitted on 8-1/2 x 11 papers.

Do not start work until you have received all required permits from both the Corps and the State of Idaho

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| USACE NWW- | Date Received: | <input type="checkbox"/> Incomplete Application Returned | Date Returned: |
| Idaho Department of Water Resources No. 31-20735 | Date Received: 1-9-2026 | <input checked="" type="checkbox"/> Fee Received DATE: 1-9-2026 | Receipt No.: C124613 |
| Idaho Department of Lands No. | Date Received: | <input type="checkbox"/> Fee Received DATE: | Receipt No.: |

INCOMPLETE APPLICANTS MAY NOT BE PROCESSED

| | | | | | | | | |
|--|--|--|--------------------|---|-----------------|---|----------------------|--------------------|
| 1. CONTACT INFORMATION - APPLICANT Required: | | | | 2. CONTACT INFORMATION - AGENT: | | | | |
| Name: Josh Ashmead, Road Foreman | | | | Name: Patrick A Wickman, M.S. | | | | |
| Company: Camas County Road & Bridge | | | | Company: Forsgren Associates, Inc., An Apex Company | | | | |
| Mailing Address: PO Box 430 | | | | Mailing Address: 1109 W. Myrtle St | | | | |
| City: Fairfield | | State: ID | Zip Code: 83327 | City: Boise | | State: ID | Zip Code: 83702 | |
| Phone Number (include area code): 208-764-2271 | | E-mail: camascountrysrb@gmail.com | | Phone Number (include area code): 208-854-8315 | | E-mail: pwickman@forsgren.com | | |
| 3. PROJECT NAME or TITLE: LILB Bridge 23795 & 23800 Replacement | | | | 4. PROJECT STREET ADDRESS: 200 S Road | | | | |
| 5. PROJECT COUNTY: Camas County | | 6. PROJECT CITY: Fairfield | | 7. PROJECT ZIP CODE: 83327 | | 8. NEAREST WATERWAY/WATERBODY: Camas Creek | | |
| 9. TAX PARCEL ID#: * See Permit Application Narrative | | 10. LATITUDE: 43° 18' 51.25" N LONGITUDE: - 114° 39' 27.74" W | | 11a. 1/4: SW | 11b. 1/4: NW | 11c. SECTION: 22 | 11d. TOWNSHIP: 1S | 11e. RANGE: 15E |
| 12a. ESTIMATED START DATE: 6/1/2026 | | 12b. ESTIMATED END DATE: 12/1/2026 | | 13a. IS PROJECT LOCATED WITHIN ESTABLISHED TRIBAL RESERVATION BOUNDARIES? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Tribe: | | | | |
| 13b. IS PROJECT LOCATED IN LISTED ESA AREA? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES | | | | 13c. IS PROJECT LOCATED ON/NEAR HISTORICAL SITE? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES | | | | |
| 14. DIRECTIONS TO PROJECT SITE: Include vicinity map with legible crossroads, street numbers, names, landmarks. From Fairfield, Idaho head east on US-20 for seven (7) miles. Turn south onto 200 South Road/Lincoln Avenue. Follow 200 S Road/Bahr Ranch Road (200 S Road) for 2.1 miles and turn left onto 200 South Road. Bridge Key No. 23795 is located 125 feet from the intersection and Bridge Key No. 23800 is located 400 feet from the intersection. | | | | | | | | |
| 15. PURPOSE and NEED: <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Other Describe the reason or purpose of your project; include a brief description of the overall project. Continue to Block 16 to detail each work activity and overall project. *See Permit Application Narrative | | | | | | | | |

16. DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT. Specifically indicate portions that take place within waters of the United States, including wetlands: Include dimensions; equipment, construction, methods; erosion, sediment and turbidity controls; hydrological changes: general stream/surface water flows, estimated winter/summer flows; borrow sources, disposal locations etc.:

* See Permit Application Narrative

17. DESCRIBE ALTERNATIVES CONSIDERED to AVOID or MEASURES TAKEN to MINIMIZE and/ or COMPENSATE for IMPACTS to WATERS of the UNITED STATES, INCLUDING WETLANDS: See Instruction Guide for specific details.

* See Permit Application Narrative

18. PROPOSED MITIGATION STATEMENT or PLAN: If you believe a mitigation plan is not needed, provide a statement and your reasoning why a mitigation plan is NOT required. Or, attach a copy of your proposed mitigation plan.

* See Permit Application Narrative

19. TYPE and QUANTITY of MATERIAL(S) to be discharged below the ordinary high water mark and/or wetlands:

Dirt or Topsoil: 72 cubic yards
 Dredged Material: _____ cubic yards
 Clean Sand: _____ cubic yards
 Clay: _____ cubic yards
 Gravel, Rock, or Stone: 800 cubic yards
 Concrete: 200 cubic yards
 Other (describe): Metal : 10 cubic yards
 Other (describe): Earth w. Granular Fill : 2,300 cubic yards

TOTAL: 3,382 cubic yards

20. TYPE and QUANTITY of impacts to waters of the United States, including wetlands:

Filling: 0.54 acres 23,623 sq ft. 3,382 cubic yards
 Backfill & Bedding: _____ acres _____ sq ft. _____ cubic yards
 Land Clearing: _____ acres _____ sq ft. _____ cubic yards
 Dredging: _____ acres _____ sq ft. _____ cubic yards
 Flooding: _____ acres _____ sq ft. _____ cubic yards
 Excavation: 0.9 acres 39,310 sq ft. 5,400 cubic yards
 Draining: _____ acres _____ sq ft. _____ cubic yards
 Other: _____ : _____ acres _____ sq ft. _____ cubic yards

TOTALS: 1.44 acres 62,933 sq ft. 8,782 cubic yards

21. HAVE ANY WORK ACTIVITIES STARTED ON THIS PROJECT? NO YES If yes, describe ALL work that has occurred including dates.

22. LIST ALL PREVIOUSLY ISSUED PERMIT AUTHORIZATIONS:
 No previous permits issued. A pre-application meeting was held with both Idaho Department of Water Resources and the US Army Corps on March 15, 2024.

23. YES, Alteration(s) are located on Public Trust Lands, Administered by Idaho Department of Lands

24. SIZE AND FLOW CAPACITY OF BRIDGE/CULVERT and DRAINAGE AREA SERVED: 480 Square Miles

25. IS PROJECT LOCATED IN A MAPPED FLOODWAY? NO YES If yes, contact the floodplain administrator in the local government jurisdiction in which the project is located. A Floodplain Development permit and a No-rise Certification may be required.

26a WATER QUALITY CERTIFICATION: Pursuant to the Clean Water Act, anyone who wishes to discharge dredge or fill material into the waters of the United States, either on private or public property, must obtain a Section 401 Water Quality Certification (WQC) from the appropriate water quality certifying government entity.
 See Instruction Guide for further clarification and all contact information.

The following information is requested by IDEQ and/or EPA concerning the proposed impacts to water quality and anti-degradation:
 NO YES Is applicant willing to assume that the affected waterbody is high quality?
 NO YES Does applicant have water quality data relevant to determining whether the affected waterbody is high quality or not?
 NO YES Is the applicant willing to collect the data needed to determine whether the affected waterbody is high quality or not?

26b. BEST MANAGEMENT PRACTICES (BMP's): List the Best Management Practices and describe these practices that you will use to minimize impacts on water quality and anti-degradation of water quality. All feasible alternatives should be considered - treatment or otherwise. Select an alternative which will minimize degrading water quality

BMPs will be implemented to prevent erosion, sedimentation, and water quality degradation. They will be inspected regularly to ensure they are functioning properly and repairs made immediately. Materials will be removed and disposed of appropriately off-site in compliance with applicable regulations.

For the 401 Water Quality Certification, the contractor will follow and implement all approved conditions and requirements of the 401 Water Quality Certification issued by IDEQ to ensure project actions meet State of Idaho anti-degradation requirements for water quality. BMPS implemented may include:

1. Minimize construction activities/equipment from impacting identified wetlands through placement of silt fencing or fiber wattles along construction limits. A Contractors note will be included in the Contract Drawings that indicates wetlands are to be retained and protected beyond identified construction limits.
2. Keep equipment (including fuels and oils) away from the creek when not in use.
3. Schedule construction activities during dry or low-flow conditions.

Through the 401 Certification process, water quality certification will stipulate minimum management practices needed to prevent degradation.

27. LIST EACH IMPACT to stream, river, lake, reservoir, including shoreline: Attach site map with each impact location.

| Activity | Name of Water Body | Intermittent Perennial | Description of Impact and Dimensions | Impact Length Linear Feet |
|--|--------------------|---------------------------|--|------------------------------|
| Roadway Realignment | Camas Creek | Perennial | Move centerline of two lane roadway northeast | 130 |
| Bridge Construction | Camas Creek | Perennial | Construct bridge abutments & piers | 70 |
| Channel Realignment | Camas Creek | Perennial | Excavate new channel and place rip rap weirs along channel | 600 |
| Temp Crane Pad & Road | Camas Creek | Perennial | Temp Path and Pad for Crane | 30 |
| TOTAL STREAM IMPACTS (Linear Feet): | | | | 830 |

28. LIST EACH WETLAND IMPACT include mechanized clearing, fill excavation, flood, drainage, etc. Attach site map with each impact location.

| Activity | Wetland Type: Emergent, Forested, Scrub/Shrub | Distance to Water Body (linear ft) | Description of Impact Purpose: road crossing, compound, culvert, etc. | Impact Length (acres, square ft linear ft) |
|---|--|--|--|--|
| Roadway Realignment | Emergent | 0 | Fill wetlands as part of moving roadway | 2,353 |
| Channel Realignment | Emergent | 0 | Channel realignment impacts to wetlands | 1,161 |
| | | 0 | | |
| TOTAL WETLAND IMPACTS (Square Feet): | | | | 3,514 |

29. ADJACENT PROPERTY OWNERS NOTIFICATION REQUIREMENT: Provide contact information of ALL adjacent property owners below.

| | |
|--|---|
| <p>Name: MENNENGA, GARY</p> <p>Mailing Address: Legal Address: TAX NO 1345 SEC 22 T1S R15E</p> <p>City: State: Zip Code: Fairfield ID 83327</p> <p>Phone Number (include area code): E-mail:</p> | <p>Name: KELLY RANCH, LLC</p> <p>Mailing Address: E2SE4 LESS TAX NO 1345 LESS TAX NO 1618 SEC 22 T1S R15E</p> <p>City: State: Zip Code: Fairfield ID 83327</p> <p>Phone Number (include area code): E-mail:</p> |
| <p>Name: SIMON FARMS, INC</p> <p>Mailing Address: W2, W2SE4, LESS TAX 1618, LESS TAX 1561, LESS BAHR SUBDIVISION</p> <p>City: State: Zip Code: Fairfield ID 83327</p> <p>Phone Number (include area code): E-mail:</p> | <p>Name: LUNA, JORGE</p> <p>Mailing Address: LOT 5 BAHR SUBDIVISION</p> <p>City: State: Zip Code: Fairfield ID 83327</p> <p>Phone Number (include area code): E-mail:</p> |
| <p>Name:</p> <p>Mailing Address:</p> <p>City: State: Zip Code:</p> <p>Phone Number (include area code): E-mail:</p> | <p>Name:</p> <p>Mailing Address:</p> <p>City: State: Zip Code:</p> <p>Phone Number (include area code): E-mail:</p> |
| <p>Name:</p> <p>Mailing Address:</p> <p>City: State: Zip Code:</p> <p>Phone Number (include area code): E-mail:</p> | <p>Name:</p> <p>Mailing Address:</p> <p>City: State: Zip Code:</p> <p>Phone Number (include area code): E-mail:</p> |

30. SIGNATURES: STATEMENT OF AUTHORIZATION / CERTIFICATION OF AGENT / ACCESS

Application is hereby made for permit, or permits, to authorize the work described in this application and all supporting documentation. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein; or am acting as the duly authorized agent of the applicant (Block 2). I hereby grant the agencies to which this application is made, the right to access/come upon the above-described location(s) to inspect the proposed and completed work/activities.

Signature of Applicant: _____

**Patrick
Wickman**

Digitally signed by Patrick
Wickman
Date: 2026.01.07 16:04:48
-07'00'

Date: _____

1-5-26

Signature of Agent: _____

1/7/2026

Date: _____

This application must be signed by the person who desires to undertake the proposed activity AND signed by a duly authorized agent (see Block 1, 2, 30). Further, 18 USC Section 1001 provides that: "Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both".

404 Permit Application Narrative

TAX PARCEL ID#

RP01S15E227202, RP01S15E227204, RP01S15E222407, RP006000000050

Block 15.) PURPOSE and NEED

The purpose of this project is to replace two deteriorating, load-posted existing bridges with a single bridge that will allow for two-way traffic and mitigate the effects of heavy traffic loads, including larger trucks and farming equipment. The new structure will be designed with scour countermeasures to protect the bridge from high flows in Camas Creek, and the hydraulics opening for the new bridge has been widened to better suit the flow of Camas Creek and reduce the risk of roadway overtopping. The project will realign the roadway immediately downstream of the existing alignment and will enhance long-term reliability by replacing two aging structures with a single modern bridge, reducing future maintenance needs.

The project is needed to install a bridge that meets current AASHTO standards, facilitate future traffic needs, and improve the hydraulics of Camas Creek under the structure.

Block 16.) DETAILED DESCRIPTION of EACH ACTIVITY within OVERALL PROJECT

The proposed project will replace two bridges (Bridge 23795 and Bridge 23800). Bridge 23795 is a 16-ft wide and 43-ft long bridge, and Bridge 23800 is a 17.8-ft wide and 117-ft long bridge. The new bridge will be a 207-ft long (length out to out) and 30-ft wide (width out to out) bridge. The existing side channel that travels under Bridge 23795 will be realigned and shifted to the southeast.

The project will consist of three broad stages:

Roadway Construction and Alignment

The project will require a horizontal realignment of 200 S Road to the northeast to accommodate the new bridge structure and avoid conflicts with a small building located southeast of Bridge 23800. Roadway approaches on either side of the new bridge, including two 48" diameter culverts that will replace Bridge 23795, will be adjusted to tie into the new alignment.

Bridge Construction and Removal

Because this roadway is the only access for nearby property owners, the bridge will be constructed in phases to maintain traffic throughout the project. In the first phase, traffic will remain on the existing bridge while the north half of the new bridge is constructed on the northeast alignment. In the second phase, traffic will shift onto the completed structure, the existing bridges will be removed, and construction of the remaining portion of the new bridge will be completed. As part of this process, the portion of the old roadway no longer used by the new bridge alignment will be removed, creating streambed where the roadway currently exists. At least one lane of traffic will be maintained during all phases using signalized traffic control.

Channel Realignment and Creation

Channel realignment will be required as part of the project. The existing side channel that travels under Bridge 23795 will be shifted to the east, and the current side channel will be replaced with two 48" diameter culverts. Riprap will be placed in the newly excavated channel to direct flow under the western span of the new bridge.

Profile Grade. The profile grade of the new bridge will meet a 2-foot freeboard requirement by the Idaho Transportation Department (ITD). The modified channel opening under the bridge will better convey the maximum flow of Camas Creek and counteract scour damage present on the existing structures.

Dewatering (if needed). Groundwater may be encountered during construction. The contractor will prepare and submit a dewatering plan for the Engineer and Idaho Department of Water Resources (IDWR) to review and approve before implementation. The contractor will provide IDWR with at least four weeks to review and approve. Work cannot commence until the plan is approved.

Schedule. The bridge replacement project is anticipated to take approximately six (6) months and will start on June 1, 2026 and finish by December 31, 2026. The construction window will occur after spring runoff, when the creek is dry or at its lowest flows of the year.

Wetlands. An Aquatic Resources Delineation Report (ARDR) was prepared for the project area in 2024. The ARDR documented that the dominant aquatic resource classifications within the study area are open water (Camas Creek) and palustrine emergent (PEM) wetlands. Within the study area, the creek channel measures approximately 300 to 400 feet wide between the Ordinary High-Water Mark (OHWM). The OHWM was delineated in the field based on shelving, changes in vegetation, and the slope of the bank.

A table is included in Attachment A that summarizes the permanent and temporary impacts to Waters of the US and adjacent wetlands from the proposed project. Permit Drawings with impacts are included in Attachment A. The ARDR is included as Attachment B.

CONSTRUCTION EQUIPMENT AND METHODS

Activity 1. Protect Existing Wetlands/Install Best Management Practices

Prior to the removal of the existing bridges and the installation of the new bridge, wetlands that are not to be disturbed will be protected/marked with orange construction fencing. Fiber wattles will also be placed to prevent runoff from the proposed work area (See Attachment A – Permit Drawings).

Activity 2. Implement Dewatering Plan (If Needed)

To facilitate in-channel work and create a dry work area, the contractor may implement dewatering methods as needed in accordance with an IDWR approved dewatering plan.

Activity 3. Construct Temporary Access Road and Crane Platform

A temporary access road and crane platform will be built north of the existing roadway to facilitate construction. The contractor will place geotextile fabric at the base of the road and platform to protect the existing wetlands.

Activity 4. Roadway Construction and Realignment

The contractor will build a new roadway and bridge approach to shift the alignment of 200 S Road north to accommodate the new single-span bridge that will cross both the main channel and the realigned side channel. Two parallel 48" diameter culverts will be placed under the road just downstream of where Bridge 23795 was located.

Activity 5. Excavation for New Bridge Footings, Pier, and Abutments

The contractor will excavate for the new bridge footings, abutments and center pier as shown on the permit drawings.

Activity 6. Construct Footings, Abutments, and Center Pier for the Northern half of the New Bridge; Set First Half of Bridge Deck

The contractor will pour new concrete footings, construct bridge abutments and place the center pier for the north half of the bridge. The contractor will place/install the north half of the bridge deck on the newly constructed abutments and center pier.

Activity 7. Shift Traffic onto North Half of Bridge

Upon completion of the first half of the bridge, traffic will be shifted onto the new roadway and structure.

Activity 8. Remove Existing Bridges and Roadway Fill.

The contractor will remove the existing bridge decks, abutments, and piers for Bridges 23795 & 23800. The contractor will also excavate and remove the portion of the roadway no longer used by the new bridge.

Activity 9. Construct Footings, Abutments, and Center Pier for the Southern half of the New Bridge; Set Second Half of the Bridge Deck

The contractor will place/install the south half of the bridge deck. The contractor will pour new concrete footings, construct bridge abutments for the south half of the bridge and set the second half of the bridge deck.

Activity 10. Place Riprap For Scour Protection and Channel Realignment

The contractor will place two feet of riprap (size D50 = 1 ft min) in front of the bridge abutments and wing walls as shown in the permit drawings.

The contractor will grade the side channel that flows under Bridge 23795 east, so it flows under the western span of the new bridge. This realigned side channel will connect with the main channel downstream of the new bridge. Riprap will be placed in the excavated streambed to direct flows into the regraded side channel. Over time, it is anticipated that natural sediment transport will gradually cover the low areas of the riprap.

Activity 11. Remove Temporary Access Road and Crane Platform, Restore Disturbed Areas

The contractor will remove the temporary access road, crane platform, and all associated materials from the work area. Disturbed areas will be re-graded to tie into existing topography. Disturbed areas above the OHWM will be reseeded.

Block 17.) DESCRIBE ALTERNATIVES CONSIDERED to AVOID or MEASURES TAKEN to MINIMIZE and/ or COMPENSATE for IMPACTS to WATERS of the UNITED STATES, INCLUDING WETLANDS:

Replacement of the two structurally deficient bridges on 200 South Road requires work within Camas Creek, a Water of the United States (WOTUS), and its adjacent wetlands. Because these features are unavoidable in the project corridor, some impacts will occur; however, the selected alternative was identified as the **least environmentally damaging practicable alternative (LEDPA)**. It best meets the project's purpose and need while avoiding and minimizing impacts to the maximum extent practicable.

Preferred Alternative (LEDPA)

The preferred alternative shifts the new bridge slightly north of the existing alignment. This shift allows the structure to improve hydraulic performance by reducing the likelihood of roadway overtopping during high-flow events. Importantly, relocating the alignment north avoids the scrub-shrub wetlands located immediately south of the existing roadway, thereby reducing direct wetland fill.

The required channel realignment has been designed to use the minimum amount of bank stabilization needed to safely convey flows beneath the new span. Limiting the amount of new rock and channel excavation reduces the overall disturbance footprint within the floodplain. By efficiently passing high flows, the preferred alternative also decreases long-term scour potential and reduces the need for future maintenance activities that could re-disturb aquatic resources.

Alternative Considered and Rejected

One practicable alternative considered retained the existing roadway alignment and replaced the two existing structures in place with longer, wider single-span bridges. Under this alternative, Bridge No. 23795 would be reconstructed with a 60-foot span and Bridge No. 23800 with a 120-foot span; the existing 48-inch relief culvert would be extended. To meet ITD freeboard requirements, this design would require raising the roadway profile, which in turn would necessitate widening and armoring the channel banks and constructing new riprapped abutments.

Although this alternative would meet hydraulic design standards, it would result in **substantially greater impacts to WOTUS and adjacent wetlands** due to increased earthwork, channel embankment construction, and riprap placement. Compared to the preferred alignment shift, the in-place replacement option would disturb a larger wetland area, expand the fill footprint in the floodplain, and alter more of the existing stream channel. For these reasons, the in-place alternative was determined **not to be the least environmentally damaging practicable alternative** and was therefore not selected. Additional hydraulic comparison is provided in Attachment C – Hydraulics Report.

Block 18.) PROPOSED MITIGATION STATEMENT or PLAN: If you believe a mitigation plan is not needed, provide a statement and your reasoning why a mitigation plan is NOT required. Or, attach a copy of your proposed mitigation plan:

The proposed project is anticipated to impact less than 0.1 acre of existing wetlands; therefore, no wetland compensatory mitigation is proposed.

The project will result in approximately 0.27 acre of permanent impacts to waters of the United States (WOTUS)/streambed associated with roadway realignment and localized channel modifications necessary to replace two end-of-life bridges with a single structure. Removal of the existing roadway prism and associated fill will result in approximately 0.11 acre of on-site restoration and creation of new WOTUS/streambed within the Camas Creek corridor.

The Applicant requests that the U.S. Army Corps of Engineers, Walla Walla District, determine that compensatory mitigation for streambed impacts is not required for the following reasons:

- 1. Impacts are limited to low-function, intermittently dry streambed areas.**
Streambed impacts will occur outside of the primary low-flow channel of Camas Creek within a wide, braided channel system. Impacted areas are intermittently dry, lack defined bed and bank structure, and do not support wetland vegetation or meet the wetland vegetation dominance test. These areas provide limited aquatic habitat and are more characteristic of adjacent upland or transitional plant communities.
- 2. Avoidance and minimization have been implemented to the maximum extent practicable.**
The selected alternative consolidates two existing crossings into a single bridge span, avoids impacts to adjacent palustrine scrub-shrub wetlands, and minimizes streambed impacts through alignment shifts and reduction of in-channel infrastructure. Additional avoidance is not practicable due to channel width, floodplain constraints, and the need to safely convey design flood events.
- 3. On-site restoration and functional replacement will occur.**
Removal of the existing roadway embankment will restore hydraulic connectivity across the channel and result in approximately 0.11 acre of on-site restoration and creation of new streambed. These actions will offset a portion of the permanent impacts by reestablishing channel area and improving sediment and flow continuity within the creek corridor.
- 4. Overall project results in improved channel stability and flood conveyance.**
Channel modifications, including embedded riprap installed for bank and bed stability, are necessary to safely convey 50-, 100-, and 500-year flood events and reduce the potential for scour, erosion, and uncontrolled channel migration. Riprap will be embedded to allow sediment accumulation and vegetation establishment during low-flow periods, improving long-term channel stability relative to existing conditions.

Given the low functional value of the impacted streambed areas, the incorporation of avoidance and minimization measures, the on-site restoration and creation of streambed, and the overall improvement to channel stability and hydraulic function, the proposed impacts are not expected to result in a net loss of aquatic resource function. Therefore, compensatory mitigation is not proposed.

Block 24.) SIZE AND FLOW CAPACITY OF BRIDGE/CULVERT and DRAINAGE AREA SERVED

A hydraulic model was created for the proposed bridge crossing using SMS-SRH2D V.13.3 to simulate the expected hydraulic conditions for the 50-year, 100-year, and 500-year floods.

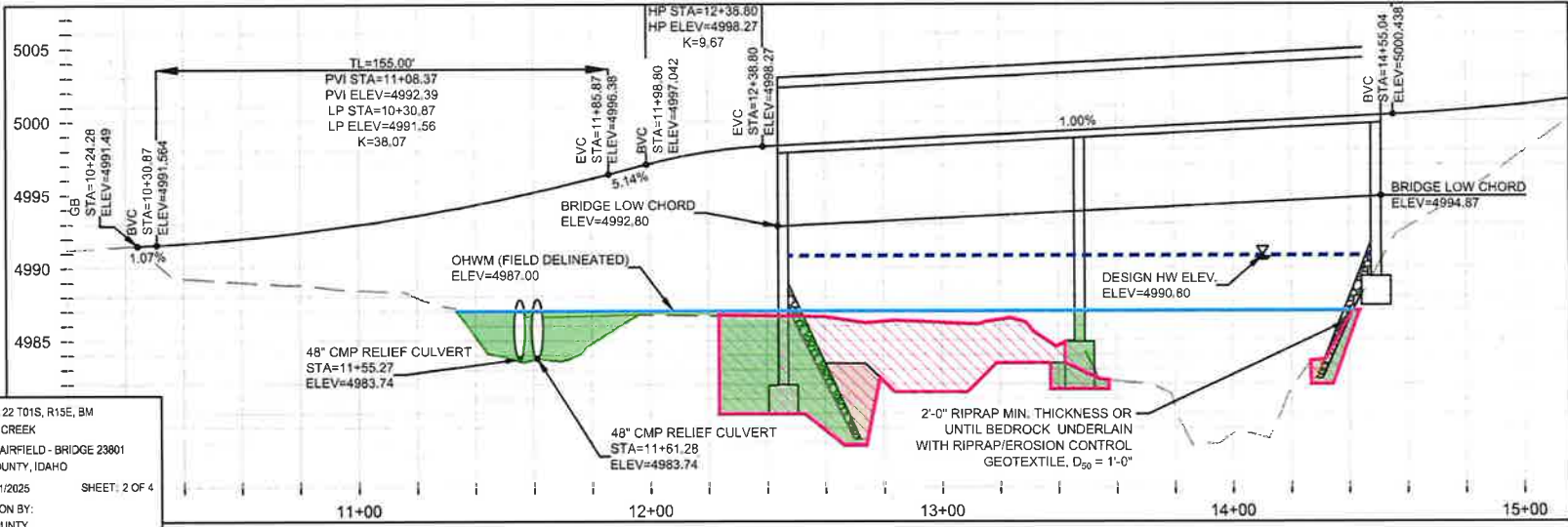
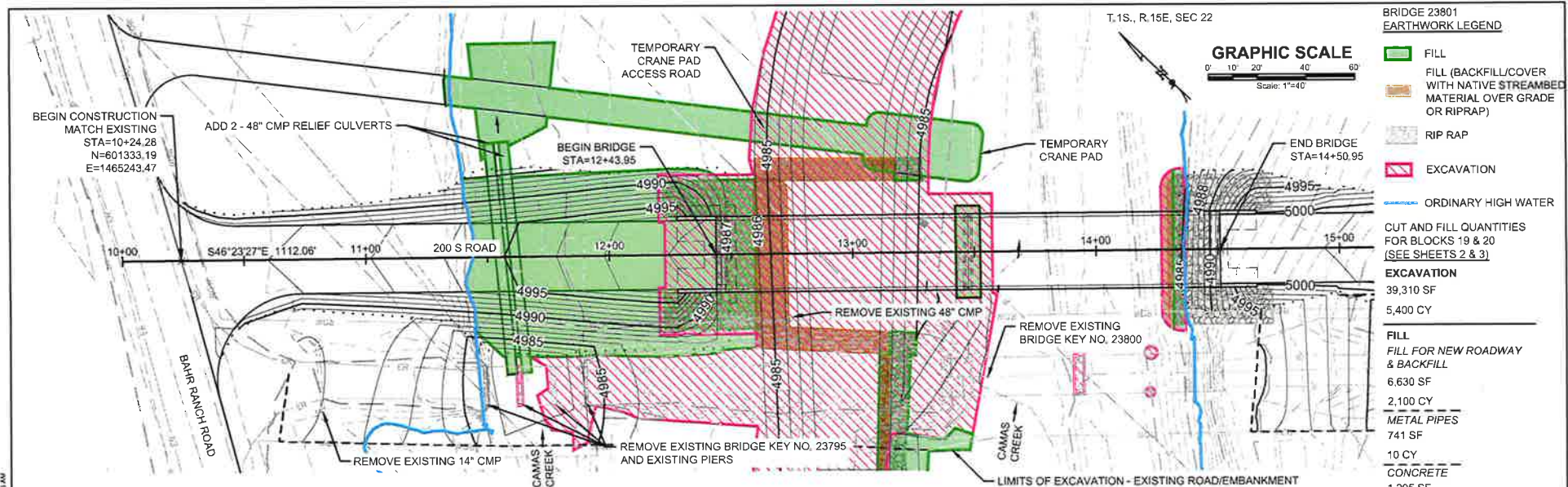
Section 2.1 of the ITD Bridge Hydraulics Manual states that a 2-foot minimum freeboard must be met for a 50-year flood, while the flow of a 100-year flood must pass through the structure without contacting the low chord. The low chord of the bridge is the lowest portion of the bridge, while the freeboard is the vertical distance between the water surface and the low chord of the bridge.

The following table summarizes the results of the hydraulic modeling conducted and displays the ITD design criterion that have been met. **The bridge passes the 2-ft minimum for the 50-year flood, with an estimated freeboard of 2.02 feet. The bridge also has an estimated freeboard elevation of 1.81-ft for the 100-year flood, which exceeds minimum design standards.**

Table 2: Camas Creek Summary of Stream Flows

| Recurrence Interval (years) | Computed WSE (ft) | Bridge Low Chord (ft) | Estimated Freeboard (ft) |
|-----------------------------|-------------------|-----------------------|--------------------------|
| 50 | 4990.78 | 4992.80 | 2.02 |
| 100 | 4990.99 | | 1.81 |
| 500 | 4991.24 | | 1.56 |

Attachment A. Permit Drawings and Permit Impact Table



NW: SEC 22 T01S, R15E, BM
IN: CAMAS CREEK
IN/NEAR: FAIRFIELD - BRIDGE 23801
CAMAS COUNTY, IDAHO
DATE: 12/31/2025 SHEET: 2 OF 4
APPLICATION BY:
CAMAS COUNTY

| | | | |
|-----|-----------|----|------|
| NO. | REVISIONS | BY | DATE |
| | | | |
| | | | |
| | | | |

SCALES SHOWN ARE FOR 11"x17" PRINTS ONLY

COUNTY
CAMAS

BRIDGE KEY NUMBER
23801

LEADING IDAHO LOCAL BRIDGE PROGRAM

FORSGRÉN Associates Inc.

Untact2

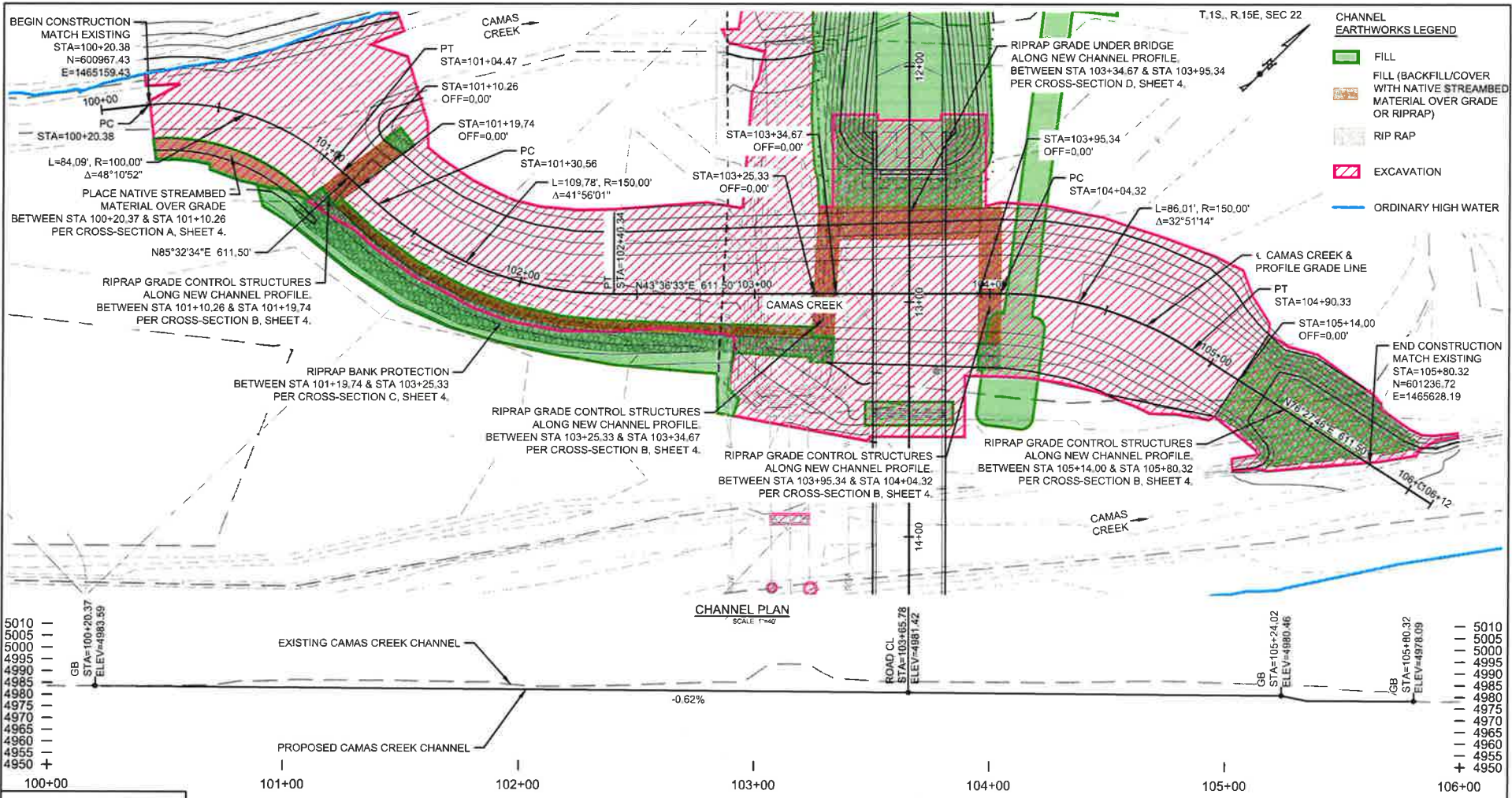
FILL & EXCAVATION FROM ROAD & BRIDGE REALIGNMENT

200 S ROAD OVER CAMAS CREEK

PROJECT NO: 02-23-0135
DRAWING NO: 18294
DATE: 12/31/25 SHEET NO: 2 OF 4

**PRELIMINARY
DRAWING
NOT FOR
CONSTRUCTION**

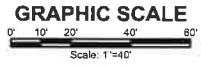
F:\bids\p18294\23135 - LUEB Round 2 Bridge\Drawn 2 Bridge\23801 & 23795 - 206 S over Camas Creek\CAD\Drawings\18294-02-23-0135 - 18294-02-23-0135.dwg - 1/17/2025 9:13 AM



- CHANNEL EARTHWORKS LEGEND**
- FILL
 - FILL (BACKFILL/COVER WITH NATIVE STREAMBED MATERIAL OVER GRADE OR RIPRAP)
 - RIP RAP
 - EXCAVATION
 - ORDINARY HIGH WATER

CHANNEL PLAN
SCALE: 1"=40'

CHANNEL ELEVATION
SCALE: 1"=40'



5010
5005
5000
4995
4990
4985
4980
4975
4970
4965
4960
4955
4950

5010
5005
5000
4995
4990
4985
4980
4975
4970
4965
4960
4955
4950

NW/4 SEC. 22 T01S, R15E, BM
IN: CAMAS CREEK
IN/NEAR: FAIRFIELD - BRIDGE 23801
CAMAS COUNTY, IDAHO
DATE: 12/31/2025 SHEET: 3 OF 4
APPLICATION BY:
CAMAS COUNTY

| | | | |
|-----|-----------|----|------|
| NO. | REVISIONS | BY | DATE |
| | | | |
| | | | |

SCALES SHOWN ARE FOR 11"x17" PRINTS ONLY
COUNTY
CAMAS
BRIDGE KEY NUMBER
23801

LEADING IDAHO LOCAL BRIDGE PROGRAM

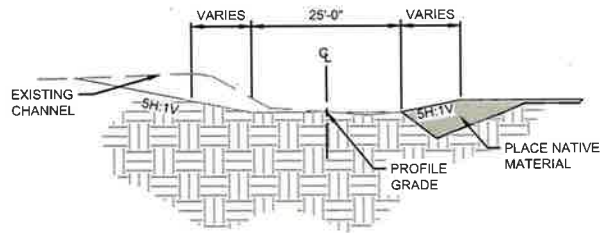


FILL & EXCAVATION FROM CHANNEL REALIGNMENT
200 S ROAD OVER CAMAS CREEK

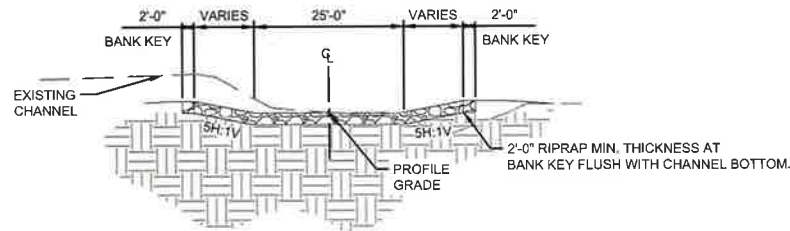
PROJECT NO: 02-23-0135
DRAWING NO: 18294
DATE: 12/31/25 SHEET NO: 3 OF 4

**PRELIMINARY
DRAWING
NOT FOR
CONSTRUCTION**

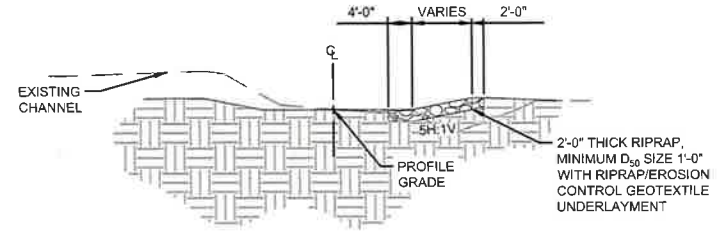
F:\Misc\Projects\23135 - LEER Round 3 Bridge\Draw 2 Bridge\Draw 2 Bridge\23801 & 23795 - 200 S over Camas Creek\23801.dwg (12/31/2025 9:13 AM)



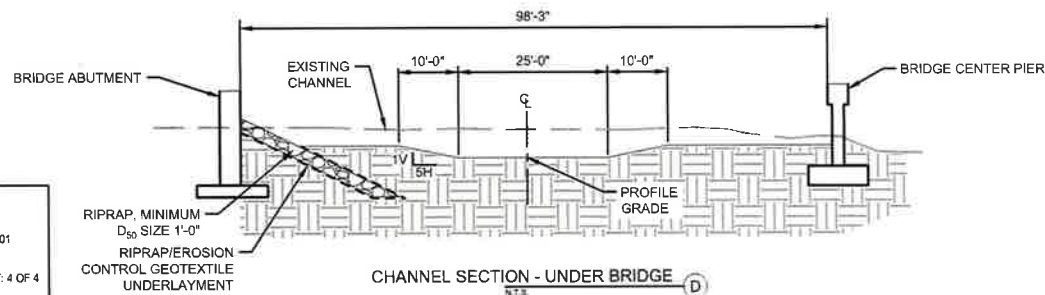
CHANNEL SECTION - NO RIPRAP
N.T.S. (A)



CHANNEL SECTION - WITH RIPRAP GRADE CONTROL STRUCTURE
N.T.S. (B)



CHANNEL SECTION - WITH RIPRAP BANK PROTECTION
N.T.S. (C)



CHANNEL SECTION - UNDER BRIDGE
N.T.S. (D)

F:\bentley\project\23110 - IEB Round 1 Bridge\creek 2 Bridge\23000 1 23195 2018 5 over Camas Creek\CAD\Sheet\Environment\23801_18294.dwg 12/27/2025 9:11 AM

NWW: SEC 22 T01S, R18E, BM
 IN: CAMAS CREEK
 IN/NEAR: FAIRFIELD - BRIDGE 23801
 CAMAS COUNTY, IDAHO
 DATE: 12/31/2025 SHEET: 4 OF 4
 APPLICATION BY:
 CAMAS COUNTY

| | | | |
|-----|-----------|----|------|
| NO. | REVISIONS | BY | DATE |
| | | | |

| | | | |
|----------|--|-------------------|-------------|
| DRAWN | | SCALES SHOWN | |
| DESIGNED | | ARE FOR 11"x17" | PRINTS ONLY |
| APPROVED | | COUNTY | CAMAS |
| QA | | BRIDGE KEY NUMBER | 23801 |

LEADING IDAHO
 LOCAL BRIDGE
 PROGRAM



CHANNEL SECTIONS
 200 S ROAD OVER CAMAS CREEK

| | |
|-------------|------------|
| PROJECT NO: | 02-23-0135 |
| DRAWING NO: | 18294 |
| DATE: | 12/31/25 |
| SHEET NO: | 4 OF 4 |

PRELIMINARY
 DRAWING
 NOT FOR
 CONSTRUCTION

Camas County and LHTAC
 LILB Bridges # 23795 & 23800 - 200 S Road over Camas Creek
 Date Updated: 12/30/2025

| Activity # | Activity Description | TYPE and QUANTITY of MATERIALS Discharge Below OHW (Block 19) | | TYPE and QUANTITY of Impacts to Waters of US (Block 20) | | | Stream Impacts (Block 27) | Wetland Impact (Block 28) | | | WOTUS/Streambed Impact (No Block) | | WOTUS/Streambed Creation (No Block) | | Temporary Wetland Impact (No Block) | | | Temporary WOTUS/Streambed Impact (No Block) | | | |
|---|---|---|--------------|---|-------------|---------------|---------------------------|---------------------------|------|-------------|-----------------------------------|-------------|-------------------------------------|-------------|-------------------------------------|------|-------------|---|-------------|---------------|--------|
| | | Material Type | Quantity | Type | Quantity | | | LF | Type | Acres | SF | Acres | SF | Acres | SF | Type | Acres | SF | Acres | SF | |
| | | | CY | | Acres | SF | CY | | | | | | | | | | | | | | |
| Roadway Construction/Realignment | | | | | | | | | | | | | | | | | | | | | |
| 3 | Construct Temp Crane Platform & Access Road | Earth mixed with Granular Fill | 200 | Fill | 0.09 | 3,998 | 200 | 30 | | | | | | | | | PEM | 0.03 | 1,215 | 0.06 | 2,783 |
| 4 | Install two 48" Culverts | Metal | 10 | Fill | 0.02 | 741 | 10 | | | | | | | | | | | | | | |
| 4 | New Roadway Construction & Realignment | Earth mixed with Granular Fill | 2,100 | Fill | 0.15 | 6,630 | 2,100 | 130 | PEM | 0.05 | 2,000 | 0.11 | 4,630 | | | | | | | | |
| 8 | Removal Existing Roadway Fill, Abutments & Piers | | | Excavation | 0.12 | 5,300 | 1,240 | | PEM | 0.01 | 353 | | | 0.11 | 4,947 | | | | | | |
| Bridge Replacement | | | | | | | | | | | | | | | | | | | | | |
| 5 | Excavate for New Bridge Footing & Pier | | | Excavation | 0.08 | 3,692 | 641 | | | | | | | | | | | | | 0.02 | 848 |
| 6, 9 | Construct New Abutments, Footings, Center Pier & Wing Walls | Concrete | 200 | Fill | 0.03 | 1,205 | 200 | 70 | | | | 0.01 | 370 | | | | | | | | |
| 10 | Place Riprap on Abutments and Wingwall | Rock | 218 | Fill | 0.06 | 2,825 | 218 | | | | | 0.04 | 1,635 | | | | | | | 0.00 | 209 |
| Channel Realignment | | | | | | | | | | | | | | | | | | | | | |
| 10 | Channel Realignment | | | Excavation | 0.70 | 30,318 | 3,519 | 600 | PEM | 0.03 | 1,161 | | | | | | | | | 0.67 | 29,157 |
| 10 | Place Riprap in Regraded Side Channel | Rock | 582 | Fill | 0.12 | 5,149 | 582 | | | | | 0.12 | 5,149 | | | | | | | | |
| 12 | Backfill w. Native Streambed Material Over Riprap | Clean Fill | 72 | Fill | 0.07 | 3,075 | 72 | | | | | | | | | | | | | | |
| Totals | | | 3,382 | | 1.44 | 62,933 | 8,782 | 830 | | 0.08 | 3,514 | 0.27 | 11,784 | 0.11 | 4,947 | | 0.03 | 1,215 | 0.76 | 32,997 | |

Attachment B. Aquatic Resource Delineation Report



US Army Corps
of Engineers
Walla Walla District

Draft Aquatic Resource Delineation Report

**Bridge Key Nos. 23795 and 23800
Leading Idaho Local Bridge Program
200 South Road over Camas Creek
Camas County**

December 2024

Prepared by:

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Boise, ID 83702
208.342.3144
Forsgren Project No. 02-23-0026

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Report Summary

The Local Highway Technical Assistance Council (LHTAC) has contracted Forsgren Associates, Inc. (Forsgren) to prepare an Aquatic Resource Delineation Report for the replacement of two (2) 200 S Road bridges over Camas Creek (Bridge Key Nos. 23795 and 23800).

The purpose of the report is to identify potential jurisdictional Waters of the United States (WOTUS) to support the preparation of a Section 404 Joint Application for Permit for the proposed replacement project.

A 13.2-acre survey area along 200 S Road, Bahr Ranch Road (200 S Road), and the existing bridges was assessed, and potential aquatic resources were delineated. Camas Creek was identified as a Waters of the United States (WOTUS) with five adjacent wetlands along its banks. The five wetlands are palustrine emergent (PEM), 0.781 acres (34,023 sf) and palustrine scrub shrub (PSS), 0.902 acres (39,274 sf) with a total cover of 1.68 acres (73,297 sf).

Acronyms and Abbreviations

| | |
|-------|---|
| APE | Area of Potential Effect |
| FEMA | Federal Emergency Management Agency |
| LILB | Leading Idaho Local Bridge Program |
| LHTAC | Local Highway Technical Assistance Council |
| MSL | Mean Sea Level |
| NRCS | Natural Resources Conservation Service |
| NWI | National Wetlands Inventory |
| OHW | Ordinary High-Water Mark |
| PEM | palustrine emergent |
| PSS | palustrine scrub shrub |
| ROW | Right of Way |
| USACE | United States Army Corps of Engineers |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |
| UTM | Universal Transverse Mercator coordinate system |
| WETS | Water Equipment and Treatment Services |
| WOTUS | Waters of the United States |

1. Introduction

The Local Highway Technical Assistance Council (LHTAC) has contracted Forsgren Associates, Inc. (Forsgren) to prepare an Aquatic Resource Delineation Report for the replacement of two (2) 200 S Road bridges over Camas Creek (Bridge Key Nos. 23795 and 23800).

The purpose of the report is to identify potential jurisdictional Waters of the United States (WOTUS) to support the preparation of a Section 404 Joint Application for Permit for the proposed replacement project.

This report identifies and describes aquatic resources such as rivers, creeks, wetlands, and other sensitive aquatic habitats within the project's survey area.

1.1 Contact Information

Contact information for the organizations and individuals involved in this aquatic resource delineation report are as follows:

Applicant:

Ted Strickler
Road Foreman
Camas County Road & Bridge
PO Box 430
Fairfield, ID 83327
208-764-2271
camascountyrb@gmail.com

Agent:

Patrick Wickman, MS
Environmental Scientist
Forsgren Associates, Inc.
1109 W Myrtle Street, Suite 300
Boise, ID 83702
208-342-3144
pwickman@forsgren.com

Adjacent Property Owners:

Property to north:

Mennenga, Gary

Property to north/south:

Kelly Ranch, LLC

Property to west:

Simon Farms, Inc.

1.2 Survey Area Location

The Area of Potential Effect (APE) is in Camas County, southeast of Fairfield, Idaho. The APE for Bridges 23795 and 23800 extends approximately 1340 feet upstream and downstream of the bridges. The APE also encompasses the intersection of 200 S Road and Bahr Ranch Road (200 S Road) northwest of Bridge 23795. It extends 120 feet northeast and southwest of the 200 South Road intersection. The APE is approximately 13.2 acres.

Directions to the Survey Area:

From Fairfield, Idaho head east on US-20 for seven (7) miles. Turn south onto 200 South Road/Lincoln Avenue. Follow 200 S Road/Bahr Ranch Road (200 S Road) for 2.1 miles and turn left onto 200 South Road. Bridge Key No. 23795 is located 125 feet from the intersection and Bridge Key No. 23800 is located 400 feet from the intersection.

The center points of the primary survey area are located at the following Universal Transverse Mercator (UTM) coordinates:

Bridge Key No. 23795

Latitude: 43°18'52.30"N
Longitude: 114°39'29.00"W

Bridge Key No. 23800

Latitude: 43°18'50.70"N
Longitude: 114°39'26.50"W

The location map in Appendix A identifies the area surveyed.

2. Methods

Wetlands within the survey area were delineated using routine procedures in accordance with the United States Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual (USACE 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 (USACE 2008), and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008).

Wetlands were delineated along both sides of the creek downstream of Bridge 23800. Upstream, wetlands were originally delineated on the southwest side of the bridge. However, the APE was later expanded to encompass additional land both upstream and downstream of the bridge. A wetland delineation was initially completed in September of 2023, and a second wetland delineation occurred in June of 2024, following the expansion of the APE. Wetlands were observed in the streambed under Bridge 23795 upstream and downstream of the bridge. During the September 2023 delineation, test pits were not able to be dug so vegetative indicators were used to delineate the wetlands.

The ordinary high-water mark (OHWM) was delineated following the USACE 2008 A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States. The OHWM is the same boundary as the active floodplain and is shown in Figure 2. The bankfull channel for the main creek channel under Bridge 23800 is delineated as well as the low terrace located upstream between the two bridges.

Boundaries for these areas are shown in Figure 2. Photos taken of the project site during high spring flows provide clear indicators of the location of the OHWM. This elevation was observed in the field through how the local terrain is terraced.

The bankfull channel was delineated based on vegetative indicators and further terracing on the banks of each channel. A low terrace is identified by the presence of mature vegetation, breaks in slope, and a soil textural change, with the sand grains of the low terrace being finer than those of the active floodplain. In the field, the low terrace mapped was composed of mature willows on a fine-sand gravel bar, which was

higher in elevation than the channels on either side.

2.1 Field Survey

Forsgren conducted two wetland delineations; one on September 25, 2023, and one on June 24, 2024, after the APE was expanded to include additional land upstream and downstream of the bridges. During the wetland delineations, Forsgren scientists walked through the survey areas to identify locations dominated by hydrophytic vegetation with obvious signs of wetland hydrology.

Areas with dominant hydrophytic vegetation were identified and further evaluated for potential wetland criteria. Wetland boundaries were delineated based on vegetation type and size. During the September delineation, seven (7) Wetland Determination Data Forms were completed: two downstream of Bridge 23795, one downstream of Bridge 23800, and four upstream of Bridge 23800. During the June delineation, eight (8) Wetland Determination Data Forms were completed: five downstream of Bridges 23795 and 23800, and three upstream of Bridges 23795 and 23800. Challenging wetland delineation conditions were encountered, with restrictive layers and problematic hydric soils present, including Vegetated Sand and Gravel Bars within Floodplains.

For each Wetland Determination Data Form, a survey of the surrounding vegetation, soils, and wetland hydrology was conducted. Wetland boundaries were delineated using a Trimble Catalyst DA2 with submeter accuracy of 3 inches. Data was post-processed using Trimble Connect. Figures were generated using ArcMap.

3. Existing Conditions

3.1 Site Description

The survey area ranges in elevation from 4,980 feet to 5,010 feet above Mean Sea Level (MSL). The area includes Bahr Ranch Road (200 S), 200 South Road, their intersection, and Camas Creek.

Aerial photographs available on Google Earth were reviewed to identify historical land uses. Land use in the survey area consists of a mixed use of grazing and residential. Most structures near the bridge have been in place for the past 30 years.

3.2 Climate

Annually this region receives an average of 15.04 inches of precipitation as per the Fairfield Ranger Station, Idaho NRCS WETS Table (NRCS WETS Table, 2024). The average high temperature is 57.5° Fahrenheit, and the average low temperature is 26.0° Fahrenheit (NRCS WETS Table, 2024) (see Appendix E).

No precipitation occurred during the September 25, 2023, delineation. The creek was completely dry at the time of the delineation. Review of precipitation data from the National Weather Service shows that there had been less than half an inch of rain for a week prior to the September delineation. Temperatures and precipitation for the month preceding the delineation were generally slightly elevated compared to historic ranges.

No precipitation occurred during the June 24, 2024, wetland delineation. Review of the precipitation data from the National Weather Service shows that there had been less than a quarter inch of rain for the week

prior to the June 24, 2024, delineation. Temperatures were slightly elevated, and precipitation was lower for the month preceding the wetland delineation compared to historic ranges (See Appendix E). During the June 24, 2024, delineation, there was only water in the creek's bankfull channel under bridge 23800.

3.3 FEMA Floodplain Status

The Federal Emergency Management Agency (FEMA) does not have floodplain maps for Camas County.

4. Aquatic Resources

Within the survey area, one WOTUS (Camas Creek), and five wetlands were identified (Table 1). The creek channel, from OHWM to OHWM, spans 300 to 400 feet within the survey area. Camas Creek flows approximately 13 miles downstream from 200 South Road into Magic Reservoir.

Downstream of Bridge 23800, aquatic resources consist of a channelized waterway flanked by wetlands on both sides of the creek, extending under the bridge and briefly onto the upstream side. The upstream reach of Bridge 23800 includes the same channelized waterway, with palustrine scrub shrub wetlands expanding southwest of the bridge.

Aquatic resources at Bridge 23795 also feature a channelized waterway, populated with wetland species such as hairy water clover.



Photo 1: Wetland A, downstream of Bridge 23795
(June 24, 2024)

Wetland A is a palustrine emergent (PEM) wetland identified in various sections along the banks and downstream areas near bridge 23795. The wetland is 15,315 square feet/0.352 acres in size within the survey area. It includes island depressions and stretches along the channel. The wetland community is dominated by hairy water clover (*Marsilea vestita*), narrow-leaf willow (*Salix exigua*), reed canary grass (*Phalaris arundinacea*), and dandelions (*Taraxacum sp.*), with additional species such as skunk bush (*Rhus trilobata*), meadow foxtail (*Alopecurus pratensis*), and smooth brome (*Bromus inermis*) also present.

Soil samples from Wetland A exhibited a variety of textures and hydric indicators. The NRCS Soil Survey has mapped the soils in this area as Marshdale loam, 0 to 4 percent slopes. Marshdale loam is considered a hydric soil. The matrix colors observed were 10YR 4/2 and 10YR 3/3 from 0-5 inches, and 10YR 4/4 from 5-15 inches, with redox feature colors of 10YR 4/6 at depths of 3-18 inches. The soil textures included loamy sand for the first three inches, sandy clay from 3-18 inches, and sandy redox features present at six inches, indicating problematic hydric soils like Vegetated Sand and Gravel bars within Floodplains.

Wetland B is a PEM wetland identified along the southeast bank of Camas Creek, downstream of Bridge 23800. The wetland is 9,107 square feet/0.209 acres in size within the survey area. The wetland community is dominated by narrow-leaf willow (*Salix exigua*), reed canary grass (*Phalaris arundinacea*), horsetail (*Equisetum arvense*), and rough cocklebur (*Xanthium strumarium*). The NRCS Soil Survey has mapped the soils in this area as Marshdale loam, 0 to 4 percent slopes and Simonton loam, 4 to 12 percent slopes. Marshdale loam is considered a hydric soil. Soils were sampled within the wetland community which exhibited problematic hydric soils: Vegetated Sand and Gravel Bars within Floodplains. The matrix colors observed were 10YR 3/2 at a depth of 1-5 and 6-14 inches, and 2.5YR 4/3 at a depth of 5-6 inches. Redox features were observed from 6-14 inches and were 10YR 4/6. Wetland hydrology was apparent due to the presence of drift deposits, drainage patterns, saturation on aerial imagery, and the facultative (FAC)-Neutral Test.



Photo 2: Wetland B (red dashed line), downstream of Bridge 23800 (September 25, 2023)

Wetland C is a PSS wetland identified within a low terrace, upstream of Bridge 23800. The wetland is 27,859 square feet/0.640 acres in size within the survey area. The wetland community is dominated by narrow-leaf willow (*Salix exigua*), reed canary grass (*Phalaris arundinacea*), and wild cabbage (*Brassica sp.*). The NRCS Soil Survey has mapped the soils in this area as Marshdale loam, 0 to 4 percent slopes. Marshdale loam is classified as a hydric soil. Soils were sampled within the wetland community, which exhibited matrix colors of 7.5YR 3/2 and 7.5YR 4/3. Soils were identified as problematic hydric soils: Vegetated Sand and Gravel Bars within Floodplains.



Photo 3: Wetland C, upstream of Bridge 23800 (September 25, 2023)

WETLAND D is a PSS wetland located upstream of Bridge 23800, southwest of wetland C. The wetland is 11,415 square feet/0.262 acres in size within the survey area. The dominant species in this wetland community is common knotgrass (*Polygonum aviculare*), with a minor presence of narrow-leaf willow (*Salix exigua*). The NRCS Soil Survey has mapped the area's soils as Marshdale loam, 0 to 4 percent slopes. Marshdale loam is classified as a hydric soil. Soil samples from within the wetland community showed the following matrix colors: 10YR 3/2 at 0-3 inches, 10YR 4/3 at 3-6 inches, 10YR 2/2 at 6-8 inches, 10YR 4/3 at 8-10 inches, 10YR 2/2 at 10-12 inches, 10YR 4/3 at 12-14 inches, and 10YR 2/2 at 14-16 inches. Redox feature colors were 10YR 4/6 at 6-8 inches, 10YR 3/6 at 10-12 inches, 10YR 4/6 at 12-14 inches, and 10YR 4/6 at 14-16 inches. The soil textures included sandy loam, sand, sandy clay loam, and sandy clay. The sandy redox hydric soil indicator was present. The soils were Vegetated Sand and Gravel Bars within Floodplains, with mottles starting at exactly six inches. Wetland hydrology was apparent due to the presence of inundation that was visible on satellite imagery, along with riverine drift deposits, drainage patterns, and the FAC-Neutral test.

Wetland E is a PEM wetland identified upstream of Bridges 23795 and 23800. The wetland is in a low area west of wetland C. The wetland is 9,601 square feet/0.220 acres in size within the survey area. The wetland community is dominated by patches of narrow-leaf willow (*Salix exigua*). The NRCS Soil Survey has mapped the soils in this area as Marshdale loam, 0 to 4 percent slopes. Marshdale loam is considered a hydric soil. Soils were not sampled within the wetland community but were identified as problematic hydric soils: Vegetated Sand and Gravel Bars within Floodplains. Wetland hydrology was apparent due to the presence of vegetation and drainage patterns.



Photo 4: Wetland E, upstream of Bridge 23800 (September 23, 2023)

4.1 Aquatic Resources Table

Table 1 includes all the delineated aquatic resources within the survey area.

Table 1. Aquatic Resources Table within the Survey Area

| Aquatic Resources Name | Aquatic Resources Classification | | Aquatic Resource Size (AC/ SF) For all aquatic resource features | Aquatic Resource Length (linear feet) For ditches, canals, streams, river features |
|------------------------|----------------------------------|--|---|---|
| | Cowardin | Location (lat/long) | | |
| Camas Creek | OW R3UBH | 43° 18' 50.637" N -114° 39' 25.92" W | -- | 1,340 LF |
| Wetland A | PEM | 43° 18' 52.2282" N -114° 39' 28.1232" W | 0.352 AC / 15,315 SF | -- |
| Wetland B | PEM | 43° 18' 50.976" N -114° 39' 26.2578" W | 0.209 AC / 9,107 SF | -- |
| Wetland C | PSS | 43° 18' 48.4986" N -114° 39' 29.3688" W | 0.640 AC / 27,859 SF | -- |
| Wetland D | PSS | 43° 18' 46.3998" N -114° 39' 31.0032" W | 0.262 AC / 11,415 SF | -- |
| Wetland E | PEM | 43° 18' 47.0766" N -114° 39' 32.562" W | 0.220 AC / 9,601 SF | -- |
| Total | -- | -- | 1.68 AC / 73,297 SF | 1,340 LF |

Note: OW = Open Water; PEM = Palustrine Emergent, PSS = Palustrine Scrub Shrub

4.2. Non-Jurisdictional Aquatic Resources

Since all the aquatic resources identified within the survey area are either tributaries or adjacent wetlands, none of the identified resources are assumed to be non-jurisdictional.

4.3. Hydrology

Wetland A is a palustrine emergent (PEM) wetland identified in various sections along the banks and downstream areas near Bridge 23795. The wetland includes island depressions and stretches along the channel. Wetland hydrology was confirmed through various indicators such as water marks, drift deposits (both nonriverine and riverine), drainage patterns, inundation visible on aerial imagery, the presence of reduced iron, and the FAC-neutral test.

Wetland B is a palustrine emergent (PEM) wetland adjacent to the creek that flows under Bridge 23800. Wetland B is located immediately upstream, downstream, and under Bridge 23800. Wetland hydrology was apparent due to the presence of drift deposits, drainage patterns, and saturation visible on aerial imagery. The embankment upstream of Wetland B is armored with rocks and large cobbles and is not a wetland.

Wetland C is a palustrine scrub-shrub (PSS) wetland that is upstream of Bridge 23800. Wetland hydrology was indicated through the presence of drift deposits, drainage patterns, and the FAC neutral test.

Wetland D is a PSS wetland found southwest and upstream of Bridge 23800 within the streambed. Wetland hydrology was apparent due to the presence of inundation visible on aerial imagery, drift deposits, and drainage patterns.

Wetland E is a PEM wetland amidst a swale that is upstream and in between Bridges 23795 and 23800. This wetland was defined by its vegetation and local drainage patterns throughout the area.

4.4. Vegetation

PEM Wetlands A, B, and E are vegetated with narrow-leaf willow, reed canary grass, horsetail, and rough cocklebur. PSS Wetlands C and D are vegetated with narrow-leaf willow, common knotgrass, and reed canary grass. Table two lists all the vegetation found within the survey area.

Table 2. Vegetation within the Survey Area

| | | |
|--------------------|-------------------------------|------|
| Hairy water clover | <i>Marsilea vestita</i> | OBL |
| Narrow-leaf willow | <i>Salix exigua</i> | OBL |
| White willow | <i>Salix alba</i> | FACW |
| Reed canary grass | <i>Phalaris arundinacea</i> | FACW |
| Curly dock | <i>Rumex crispus</i> | FACW |
| Meadow Foxtail | <i>Alopecurus pratensis</i> | FACW |
| Common knotgrass | <i>Polygonum aviculare</i> | FAC |
| Golden Currant | <i>Ribes aureum</i> | FAC |
| purslane speedwell | <i>Veronica peregrina</i> | FAC |
| Willowherb | <i>Epilobium brachycarpum</i> | FAC |
| Basin Wild Rye | <i>Leymus cinereus</i> | FAC |

| | | |
|-----------------------|------------------------------------|------|
| Jim Hill Mustard | <i>Sisymbrium altissimum</i> | FACU |
| Lyre-leaved Rockcress | <i>Arabidopsis lyrata</i> | FACU |
| Dandelion | <i>Taraxacum</i> | FACU |
| Q-tip Bombycilaena | <i>Bombycilaena californica</i> | FACU |
| rose | <i>Rosa woodsii</i> | FACU |
| Skunk bush | <i>Rhus Trilobata</i> | FACU |
| Smooth Brome | <i>Bromus inermis</i> | FACU |
| Bur buttercup | <i>Ceratocephala testiculata</i> | UPL |
| Desert Madwort | <i>Alyssum desertorum</i> | UPL |
| Douglas' Dustymaiden | <i>Chaenactis douglasii</i> | UPL |
| Green rabbitbrush | <i>Chrysothamnus viscidiflorus</i> | UPL |
| Hairy pod Pepperweed | <i>Lepidium lasiocarpum</i> | UPL |
| Rubber rabbitbrush | <i>Ericameria nauseosa</i> | UPL |
| Sagebrush | <i>Artemisia tridentata</i> | UPL |
| White Top | <i>Lepidium draba</i> | UPL |

Note: **OBL** = Obligate; **FACW** = Facultative Wet, **FAC** = Facultative; **FACU** = Facultative Upland; **UPL** = Upland

Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Report for the project area found soils within the proposed project area including Manard-Rock outcrop complex, 0 to 8 percent slopes, Marshdale loam, 0 to 4 percent slopes, Simonton loam, 4 to 12 percent slopes, Riceton coarse sandy loam, 0 to 4 percent slopes, and Vodermaier gravelly coarse sandy loam, 0 to 4 percent slopes (USDA Soil Report). The USDA Soil Report for the project area identified the Marshdale loam as having a hydric soil rating (Appendix E).

During the September 2023 delineation, test points were attempted at seven locations to sample and assess soils in and around the potential wetland areas. Four test points were dug downstream of Bridge 23800 (Wetland Test Points 1, 2, 3, and 4). The soils sampled contained problematic hydric soils and restrictive layers. A test point was also attempted upstream of the bridge (Wetland Test Point 5) and was deemed to have problematic hydric soils. The problematic hydric soils were classified as Vegetated Sand and Gravel Bars within Floodplains. Two test points were attempted upstream of Bridge 23795 (Wetland Test Points 1 and 2). A restrictive layer was present and there was evidence of bedrock near the bridge. The soils are assumed to be hydric due to hydrology and vegetative indicators. Matrix colors and remarks are included on the attached Wetland Determination Data Forms (Appendix C).

During the June 2024 delineation, test points were taken at eight locations to sample and assess soils in and around the potential wetland areas. Five test points were taken downstream of Bridges 23795 and 23800 (Wetland Test Points 200 S 1, 2, 3, 4, and 5). The soils sampled were deemed to have problematic hydric soils and restrictive layers. The problematic hydric soils were classified as Vegetated Sand and Gravel Bars within Floodplains. Three test points (200 S 6, 7, and 8) were taken upstream of Bridges 23795 and 23800. Matrix colors, redox features, and remarks are included on the attached Wetland Determination Data Forms (Appendix C).

4.5. Wetland Determination Data Forms

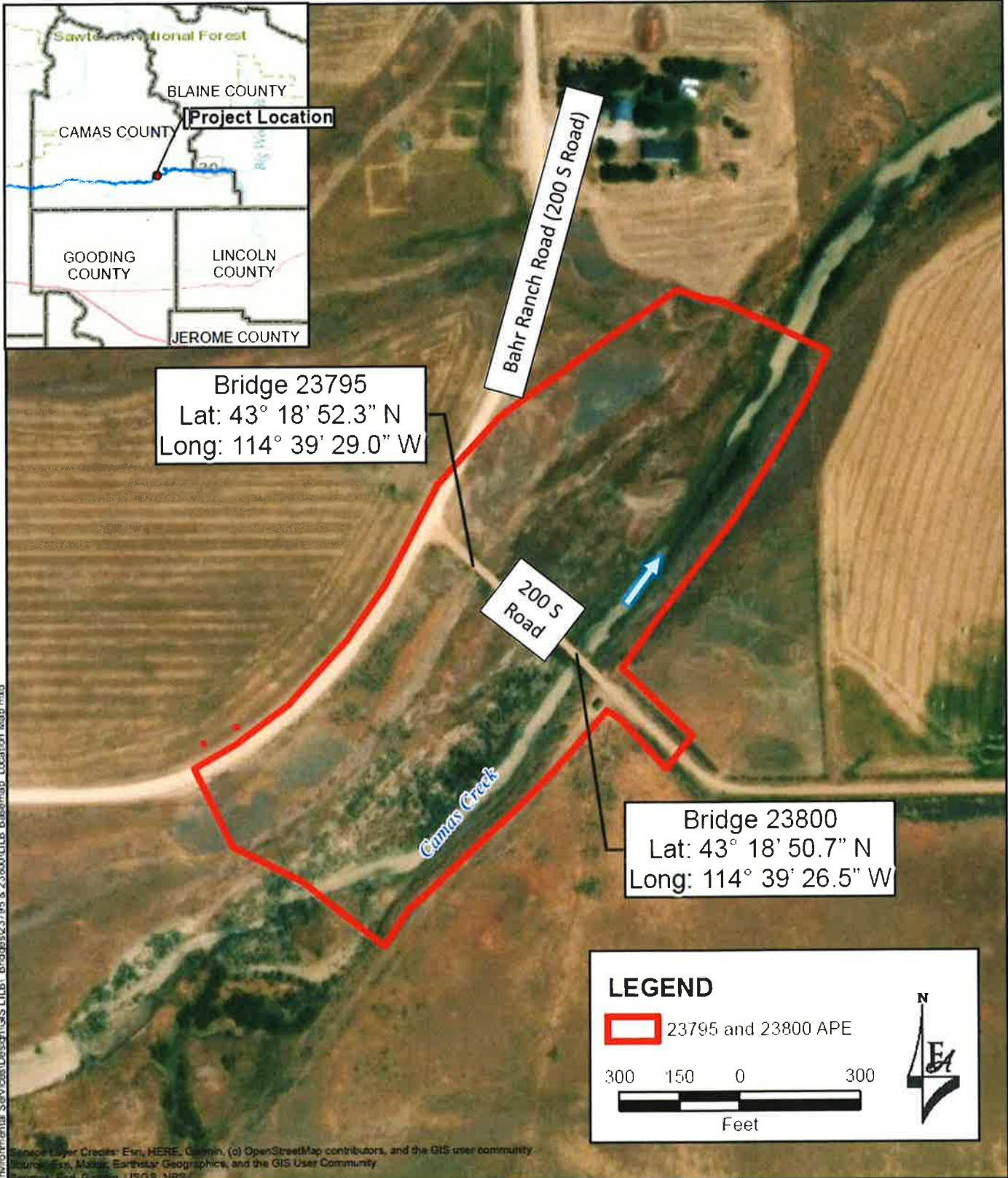
The Wetland Determination Data Forms from the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region were completed for fifteen sampling points. For each Wetland Determination Data Form, a survey of the surrounding vegetation, soils, and wetland hydrology was

conducted. Wetland boundaries were delineated and surveyed. The Data Forms are included in Appendix C.

5. References

- Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. Government Printing Office, Washington, D.C.
- Natural Resources Conservation Service. 2021. National Wetland Inventory Mapper. Site accessed November 29, 2023, at [Wetlands Mapper | U.S. Fish & Wildlife Service](#)
- Natural Resources Conservation Service. 2023. National Water and Climate Center. Site accessed November 29, 2023, at <https://www.nrcs.usda.gov/wps/portal/wcc/home/>
- National Oceanic and Atmospheric Administration National Weather Service. NWS Boise Climate Graphs for Mountain Home. September 2023, website. Site Accessed November 29, 2023, at: [Mountain Home Climate Graphs \(weather.gov\)](#).
- U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. Accessed March 1, 2024
- . 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- . 1987. (Department of Army-Waterway Experimental Station.), Wetlands Research Programs, Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual – Final Report, Vicksburg, M.S.
- U.S. Climate Data for Fairfield, Idaho. Site Accessed November 29, 2023, at: [Climate Fairfield - Idaho and Weather averages Fairfield \(usclimatedata.com\)](#).
- U.S. Dept. of Agriculture, USDA Plant Database, website at: <http://plants.usda.gov/>

Appendix A
Location Map



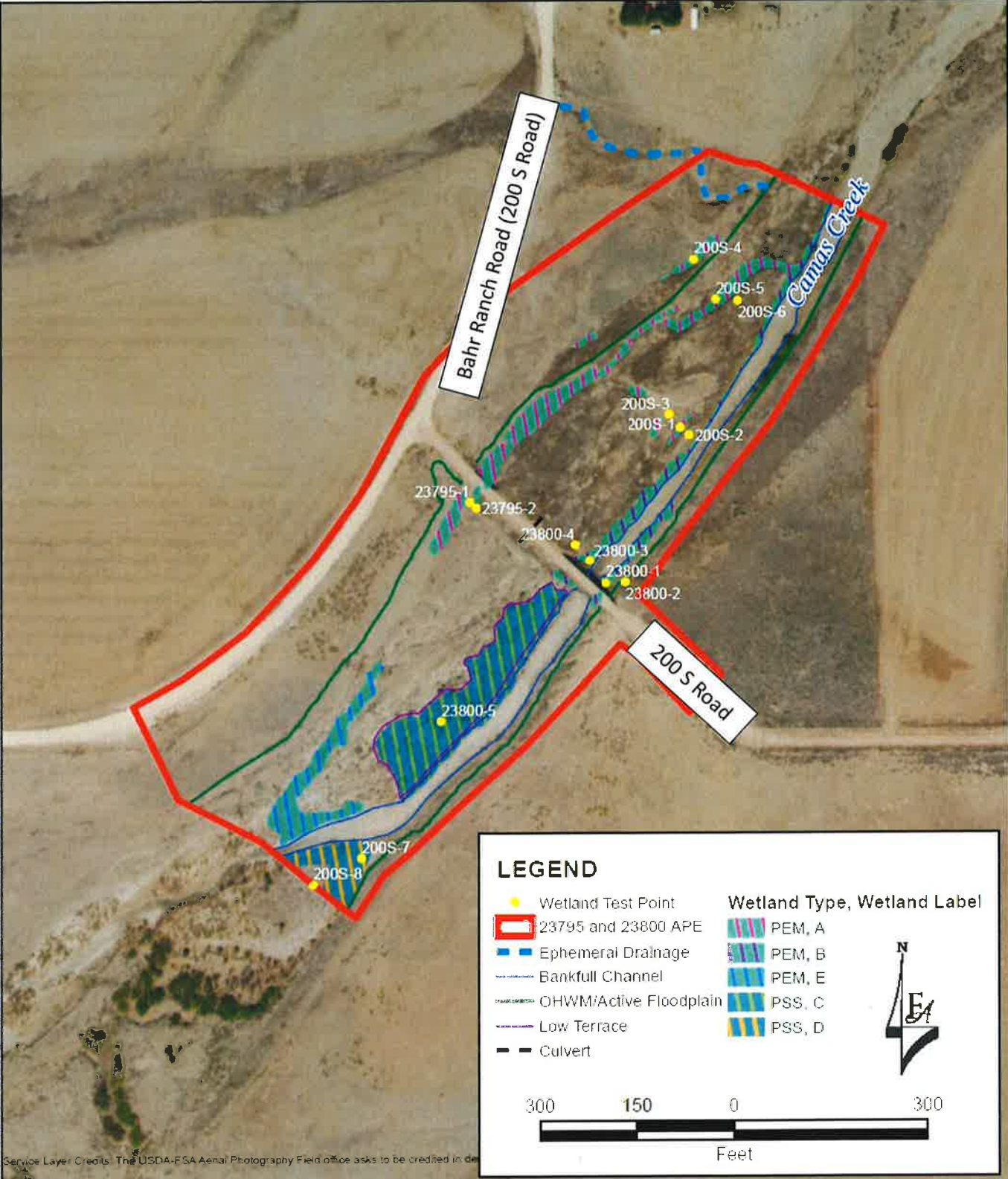
F:\Borset\Projects\22-3026 - LULB Environmental Services\Descript\GIS\LULB_Bridges\23795 & 23800\LULB_BaseMap_Location_Map.mxd

| | | | |
|---|---|---------------------------|---------------------|
| LHTAC - Leading Idaho Local Bridge Program | <i>Aquatic Resource Delineation Report</i> | FA Project No: 02-23-0026 | |
| | <i>Bridge Key No. 23795 and 23800 Camas County, Idaho</i> | Drawn by: AW | Date: April 2024 |
| Figure 1. Location Map | <i>Section 22, Township 1S, Range 15E</i> | Approved by: PW | Date: April 2024 |

Appendix B

Aquatic Resources Maps

F:\Bois\Projects\223026 - LULB Environmental Services\GIS\LULB - Bridges\23795 & 23800\LULB Base\map - Wetland Map 08 25 2024.mxd
 Service Layer Credits: The USDA-FSA Aerial Photography Field office asks to be credited in the



LHTAC - Leading Idaho Local Bridge Program

Figure 2. Wetlands Map

Aquatic Resource Delineation Report

Bridge Key No. 23795 and 23800
 Camas County, Idaho

Section 22, Township 1S, Range 15E

FA Project No: 02-23-0026

Drawn by: AW Date: July 2024

Approved by: PW Date: July 2024

Appendix C

Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23795 - 1
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Swale-Center Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR): LRR B Lat: 43°18'51.86"N Long: 114°39'28.81"W Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0%-8% Slopes), Marshdale Loam (0%-4% Slopes) NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|--|
| Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u> | Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> |
| Remarks: Site was viisted late in the season, but hairy water clover observed at the low point just south of the bridge. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|----------------------------------|-------------------------------------|-------------------|------------------|--|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: <u>15ft x 15ft</u>) | | | | |
| 1. | <u>Salix exigua</u> | <u>30</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>5ft x 5ft</u>) | | | | |
| 1. | <u>Marsilea vestita</u> | <u>15</u> | <u>Yes</u> | <u>OBL</u> | |
| 2. | <u>Phalaris arundinacea</u> | <u>15</u> | <u>Yes</u> | <u>FACW</u> | |
| 3. | <u>Taraxacum</u> | <u>2</u> | <u>No</u> | | |
| 4. | <u>Artemisia vulgaris</u> | <u>2</u> | <u>No</u> | <u>UPL</u> | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: <u> </u>) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| =Total Cover | | | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | | |

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

| | | |
|--------------------------|-------------------|-----------------|
| | Total % Cover of: | Multiply by: |
| OBL species | <u>15</u> | <u>x 1 = 15</u> |
| FACW species | <u>45</u> | <u>x 2 = 90</u> |
| FAC species | <u>0</u> | <u>x 3 = 0</u> |
| FACU species | <u>0</u> | <u>x 4 = 0</u> |
| UPL species | <u>2</u> | <u>x 5 = 10</u> |
| Column Totals: | <u>62</u> (A) | <u>115</u> (B) |
| Prevalence Index = B/A = | | <u>1.85</u> |

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23795 - 1

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|------------------|---------|------------------------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0-8 | 10YR 4/2 | 100 | | | | | Sandy | Different Color Grains |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| | | | |
|--|---|--|--|
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils³: | |
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) | |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) | |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) | |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) | |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): | Hydric Soil Present? |
| Type: <u>Rock</u> | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Depth (inches): <u>8</u> | |

Remarks:
There is a restrictive rock layer at 8" so no deeper profile could be dug. Due to sandy soils, problematic indicator for hydric soils - Sandy Bars was used to say "yes" to hydric soils.

HYDROLOGY

| | |
|--|--|
| Wetland Hydrology Indicators: | |
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> | <u>Secondary Indicators (minimum of two required)</u> |
| <input type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Salt Crust (B11) | |
| <input type="checkbox"/> Biotic Crust (B12) | |
| <input type="checkbox"/> Aquatic Invertebrates (B13) | |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | |
| <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | |
| <input type="checkbox"/> Presence of Reduced Iron (C4) | |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | |
| <input type="checkbox"/> Thin Muck Surface (C7) | |
| <input type="checkbox"/> Other (Explain in Remarks) | |

| | |
|---|---|
| Field Observations: | Wetland Hydrology Present? |
| Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ | |
| Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe) | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23795 - 2
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave Slope (%): 20
 Subregion (LRR): LRR B Lat: 43°18'51.77"N Long: 114°39'28.67"W Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0%-8% Slopes), Marshdale Loam (0%-4% Slopes) NWI classification: R5UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: The Sample Point is immediately upslope from Sampling Point 23795-1, and marks the wetland boundary. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|-----------------------------------|-------------------------------------|-------------------|------------------|--|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: <u>15 ft x 15ft</u>) | | | | |
| 1. | <u>Artemisia tridentata</u> | <u>5</u> | <u>Yes</u> | <u>UPL</u> | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>5ft x 5ft</u>) | | | | |
| 1. | <u>Koeleria macrantha</u> | <u>30</u> | <u>Yes</u> | <u>UPL</u> | |
| 2. | <u>Sisymbrium altissimum</u> | <u>10</u> | <u>No</u> | <u>FACU</u> | |
| 3. | <u>Comandra umbellata</u> | <u>10</u> | <u>No</u> | <u>UPL</u> | |
| 4. | <u>Rosa woodsii</u> | <u>2</u> | <u>No</u> | <u>FACU</u> | |
| 5. | <u>Echinochloa colona</u> | <u>2</u> | <u>No</u> | <u>FAC</u> | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: <u> </u>) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| =Total Cover | | | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | | |

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 2 x 3 = 6
 FACU species 12 x 4 = 48
 UPL species 45 x 5 = 225
 Column Totals: 59 (A) 279 (B)
 Prevalence Index = B/A = 4.73

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23795 - 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|-------------------|------------------|--------------|---------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0-9 | 10YR 2/2 | 100 | | | | | Loamy/Clayey | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compact Silt
 Depth (inches): 9

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23800 - 1
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): STREAM BED Local relief (concave, convex, none): FLAT Slope (%): 1
 Subregion (LRR): LRR B Lat: 43°18'50.64"N Long: 114°39'25.92"W Datum: NAD 83
 Soil Map Unit Name: Marshdale Loam (0%-4% slopes), Simononton Loam (4%-12% Slopes) NWI classification: R5UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u> | Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> |
| Remarks: Sampling Point is downstream of bridge on the NE side. Test pit dug in sandy unconsolidated substrate. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|--------------------------------|------------------|-------------------|------------------------|---|
| 1. | _____ | _____ | _____ | _____ | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 2 </u> (A) Total Number of Dominant Species Across All Strata: <u> 2 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| Sapling/Shrub Stratum | (Plot size: _____) | | | | Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u> 0 </u> x 1 = <u> 0 </u> FACW species <u> 20 </u> x 2 = <u> 40 </u> FAC species <u> 7 </u> x 3 = <u> 21 </u> FACU species <u> 0 </u> x 4 = <u> 0 </u> UPL species <u> 2 </u> x 5 = <u> 10 </u> Column Totals: <u> 29 </u> (A) <u> 71 </u> (B) Prevalence Index = B/A = <u> 2.45 </u> |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| Herb Stratum | (Plot size: <u>5ft x 5ft</u>) | | | | Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 1. | <u>Salix exigua</u> | <u>10</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. | <u>Phalaris arundinacea</u> | <u>10</u> | <u>Yes</u> | <u>FACW</u> | |
| 3. | <u>Equisetum arvense</u> | <u>5</u> | <u>No</u> | <u>FAC</u> | |
| 4. | <u>Xanthium strumarium</u> | <u>2</u> | <u>No</u> | <u>FAC</u> | |
| 5. | <u>Ericameria nauseosa</u> | <u>2</u> | <u>No</u> | <u>UPL</u> | |
| 6. | _____ | _____ | _____ | _____ | |
| 7. | _____ | _____ | _____ | _____ | |
| 8. | _____ | _____ | _____ | _____ | |
| | | | | <u>29</u> =Total Cover | |
| Woody Vine Stratum | (Plot size: _____) | | | | Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| % Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____ | | | | | |
| Remarks: FAC Neutral to be positive | | | | | |

SOIL

Sampling Point: 23800 - 1

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|---------|---------|-------------------------|
| Depth (inches) | Matrix | | Redox Features | | | Texture | Remarks | |
| | Color (moist) | % | Color (moist) | % | Type ¹ | | | Loc ² |
| 0-11 | 2.5YR 3/2 | 100 | | | | | Sandy | Different color pebbles |
| 11-16 | 2.5YR 3/2 | 100 | | | | | Sandy | Different color pebbles |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ³ : | |
|---|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) | |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) | |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) | |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) | |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|--|
| Restrictive Layer (if observed): Type: _____ Depth (inches): _____ | Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ |
|---|--|

Remarks:
Soils are a problematic soil for sandy soils on sand bars in floodplain.

HYDROLOGY

| Wetland Hydrology Indicators: | |
|---|---|
| Primary Indicators (minimum of one is required; check all that apply) | Secondary Indicators (minimum of two required) |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) |
| | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| | <input type="checkbox"/> Dry-Season Water Table (C2) |
| | <input type="checkbox"/> Crayfish Burrows (C8) |
| | <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| | <input type="checkbox"/> Shallow Aquitard (D3) |
| | <input type="checkbox"/> FAC-Neutral Test (D5) |

| | |
|---|--|
| Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ |
|---|--|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23800 - 2
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave Slope (%): 15
 Subregion (LRR): LRR B Lat: 43°18'50.65"N Long: 114°39'25.51"W Datum: NAD 83
 Soil Map Unit Name: Marshdale Loam(0%-4% slopes), Simononton Loam(4%-12% Slopes) NWI classification: R5UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: Sampling Point is uphill of Sampling Point 23800-1. | |

VEGETATION – Use scientific names of plants.

| <u>Tree Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|------------------|-------------------|------------------|--|
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 3. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 4. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| =Total Cover | | | | |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 3. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 4. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 5. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| =Total Cover | | | | |
| <u>Herb Stratum</u> (Plot size: <u>5ft x 5ft</u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u>Artemisia vulgaris</u> | 15 | Yes | UPL | |
| 2. <u>Artemisia tridentata</u> | 10 | Yes | UPL | |
| 3. <u>Phalaris arundinacea</u> | 5 | No | FACW | |
| 4. <u>Lolium perenne</u> | 5 | No | FAC | |
| 5. <u>Ericameria nauseosa</u> | 5 | No | UPL | |
| 6. <u>Rosa woodsii</u> | 3 | No | FACU | |
| 7. <u>Brassica</u> | 2 | No | | |
| 8. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 45 =Total Cover | | | | |
| <u>Woody Vine Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| =Total Cover | | | | |
| % Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u> | | | | |

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 5 x 2 = 10
 FAC species 5 x 3 = 15
 FACU species 3 x 4 = 12
 UPL species 30 x 5 = 150
 Column Totals: 43 (A) 187 (B)
 Prevalence Index = B/A = 4.35

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23800 - 2

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|------------------|--------------|---------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0-8 | 7.5YR 3/2 | 100 | | | | | Loamy/Clayey | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ³ : |
|---|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): Type: <u>Bedrock</u> Depth (inches): <u>8</u> | Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|---|---|

Remarks:
Bedrock assumed based on exposed outcrop uphill.

HYDROLOGY

| Wetland Hydrology Indicators: | |
|---|---|
| Primary Indicators (minimum of one is required; check all that apply) | Secondary Indicators (minimum of two required) |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) |
| | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |

| | |
|---|---|
| Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23800 - 3
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): LRR B Lat: 43°18'50.97"N Long: 114°39'26.26"W Datum: NAD 83
 Soil Map Unit Name: Marshdale Loam(0%-4% slopes), Simononton Loam(4%-12% Slopes) NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|--|
| Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u> | Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> |
| Remarks: Downstream of Bridge on the west side. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|------------------------------------|-------------------------------------|-------------------|------------------|--|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: <u>10' x 20' box</u>) | | | | |
| 1. | <u>Salix exigua</u> | 25 | Yes | FACW | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 25 =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>5' x 10' box</u>) | | | | |
| 1. | <u>Phalaris arundinacea</u> | 60 | Yes | FACW | |
| 2. | <u>Artemisia vulgaris</u> | 2 | No | UPL | |
| 3. | <u>Brassica</u> | 2 | No | | |
| 4. | <u>Unknown weed</u> | 2 | No | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 66 =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: <u> </u>) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| =Total Cover | | | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | | |

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

| | |
|--------------------------------------|------------------|
| Total % Cover of: | Multiply by: |
| OBL species <u>0</u> | x 1 = <u>0</u> |
| FACW species <u>85</u> | x 2 = <u>170</u> |
| FAC species <u>0</u> | x 3 = <u>0</u> |
| FACU species <u>0</u> | x 4 = <u>0</u> |
| UPL species <u>2</u> | x 5 = <u>10</u> |
| Column Totals: <u>87</u> (A) | <u>180</u> (B) |
| Prevalence Index = B/A = <u>2.07</u> | |

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23800 - 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|----------------|---------------|-----|----------------|----|-------------------|------------------|--------------|------------------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0-3 | 10YR 3/2 | 100 | | | | | Loamy/Clayey | Root Layer |
| 3-4 | 10YR 3/2 | 100 | | | | | Loamy/Clayey | Small Sand Layer |
| 4-5 | 10YR 3/2 | 100 | | | | | Loamy/Clayey | |
| 5-6 | 2.5YR 4/3 | 100 | | | | | Sandy | Different Color Grains |
| 6-14 | 10YR 3/2 | 70 | 10YR 4/6 | 30 | RM | M | Sandy | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ³ : | |
|---|--|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) | |
| <input type="checkbox"/> Histic Epipedon (A2) | <input checked="" type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) | |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) | |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) | |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): Type: _____ Depth (inches): _____ | Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Remarks:

HYDROLOGY

| Wetland Hydrology Indicators: | |
|---|---|
| Primary Indicators (minimum of one is required; check all that apply) | Secondary Indicators (minimum of two required) |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) |
| | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| | <input type="checkbox"/> Dry-Season Water Table (C2) |
| | <input type="checkbox"/> Crayfish Burrows (C8) |
| | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| | <input type="checkbox"/> Shallow Aquitard (D3) |
| | <input type="checkbox"/> FAC-Neutral Test (D5) |

| | |
|---|---|
| Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23800 - 4
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): LRR B Lat: 43°18'50.64"N Long: 114°39'25.92"W Datum: NAD 83
 Soil Map Unit Name: Marshdale Loam(0%-4% slopes), Simononton Loam(4%-12% Slopes) NWI classification: R5UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: The Sampling Point is located upslope from Sampling Point 23800-3. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|--------------------------------|------------------|-------------------|------------------|--|
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| _____ =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: _____) | | | | |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| 5. | _____ | _____ | _____ | _____ | |
| _____ =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>5ft x 5ft</u>) | | | | |
| 1. | <u>Brassica</u> | <u>5</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. | <u>Artemisia tridentata</u> | <u>5</u> | <u>Yes</u> | <u>UPL</u> | |
| 3. | <u>Phalaris arundinacea</u> | <u>5</u> | <u>Yes</u> | <u>FACW</u> | |
| 4. | <u>Agropyron cristatum</u> | <u>5</u> | <u>Yes</u> | <u>UPL</u> | |
| 5. | <u>Rosa woodsii</u> | <u>2</u> | <u>No</u> | <u>FACU</u> | |
| 6. | <u>Juncus sp.</u> | <u>2</u> | <u>No</u> | _____ | |
| 7. | _____ | _____ | _____ | _____ | |
| 8. | _____ | _____ | _____ | _____ | |
| <u>24</u> =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: _____) | | | | |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| _____ =Total Cover | | | | | |
| % Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____ | | | | | |

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

| | |
|--------------------------------------|-----------------|
| Total % Cover of: | Multiply by: |
| OBL species <u>0</u> | x 1 = <u>0</u> |
| FACW species <u>10</u> | x 2 = <u>20</u> |
| FAC species <u>0</u> | x 3 = <u>0</u> |
| FACU species <u>2</u> | x 4 = <u>8</u> |
| UPL species <u>10</u> | x 5 = <u>50</u> |
| Column Totals: <u>22</u> (A) | <u>78</u> (B) |
| Prevalence Index = B/A = <u>3.55</u> | |

Hydrophytic Vegetation Indicators:
 ___ Dominance Test is >50%
 ___ Prevalence Index is ≤3.0¹
 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23800 - 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|-------------------|------------------|--------------|------------------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 1-10 | 10YR 4/2 | 100 | | | | | Loamy/Clayey | Different Color Grains |
| 10-15 | 10YR 5/2 | | | | | | Loamy/Clayey | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils³: |
|--|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): Type: _____ Depth (inches): _____ | Hydric Soil Present? Yes _____ No <u>X</u> |
|---|---|

Remarks:

HYDROLOGY

| Wetland Hydrology Indicators: | |
|--|---|
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> | <u>Secondary Indicators (minimum of two required)</u> |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) |
| | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| | <input type="checkbox"/> Drainage Patterns (B10) |
| | <input type="checkbox"/> Dry-Season Water Table (C2) |
| | <input type="checkbox"/> Crayfish Burrows (C8) |
| | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| | <input type="checkbox"/> Shallow Aquitard (D3) |
| | <input type="checkbox"/> FAC-Neutral Test (D5) |

| | |
|---|---|
| Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes _____ No <u>X</u> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge # 23795 & 23800 City/County: Camas County Sampling Date: 9-25-2023
 Applicant/Owner: Camas County/LHTAC State: ID Sampling Point: 23800 - 5
 Investigator(s): Patrick Wickman, Anna Weins Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): -1
 Subregion (LRR): LRR B Lat: 43°18'48.50"N Long: 114°39'29.37"W Datum: NAD 83
 Soil Map Unit Name: Marshdale Loam(0%-4% slopes), Simononton Loam(4%-12% Slopes) NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u> | Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> |
| Remarks: Pit located in dense willow area upstream of bridge. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|-------------------------------|-------------------------------------|-------------------|------------------|--|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: <u>15m O.C.</u>) | | | | |
| 1. | <u>Salix exigua</u> | 30 | Yes | FACW | |
| 2. | <u>Ribes aureum</u> | 20 | Yes | FAC | |
| 3. | <u>Rosa woodsii</u> | 5 | No | FACU | |
| 4. | | | | | |
| 5. | | | | | |
| 55 =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>5m O.C.</u>) | | | | |
| 1. | <u>Phalaris arundinacea</u> | 35 | Yes | FACW | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 35 =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: <u> </u>) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| =Total Cover | | | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

| | |
|--------------------------------------|------------------|
| Total % Cover of: | Multiply by: |
| OBL species <u>0</u> | x 1 = <u>0</u> |
| FACW species <u>65</u> | x 2 = <u>130</u> |
| FAC species <u>20</u> | x 3 = <u>60</u> |
| FACU species <u>5</u> | x 4 = <u>20</u> |
| UPL species <u>0</u> | x 5 = <u>0</u> |
| Column Totals: <u>90</u> (A) | <u>210</u> (B) |
| Prevalence Index = B/A = <u>2.33</u> | |

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0¹

 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:
 FAC Neutral to be positive

SOIL

Sampling Point: 23800 - 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|-------------------|------------------|---------|------------------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 1-6 | 7.5YR 3/2 | 100 | | | | | Sandy | Different Color Grains |
| 6-15 | 7.5YR 4/3 | 100 | | | | | Sandy | Different Color Grains |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Histosol (A1) Sandy Redox (S5)

Histic Epipedon (A2) Stripped Matrix (S6)

Black Histic (A3) Loamy Mucky Mineral (F1)

Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)

Stratified Layers (A5) (LRR C) Depleted Matrix (F3)

1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)

Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)

Thick Dark Surface (A12) Redox Depressions (F8)

Sandy Mucky Mineral (S1)

Sandy Gleyed Matrix (S4)

Indicators for Problematic Hydric Soils³:

1 cm Muck (A9) (LRR C)

2 cm Muck (A10) (LRR B)

Iron-Manganese Masses (F12) (LRR D)

Reduced Vertic (F18)

Red Parent Material (F21)

Very Shallow Dark Surface (F22)

Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
Problematic Soils - Vegetated Sand Bars within Floodplain.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Surface Water (A1) Salt Crust (B11)

High Water Table (A2) Biotic Crust (B12)

Saturation (A3) Aquatic Invertebrates (B13)

Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)

Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres on Living Roots (C3)

Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)

Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6)

Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)

Water-Stained Leaves (B9) Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Water Marks (B1) (Riverine)

Sediment Deposits (B2) (Riverine)

Drift Deposits (B3) (Riverine)

Drainage Patterns (B10)

Dry-Season Water Table (C2)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

Shallow Aquitard (D3)

FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S -1
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): LRR B Lat: 43°18' 53.01884" Long: - 114° 39' 24.3823" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: Water level is lower than potential wetland area with potential hydrophytic plants dried out. Site is in basine one terrace up from the river. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | | | | | | | | | | | | | | | | | |
|--------------------------------------|--------------------------------|-------------------------------|-------------------|------------------|---|-------------------|--------------|-----------------------|-----------------|-----------------------|----------------|----------------------|----------------|------------------------|------------------|----------------------|-----------------|------------------------------|----------------|--------------------------------------|--|
| 1. _____ | | | | | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| Sapling/Shrub Stratum | (Plot size: _____) | | | | Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>3</u></td> <td>x 3 = <u>9</u></td> </tr> <tr> <td>FACU species <u>31</u></td> <td>x 4 = <u>124</u></td> </tr> <tr> <td>UPL species <u>7</u></td> <td>x 5 = <u>35</u></td> </tr> <tr> <td>Column Totals: <u>88</u> (A)</td> <td><u>217</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.47</u></td> </tr> </table> | Total % Cover of: | Multiply by: | OBL species <u>45</u> | x 1 = <u>45</u> | FACW species <u>2</u> | x 2 = <u>4</u> | FAC species <u>3</u> | x 3 = <u>9</u> | FACU species <u>31</u> | x 4 = <u>124</u> | UPL species <u>7</u> | x 5 = <u>35</u> | Column Totals: <u>88</u> (A) | <u>217</u> (B) | Prevalence Index = B/A = <u>2.47</u> | |
| Total % Cover of: | Multiply by: | | | | | | | | | | | | | | | | | | | | |
| OBL species <u>45</u> | x 1 = <u>45</u> | | | | | | | | | | | | | | | | | | | | |
| FACW species <u>2</u> | x 2 = <u>4</u> | | | | | | | | | | | | | | | | | | | | |
| FAC species <u>3</u> | x 3 = <u>9</u> | | | | | | | | | | | | | | | | | | | | |
| FACU species <u>31</u> | x 4 = <u>124</u> | | | | | | | | | | | | | | | | | | | | |
| UPL species <u>7</u> | x 5 = <u>35</u> | | | | | | | | | | | | | | | | | | | | |
| Column Totals: <u>88</u> (A) | <u>217</u> (B) | | | | | | | | | | | | | | | | | | | | |
| Prevalence Index = B/A = <u>2.47</u> | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| Herb Stratum | (Plot size: <u>10' x 30'</u>) | | | | Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | | | | | | | | | | | | | | |
| 1. <u>Bromus inermis</u> | | 10 | No | FACU | | | | | | | | | | | | | | | | | |
| 2. <u>Lepidium draba</u> | | 5 | No | UPL | | | | | | | | | | | | | | | | | |
| 3. <u>Artemisia tridentata</u> | | 2 | No | UPL | | | | | | | | | | | | | | | | | |
| 4. <u>Rhus Trilobata</u> | | 15 | No | FACU | | | | | | | | | | | | | | | | | |
| 5. <u>Epilobium brachycarpum</u> | | 3 | No | FAC | | | | | | | | | | | | | | | | | |
| 6. <u>Phalaris arundinacea</u> | | 2 | No | FACW | | | | | | | | | | | | | | | | | |
| 7. <u>Marsilea vestita</u> | | 45 | Yes | OBL | | | | | | | | | | | | | | | | | |
| 8. <u>Arabidopsis lyrata</u> | | 4 | No | FACU | | | | | | | | | | | | | | | | | |
| | | 88 | =Total Cover | | | | | | | | | | | | | | | | | | |
| Woody Vine Stratum | (Plot size: _____) | | | | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| % Bare Ground in Herb Stratum _____ | | % Cover of Biotic Crust _____ | | | | | | | | | | | | | | | | | | | |

Remarks:

SOIL

Sampling Point: 200 S -1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|-------------------|------------------|---------|--------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 6 | 10YR 4/4 | 100 | | | | | Sandy | Loamy, sandy |
| 6 - 22 | 10YR 3/2 | 93 | 10YR 4/6 | 7 | | | Sandy | sandy clay |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

| | | |
|--|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) | Indicators for Problematic Hydric Soils³: |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | <input checked="" type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
Sandy redox present at exactly 6". Also a problematic soil due to presence on sandy bar.

HYDROLOGY

Wetland Hydrology Indicators:

| | | |
|---|---|--|
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> | | <u>Secondary Indicators (minimum of two required)</u> |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

| | | | | |
|--|------------------------------|--|-----------------------|---|
| Surface Water Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ | Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Water Table Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ | |
| Saturation Present? (includes capillary fringe) | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S -2
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): LRR B Lat: 43° 18' 52.90299" Long: - 114° 39' 24.19733" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____ | Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ |
| Remarks: Site located upslope from the edge of the water. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|-------------------------------------|--------------------------------|-------------------------------|-------------------|------------------|--|
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| =Total Cover | | | | | |
| Sapling/Shrub Stratum | (Plot size: _____) | | | | |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| 5. | _____ | _____ | _____ | _____ | |
| =Total Cover | | | | | |
| Herb Stratum | (Plot size: <u>15' x 30'</u>) | | | | |
| 1. | <u>Phalaris arundinacea</u> | <u>25</u> | <u>Yes</u> | <u>FACW</u> | |
| 2. | <u>Alopecurus pratensis</u> | <u>10</u> | <u>No</u> | <u>FACW</u> | |
| 3. | <u>Juncus articulatus</u> | <u>3</u> | <u>No</u> | <u>OBL</u> | |
| 4. | <u>Acmispon americanus</u> | <u>5</u> | <u>No</u> | <u>UPL</u> | |
| 5. | _____ | <u>5</u> | <u>No</u> | _____ | |
| 6. | <u>Marsilea vestita</u> | <u>15</u> | <u>Yes</u> | <u>OBL</u> | |
| 7. | <u>Artemisia</u> | <u>2</u> | <u>No</u> | _____ | |
| 8. | <u>Rhus trilobata</u> | <u>10</u> | <u>No</u> | <u>FACU</u> | |
| =Total Cover | | | | | |
| Woody Vine Stratum | (Plot size: _____) | | | | |
| 1. | _____ | _____ | _____ | _____ | |
| 2. | _____ | _____ | _____ | _____ | |
| =Total Cover | | | | | |
| % Bare Ground in Herb Stratum _____ | | % Cover of Biotic Crust _____ | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

| Total % Cover of: | | Multiply by: | |
|--------------------------|---------------|--------------|----------------|
| OBL species | <u>18</u> | x 1 = | <u>18</u> |
| FACW species | <u>35</u> | x 2 = | <u>70</u> |
| FAC species | <u>0</u> | x 3 = | <u>0</u> |
| FACU species | <u>10</u> | x 4 = | <u>40</u> |
| UPL species | <u>5</u> | x 5 = | <u>25</u> |
| Column Totals: | <u>68</u> (A) | | <u>153</u> (B) |
| Prevalence Index = B/A = | | | <u>2.25</u> |

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0¹

____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 200 S -2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|----------------|---------------|-----|----------------|----|-------------------|------------------|--------------|------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 3 | 10YR 4/2 | 100 | | | | | Loamy/Clayey | Loamy sand |
| 3 - 18 | 10YR 2/2 | 90 | 10YR 4/6 | 10 | RM | M | Sandy | Sandy Clay |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

| | | |
|--|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No _____

Remarks:
 The presence of a reduced matrix within 12" of the soil surface indicates that this soil is hydric based on the hydric soil definition: "a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part".

HYDROLOGY

Wetland Hydrology Indicators:

| | | | |
|---|---|--|--|
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> | | <u>Secondary Indicators (minimum of two required)</u> | |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) | |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) | |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) | |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) | |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) | |
| <input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) | |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) | |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) | |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) | |

Field Observations:

| | | | | |
|-----------------------------|-----------|--|-----------------------|--|
| Surface Water Present? | Yes _____ | No <input checked="" type="checkbox"/> | Depth (inches): _____ | Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ |
| Water Table Present? | Yes _____ | No <input checked="" type="checkbox"/> | Depth (inches): _____ | |
| Saturation Present? | Yes _____ | No <input checked="" type="checkbox"/> | Depth (inches): _____ | |
| (includes capillary fringe) | | | | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 3
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0 - 1
 Subregion (LRR): LRR B Lat: 43° 18' 53.21976" Long: -114° 39' 24.62046" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: Normal circumstances are present because this area is usually not flooded except during high spring flows. | |

VEGETATION – Use scientific names of plants.

| <u>Tree Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|--|------------------|-------------------------------------|------------------|--|
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 3. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 4. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| <u> </u> =Total Cover | | | | |
| <u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 3. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 4. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 5. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| <u> </u> =Total Cover | | | | |
| <u>Herb Stratum</u> (Plot size: <u>5' O.C.</u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u>Bromus inermis</u> | <u>20</u> | <u>Yes</u> | <u>FACU</u> | |
| 2. <u>Artemisia tridentata</u> | <u>10</u> | <u>No</u> | <u>UPL</u> | |
| 3. <u>Chaenactis douglasii</u> | <u>5</u> | <u>No</u> | <u>UPL</u> | |
| 4. <u>Alyssum desertorum</u> | <u>25</u> | <u>Yes</u> | <u>UPL</u> | |
| 5. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 6. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 7. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 8. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| <u>60</u> =Total Cover | | | | |
| <u>Woody Vine Stratum</u> (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| 2. <u> </u> | <u> </u> | <u> </u> | <u> </u> | |
| <u> </u> =Total Cover | | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

| | |
|--------------------------------------|------------------|
| Total % Cover of: | Multiply by: |
| OBL species <u>0</u> | x 1 = <u>0</u> |
| FACW species <u>0</u> | x 2 = <u>0</u> |
| FAC species <u>0</u> | x 3 = <u>0</u> |
| FACU species <u>20</u> | x 4 = <u>80</u> |
| UPL species <u>40</u> | x 5 = <u>200</u> |
| Column Totals: <u>60</u> (A) | <u>280</u> (B) |
| Prevalence Index = B/A = <u>4.67</u> | |

Hydrophytic Vegetation Indicators:

 Dominance Test is >50%

 Prevalence Index is ≤3.0¹

 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: 200 S - 3

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|------------------|--------------|------------------------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 4 | 10YR 4/3 | 100 | | | | | Loamy/Clayey | Loamy Sand |
| 4 - 7 | 10YR 3/2 | 100 | | | | | Loamy/Clayey | Loamy Sand with gravel |
| 7 - 15 | 10YR 3/1 | 99 | 10YR 4/6 | 1 | RM | M | Sandy | Sandy Loam |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

This site doesn't have hydric soils until 7". If we had hydrology and vegetation we could argue a problematic hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site is at the point where the main Camas Creek channel overflows via a bypass to the side channel for bridge 23795.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 4
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Low Point Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): LRR B Lat: 43° 18' 55.59174" Long: - 114° 39' 24.11889" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____ | Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> |
| Remarks: Site is located at the base of a basaltic outcrop downstream of bridge 23795. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | Absolute % Cover | Dominant Species? | Indicator Status | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------|-------------------------------|------------------|---|-------------------|--|--------------|--|-------------|-----------|-------|-----------|--------------|----------|-------|----------|-------------|----------|-------|-----------|--------------|-----------|-------|-----------|-------------|----------|-------|-----------|----------------|---------------|--|----------------|--------------------------------------|--|--|--|
| 1. _____ | _____ | _____ | _____ | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sapling/Shrub Stratum (Plot size: _____) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | _____ | _____ | _____ | Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">Total % Cover of:</td> <td style="width:10%;"></td> <td style="width:10%;">Multiply by:</td> <td style="width:50%;"></td> </tr> <tr> <td>OBL species</td> <td align="center"><u>45</u></td> <td>x 1 =</td> <td align="center"><u>45</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>0</u></td> <td>x 2 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>5</u></td> <td>x 3 =</td> <td align="center"><u>15</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>11</u></td> <td>x 4 =</td> <td align="center"><u>44</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>6</u></td> <td>x 5 =</td> <td align="center"><u>30</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>67</u> (A)</td> <td></td> <td align="center"><u>134</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table> | Total % Cover of: | | Multiply by: | | OBL species | <u>45</u> | x 1 = | <u>45</u> | FACW species | <u>0</u> | x 2 = | <u>0</u> | FAC species | <u>5</u> | x 3 = | <u>15</u> | FACU species | <u>11</u> | x 4 = | <u>44</u> | UPL species | <u>6</u> | x 5 = | <u>30</u> | Column Totals: | <u>67</u> (A) | | <u>134</u> (B) | Prevalence Index = B/A = <u>2.00</u> | | | |
| Total % Cover of: | | Multiply by: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OBL species | <u>45</u> | x 1 = | <u>45</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FACW species | <u>0</u> | x 2 = | <u>0</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FAC species | <u>5</u> | x 3 = | <u>15</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FACU species | <u>11</u> | x 4 = | <u>44</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UPL species | <u>6</u> | x 5 = | <u>30</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Column Totals: | <u>67</u> (A) | | <u>134</u> (B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prevalence Index = B/A = <u>2.00</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Herb Stratum (Plot size: <u>10' x 20'</u>) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. <u>Marsilea vestita</u> | <u>45</u> | <u>Yes</u> | <u>OBL</u> | Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. <u>Bromus inermis</u> | <u>10</u> | <u>No</u> | <u>FACU</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. _____ | <u>10</u> | <u>No</u> | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. <u>Lepidium draba</u> | <u>5</u> | <u>No</u> | <u>UPL</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. <u>Alyssum desertorum</u> | <u>1</u> | <u>No</u> | <u>UPL</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. <u>Epilobium brachycarpum</u> | <u>5</u> | <u>No</u> | <u>FAC</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. <u>Bombycilaena californica</u> | <u>1</u> | <u>No</u> | <u>FACU</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <u>77</u> =Total Cover | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Woody Vine Stratum (Plot size: _____) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. _____ | _____ | _____ | _____ | Hydrophytic Vegetation Present? Yes <u>X</u> No _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| % Bare Ground in Herb Stratum _____ | | % Cover of Biotic Crust _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Remarks:

SOIL

Sampling Point: 200 S - 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|-------------------|------------------|---------|------------------------------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 5 | 10YR 3/3 | 100 | | | | | Sandy | Loamy Sandy |
| 5 - 15 | 10YR 4/4 | 100 | | | | | Sandy | Loamy Sandy, moist/damp soil |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

The soil exhibits a minor color change at approx. 5 inches. The parent material of the sand in the soil appears to be different for each horizon. The first horizon appears to have basaltic sand grains, while the lower horizon appears to have lighter, more silica rich sand grains.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|---|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input checked="" type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____
 Water Table Present? Yes ___ No X Depth (inches): _____
 Saturation Present? Yes ___ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 5
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): LRR B Lat: 43° 18' 54.98043" Long: -114° 39' 23.65232" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|--|--|
| Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ | Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____ |
| Remarks: | |

VEGETATION – Use scientific names of plants.

| <u>Tree Stratum</u> (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|-------------------------------|-------------------|------------------|-----------------|
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| 3. _____ | _____ | _____ | _____ | |
| 4. _____ | _____ | _____ | _____ | |
| | | | | =Total Cover |
| <u>Sapling/Shrub Stratum</u> (Plot size: _____) | | | | |
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| 3. _____ | _____ | _____ | _____ | |
| 4. _____ | _____ | _____ | _____ | |
| 5. _____ | _____ | _____ | _____ | |
| | | | | =Total Cover |
| <u>Herb Stratum</u> (Plot size: <u>20' x 5'</u>) | | | | |
| 1. <u>Marsilea vestita</u> | 40 | Yes | OBL | |
| 2. <u>Bromus inermis</u> | 30 | Yes | FACU | |
| 3. <u>Leymus cinereus</u> | 5 | No | | |
| 4. <u>Lepidium draba</u> | 3 | No | UPL | |
| 5. <u>Epilobium brachycarpum</u> | 2 | No | FAC | |
| 6. <u>Lepidium virginicum</u> | 2 | No | FACU | |
| 7. <u>Thlaspi arvense</u> | 2 | No | UPL | |
| 8. _____ | _____ | _____ | _____ | |
| | | | | 84 =Total Cover |
| <u>Woody Vine Stratum</u> (Plot size: _____) | | | | |
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| | | | | =Total Cover |
| % Bare Ground in Herb Stratum _____ | % Cover of Biotic Crust _____ | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

| | | | |
|--------------------------|--------|--------------|---------|
| Total % Cover of: | | Multiply by: | |
| OBL species | 40 | x 1 = | 40 |
| FACW species | 0 | x 2 = | 0 |
| FAC species | 2 | x 3 = | 6 |
| FACU species | 32 | x 4 = | 128 |
| UPL species | 5 | x 5 = | 25 |
| Column Totals: | 79 (A) | | 199 (B) |
| Prevalence Index = B/A = | | | 2.52 |

Hydrophytic Vegetation Indicators:

_____ Dominance Test is >50%

Prevalence Index is ≤3.0¹

_____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No _____

Remarks:

SOIL

Sampling Point: 200 S - 5

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|----|----------------|----|-------------------|------------------|---------|-----------------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 5 | 10YR 2/2 | 40 | 10YR 3/2 | 60 | | | Sandy | Sandy Loam |
| 5 - 16 | 10YR 2/2 | | | | | | Sandy | Sandy Clay Loam |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ³ : |
|---|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): Type: _____ Depth (inches): _____ | Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Remarks:
Problematic with vegetated floodplain

HYDROLOGY

| Wetland Hydrology Indicators: | | Secondary Indicators (minimum of two required) |
|---|---|--|
| Primary Indicators (minimum of one is required; check all that apply) | | |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

| | |
|---|---|
| Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 6
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 3
 Subregion (LRR): LRR B Lat: 43° 18' 54.69984" Long: -114° 39' 23.36904" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: Site is at the top of a terrace between two flow channels. | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|----------------------------|-----------------------------------|-------------------|------------------|---|
| 1. | | | | | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B) |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| | | =Total Cover | | | |
| Sapling/Shrub Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. | | | | | Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>22</u> x 3 = <u>66</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>57</u> (A) <u>216</u> (B) Prevalence Index = B/A = <u>3.79</u> |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| | | =Total Cover | | | |
| Herb Stratum | (Plot size: <u>5 x 5</u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. | | | | | Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| | | 57 =Total Cover | | | |
| Woody Vine Stratum | (Plot size: <u> </u>) | Absolute % Cover | Dominant Species? | Indicator Status | |
| 1. | | | | | Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> |
| 2. | | | | | |
| | | =Total Cover | | | |
| % Bare Ground in Herb Stratum <u> </u> | | % Cover of Biotic Crust <u> </u> | | | |

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 7
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): LRR B Lat: 43° 18' 46.40062" Long: - 114° 39' 31.00415" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|--|----------------------------------|-------------------------------|-------------------|------------------|---|
| 1. | _____ | _____ | _____ | _____ | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| Sapling/Shrub Stratum (Plot size: _____) | | | | | |
| 1. | _____ | _____ | _____ | _____ | Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>12</u> x 2 = <u>24</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>77</u> (A) <u>229</u> (B) Prevalence Index = B/A = <u>2.97</u> |
| 2. | _____ | _____ | _____ | _____ | |
| 3. | _____ | _____ | _____ | _____ | |
| 4. | _____ | _____ | _____ | _____ | |
| 5. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| Herb Stratum (Plot size: <u>15' x 15'</u>) | | | | | |
| 1. | <u>Polygonum aviculare</u> | 50 | Yes | FAC | Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 2. | <u>Salix exigua</u> | 10 | No | FACW | |
| 3. | <u>Rumex crispus</u> | 5 | No | FAC | |
| 4. | <u>Ceratocephala testiculata</u> | 5 | No | UPL | |
| 5. | <u>Veronica peregrina</u> | 5 | No | FAC | |
| 6. | <u>Alopecurus pratensis</u> | 2 | No | FACW | |
| 7. | _____ | _____ | _____ | _____ | |
| 8. | _____ | _____ | _____ | _____ | |
| | | | | 77 =Total Cover | |
| Woody Vine Stratum (Plot size: _____) | | | | | |
| 1. | _____ | _____ | _____ | _____ | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 2. | _____ | _____ | _____ | _____ | |
| | | | | =Total Cover | |
| % Bare Ground in Herb Stratum _____ | | % Cover of Biotic Crust _____ | | | |

Remarks:

SOIL

Sampling Point: 200 S - 7

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|----|-------------------|------------------|--------------|-----------------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 3 | 10YR 3/2 | 100 | | | | | Sandy | Sandy Loam |
| 3 - 6 | 10YR 4/3 | 100 | | | | | Sandy | Sandy Loam |
| 6 - 8 | 10YR 2/2 | 85 | 10YR 4/6 | 15 | | | Sandy | Sandy Clay Loam |
| 8 - 10 | 10YR 4/3 | 100 | | | | | Sandy | Sand |
| 10 - 12 | 10YR 2/2 | 100 | 10YR 3/6 | | | | Sandy | Sandy Clay |
| 12 - 14 | 10YR 4/3 | 95 | 10YR 4/6 | 5 | | | Loamy/Clayey | Loamy Sand |
| 14 - 16 | 10YR 2/2 | 93 | 10YR 4/6 | 7 | | | Sandy | Sandy Clay Loam |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input checked="" type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Problematic for sandy soils in flood plain. Mottles start at 6 inches exactly.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|---|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site is 30' to the river, which was flowing at the time of visit.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: LILB Bridge #23795 & 23800 City/County: Camas County Sampling Date: 06/24/24
 Applicant/Owner: Camas County / LHTAC State: ID Sampling Point: 200 S - 8
 Investigator(s): Patrick Wickman, Anna Weins, and Kate Grosswiler Section, Township, Range: S22 T1S R15E
 Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR): LRR B Lat: 43° 18' 45.98464" Long: -114° 39' 31.99938" Datum: NAD 83
 Soil Map Unit Name: Manard-Rock outcrop complex (0-8% slopes), Marshdale loam (0-4% slopes) NWI classification: R3UBH
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | |
|---|---|
| Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u> | Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> |
| Remarks: | |

VEGETATION – Use scientific names of plants.

| Tree Stratum | (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | | | | | | | | | | | | | | | | | |
|--|----------------------------------|-------------------------------|-------------------|------------------|---|-------------------|--------------|--------------------------|--------------------|---------------------------|--------------------|---------------------------|--------------------|----------------------------|----------------------|---------------------------|----------------------|----------------------------------|--------------------|--|--|
| 1. | _____ | _____ | _____ | _____ | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 2 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B) | | | | | | | | | | | | | | | | |
| 2. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 3. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 4. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| Sapling/Shrub Stratum | (Plot size: _____) | | | | | | | | | | | | | | | | | | | | |
| 1. | _____ | _____ | _____ | _____ | Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 3 </u></td> <td>x 1 = <u> 3 </u></td> </tr> <tr> <td>FACW species <u> 0 </u></td> <td>x 2 = <u> 0 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 3 = <u> 0 </u></td> </tr> <tr> <td>FACU species <u> 25 </u></td> <td>x 4 = <u> 100 </u></td> </tr> <tr> <td>UPL species <u> 28 </u></td> <td>x 5 = <u> 140 </u></td> </tr> <tr> <td>Column Totals: <u> 56 </u> (A)</td> <td><u> 243 </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> 4.34 </u></td> </tr> </table> | Total % Cover of: | Multiply by: | OBL species <u> 3 </u> | x 1 = <u> 3 </u> | FACW species <u> 0 </u> | x 2 = <u> 0 </u> | FACU species <u> 0 </u> | x 3 = <u> 0 </u> | FACU species <u> 25 </u> | x 4 = <u> 100 </u> | UPL species <u> 28 </u> | x 5 = <u> 140 </u> | Column Totals: <u> 56 </u> (A) | <u> 243 </u> (B) | Prevalence Index = B/A = <u> 4.34 </u> | |
| Total % Cover of: | Multiply by: | | | | | | | | | | | | | | | | | | | | |
| OBL species <u> 3 </u> | x 1 = <u> 3 </u> | | | | | | | | | | | | | | | | | | | | |
| FACW species <u> 0 </u> | x 2 = <u> 0 </u> | | | | | | | | | | | | | | | | | | | | |
| FACU species <u> 0 </u> | x 3 = <u> 0 </u> | | | | | | | | | | | | | | | | | | | | |
| FACU species <u> 25 </u> | x 4 = <u> 100 </u> | | | | | | | | | | | | | | | | | | | | |
| UPL species <u> 28 </u> | x 5 = <u> 140 </u> | | | | | | | | | | | | | | | | | | | | |
| Column Totals: <u> 56 </u> (A) | <u> 243 </u> (B) | | | | | | | | | | | | | | | | | | | | |
| Prevalence Index = B/A = <u> 4.34 </u> | | | | | | | | | | | | | | | | | | | | | |
| 2. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 3. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 4. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 5. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| Herb Stratum | (Plot size: <u> 5' x 5' </u>) | | | | | | | | | | | | | | | | | | | | |
| 1. | <u> Artemisia tridentata </u> | <u> 20 </u> | <u> Yes </u> | <u> UPL </u> | Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | | | | | | | | | | | | | | |
| 2. | <u> Lepidium draba </u> | <u> 5 </u> | <u> No </u> | <u> UPL </u> | | | | | | | | | | | | | | | | | |
| 3. | <u> Bromus inermis </u> | <u> 25 </u> | <u> Yes </u> | <u> FACU </u> | | | | | | | | | | | | | | | | | |
| 4. | <u> Marsilea vestita </u> | <u> 3 </u> | <u> No </u> | <u> OBL </u> | | | | | | | | | | | | | | | | | |
| 5. | <u> Lepidium lasiocarpum </u> | <u> 3 </u> | <u> No </u> | <u> UPL </u> | | | | | | | | | | | | | | | | | |
| 6. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 7. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| 8. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| Woody/Vine Stratum | (Plot size: _____) | | | | | | | | | | | | | | | | | | | | |
| 1. | _____ | _____ | _____ | _____ | Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> | | | | | | | | | | | | | | | | |
| 2. | _____ | _____ | _____ | _____ | | | | | | | | | | | | | | | | | |
| =Total Cover | | | | | | | | | | | | | | | | | | | | | |
| % Bare Ground in Herb Stratum _____ | | % Cover of Biotic Crust _____ | | | | | | | | | | | | | | | | | | | |

Remarks:

SOIL

Sampling Point: 200 S - 8

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---------------|-----|----------------|---|-------------------|------------------|---------|------------|
| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 0 - 5 | 10YR 3/2 | 100 | | | | | Sandy | Sandy Loam |
| 5 - 18 | 10YR 4/3 | 100 | | | | | Sandy | Sandy Loam |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | | Indicators for Problematic Hydric Soils ³ : |
|---|---|--|
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR D) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|---|---|
| Restrictive Layer (if observed): Type: _____ Depth (inches): _____ | Hydric Soil Present? Yes _____ No <u>X</u> |
|---|---|

Remarks:
 The top 1" to 5" has a lot of organic material and slightly loamier and darker than the lower layer. The bottom 5" to 18" is sandier with multicolored grains and faint redox features. The redox features occurred too deeply and infrequently to be considered a hydric soil indicator.

HYDROLOGY

| Wetland Hydrology Indicators: | |
|---|--|
| Primary Indicators (minimum of one is required; check all that apply) | Secondary Indicators (minimum of two required) |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Salt Crust (B11) | |
| <input type="checkbox"/> Biotic Crust (B12) | |
| <input type="checkbox"/> Aquatic Invertebrates (B13) | |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | |
| <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | |
| <input type="checkbox"/> Presence of Reduced Iron (C4) | |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | |
| <input type="checkbox"/> Thin Muck Surface (C7) | |
| <input type="checkbox"/> Other (Explain in Remarks) | |

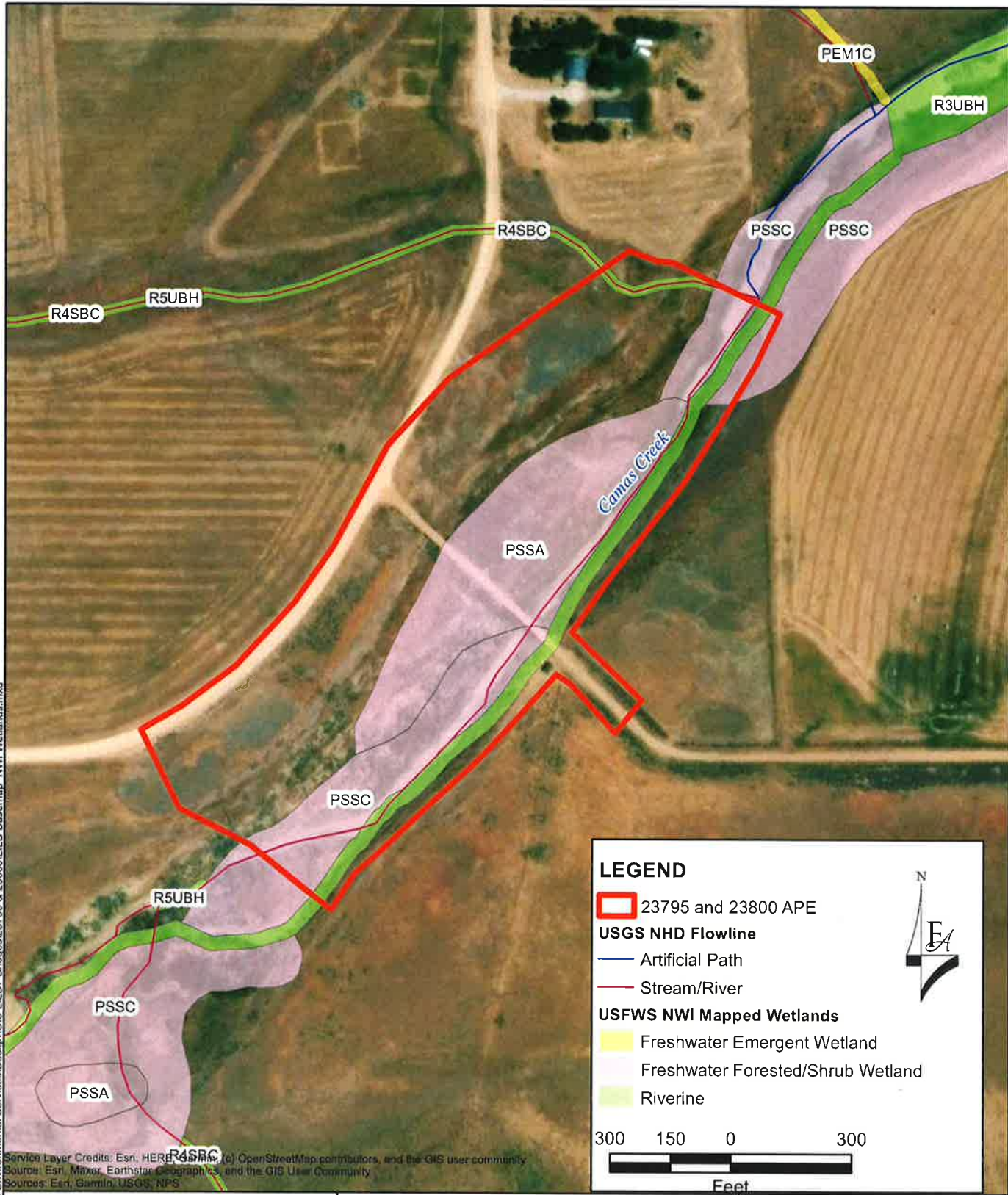
| | |
|--|--|
| Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe) | Wetland Hydrology Present? Yes _____ No <u>X</u> |
|--|--|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix D

Supplementary Maps



F:\Boise\Projects\2232026 - LILB Environmental Services\Design\GIS\LILB Bridges\23795 & 23800\LILB Basemap NWI Wetlands.mxd
 Service Layer Credits: Esri, HERE, DeLorme, Mapbox, OpenStreetMap contributors, and the GIS user community
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Sources: Esri, Garmin, USGS, NPS

**LHTAC - Leading Idaho
Local Bridge Program**

**Figure 3. NHD and NWI Mapped
Wetlands and Waters**

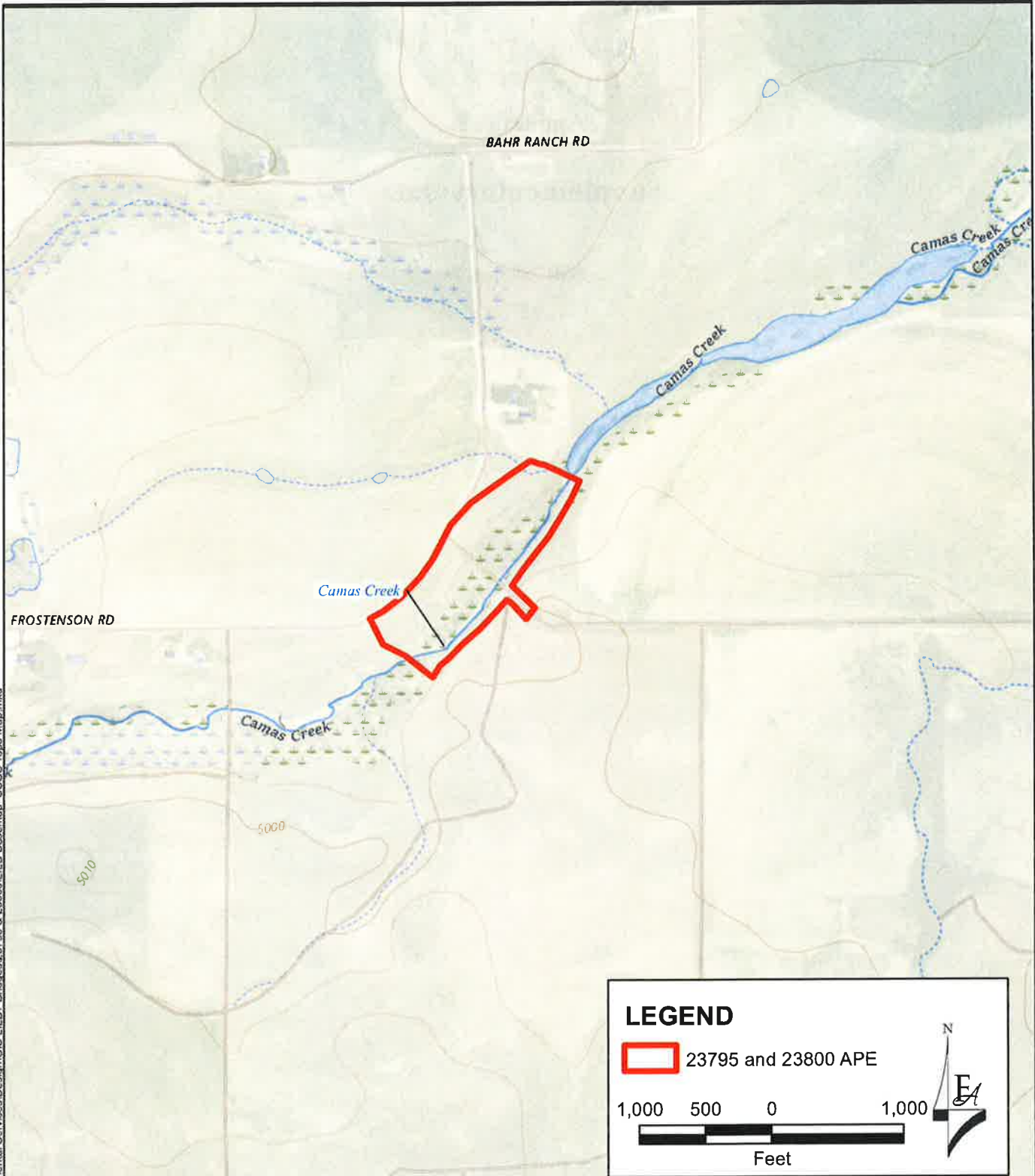
Aquatic Resource Delineation Report

*Bridge Key No. 23795 and 23800
Camas County, Idaho*

Section 22, Township 1S, Range 15E

FA Project No: 02-23-0026

| | |
|--------------------|---------------------|
| Drawn by: AW | Date: April 2024 |
| Approved by: PW | Date: April 2024 |



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data, U.S. Department of State HIU; NOAA

| | | |
|---|---|---|
| LHTAC - Leading Idaho Local Bridge Program Figure 4. USGS Topo Map | <i>Aquatic Resource Delineation Report</i> | FA Project No: 02-23-0026 |
| | Bridge Key No. 23795 and 23800 Camas County, Idaho | Drawn by: Date: AW April 2024 |
| | Section 22, Township 1S, Range 15E | Approved by: Date: PW April 2024 |

F:\Boise\Projects\223026 - LILB Environmental Services\Design\GIS\LILB_Bridges\23795 & 23800\LILB_BaseMap_USGS_Topo_Map.mxd

Appendix E
Supplementary Data

ESRI Shapefiles

Climate Data

WETS Table

WETS Station: FAIRFIELD
RANGER STATION, ID

Requested years: 1971 - 2000

| Month | Avg Max Temp | Avg Min Temp | Avg Mean Temp | Avg Precip | 30% chance precip less than | 30% chance precip more than | Avg number days precip 0.10 or more | Avg Snowfall |
|---------|--------------|--------------|---------------|------------|-----------------------------|-----------------------------|-------------------------------------|--------------|
| Jan | 30.0 | 5.9 | 17.9 | 2.14 | 1.29 | 2.59 | 5 | 16.8 |
| Feb | 35.1 | 8.4 | 21.8 | 1.70 | 0.93 | 2.07 | 5 | 11.2 |
| Mar | 43.5 | 17.9 | 30.7 | 1.56 | 0.88 | 1.88 | 4 | 4.5 |
| Apr | 56.1 | 27.6 | 41.8 | 1.04 | 0.60 | 1.25 | 3 | 1.5 |
| May | 66.8 | 34.9 | 50.9 | 1.36 | 0.80 | 1.61 | 4 | 0.3 |
| Jun | 75.9 | 40.5 | 58.2 | 0.84 | 0.34 | 1.03 | 2 | 0.0 |
| Jul | 85.2 | 46.3 | 65.7 | 0.59 | 0.18 | 0.58 | 2 | 0.0 |
| Aug | 84.9 | 44.4 | 64.6 | 0.41 | 0.15 | 0.43 | 1 | 0.0 |
| Sep | 74.9 | 35.0 | 54.9 | 0.71 | 0.25 | 0.75 | 2 | 0.1 |
| Oct | 63.8 | 27.2 | 45.5 | 0.81 | 0.40 | 0.92 | 2 | 0.5 |
| Nov | 42.8 | 17.1 | 30.0 | 1.82 | 0.76 | 2.21 | 5 | 8.1 |
| Dec | 31.4 | 7.3 | 19.4 | 2.07 | 0.85 | 2.51 | 5 | 15.2 |
| Annual: | | | | | 13.95 | 17.18 | | |
| Average | 57.5 | 26.0 | 41.8 | - | - | - | - | - |
| Total | - | - | - | 15.04 | | | 40 | 58.2 |

GROWING SEASON DATES

| | | | |
|---------------------------|-----------------------|-----------------------|-----------------------|
| Years with missing data: | 24 deg = 7 | 28 deg = 5 | 32 deg = 4 |
| Years with no occurrence: | 24 deg = 0 | 28 deg = 0 | 32 deg = 0 |
| Data years used: | 24 deg = 23 | 28 deg = 25 | 32 deg = 26 |
| Probability | 24 F or higher | 28 F or higher | 32 F or higher |
| 50 percent * | 5/7 to 9/24: 140 days | 6/7 to 9/11: 96 days | 6/25 to 8/30: 66 days |
| 70 percent * | 5/2 to 9/30: 151 days | 6/1 to 9/18: 109 days | 6/20 to 9/5: 77 days |

* Percent chance of the growing season occurring between the Beginning and Ending dates.

STATS TABLE - total precipitation (inches)

| Yr | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annl |
|------|-------|-------|------|------|------|------|------|------|------|------|------|-------|-------|
| 1948 | | | | | | | | | | 0.52 | 3.24 | 3.13 | 6.89 |
| 1949 | M1.32 | 3.55 | 0.17 | 0.09 | 1.51 | 0.20 | 0.00 | 0.07 | 0.46 | 0.67 | 1.65 | 1.68 | 11.37 |
| 1950 | 4.52 | 1.96 | 3.03 | 0.90 | 0.58 | 0.05 | 0.34 | 0.00 | 0.62 | 1.06 | 2.36 | 2.48 | 17.90 |
| 1951 | 3.03 | M2.57 | 1.26 | 1.95 | 0.67 | 0.71 | 0.27 | 0.72 | 0.00 | 1.97 | 2.53 | M5.00 | 20.68 |
| 1952 | 4.75 | 4.30 | 2.03 | 0.72 | 0.65 | 2.54 | 1.01 | 0.02 | 0.18 | 0.00 | 1.12 | 3.88 | 21.20 |
| 1953 | 4.12 | 0.60 | 0.78 | 1.42 | 1.90 | 0.76 | T | T | 0.26 | 0.19 | 2.05 | 1.06 | 13.14 |
| 1954 | 3.88 | 1.34 | 1.35 | 0.77 | 0.32 | 1.59 | 0.20 | 0.16 | 0.05 | 0.17 | 1.67 | 1.38 | 12.88 |
| 1955 | 1.02 | 0.89 | 0.46 | 1.06 | 2.44 | 0.85 | 0.14 | 0.00 | 0.34 | 0.48 | 1.67 | 6.14 | 15.49 |
| 1956 | 3.63 | 1.99 | 0.54 | 1.45 | 2.35 | 0.20 | 0.42 | T | 0.21 | 2.00 | 0.36 | 1.44 | 15.00 |

| | | | | | | | | | | | | | | 77 | 36 |
|------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|----|----|
| 1957 | 1.22 | 2.28 | 1.56 | 0.77 | 3.96 | 0.45 | 0.22 | 0.49 | M0.00 | 0.73 | 0.98 | 2.64 | 15.30 | | |
| 1958 | 2.30 | 2.66 | 1.62 | 2.46 | 1.37 | 1.67 | 0.64 | 0.13 | T | 0.03 | 1.34 | 0.70 | 14.92 | | |
| 1959 | 1.99 | 1.86 | 0.69 | 0.16 | 1.20 | 0.27 | 0.01 | 0.50 | 3.39 | 1.05 | 0.45 | 1.12 | 12.69 | | |
| 1960 | 1.49 | 2.59 | 2.50 | 0.81 | 0.39 | 0.01 | T | 0.69 | 0.28 | 0.72 | 3.40 | 0.68 | 13.56 | | |
| 1961 | 0.73 | 1.10 | 0.90 | 0.34 | 0.57 | 0.98 | 0.07 | 0.85 | 1.98 | 1.80 | 1.82 | 2.19 | 13.33 | | |
| 1962 | 1.36 | 3.29 | 1.64 | 1.30 | 4.60 | 1.11 | 0.27 | 0.30 | 0.44 | 0.79 | 1.96 | 1.12 | 18.18 | | |
| 1963 | 1.31 | 3.14 | 0.80 | M1.67 | 2.19 | 2.85 | 0.03 | 0.08 | 1.44 | 0.29 | 3.81 | 0.86 | 18.47 | | |
| 1964 | 2.71 | 0.34 | 1.90 | 1.11 | 0.28 | 1.30 | 0.29 | 0.03 | 0.17 | 0.29 | 3.10 | 8.73 | 20.25 | | |
| 1965 | 2.77 | 0.13 | 0.86 | 2.39 | 1.18 | 1.58 | 0.74 | 2.98 | 1.31 | T | 2.30 | 1.81 | 18.05 | | |
| 1966 | 1.88 | 0.61 | 1.44 | 0.80 | 0.09 | 0.36 | T | T | 0.08 | 0.32 | 1.60 | 2.32 | 9.50 | | |
| 1967 | 4.40 | 0.26 | 0.94 | 1.97 | 0.26 | 3.66 | 0.45 | 0.03 | 0.21 | 1.49 | 1.59 | 1.09 | 16.35 | | |
| 1968 | 1.57 | 2.24 | 0.29 | 0.27 | 1.00 | 1.96 | 0.01 | 3.11 | 0.21 | 0.70 | 2.23 | 4.12 | 17.71 | | |
| 1969 | 6.20 | 2.13 | 0.29 | 0.10 | 0.04 | 1.92 | 0.50 | 0.00 | 0.80 | 0.17 | 0.02 | 3.45 | 15.62 | | |
| 1970 | 6.20 | 0.45 | 1.33 | 1.32 | 1.15 | 2.30 | 0.94 | 0.48 | 0.75 | 1.47 | 3.70 | 4.34 | 24.43 | | |
| 1971 | 4.58 | 0.61 | 1.94 | 0.65 | 1.29 | 1.57 | 0.09 | 1.23 | 0.61 | 0.57 | 2.01 | 3.32 | 18.47 | | |
| 1972 | 3.35 | 1.02 | 1.42 | 0.66 | 0.83 | 0.92 | 0.00 | 0.18 | 0.91 | 1.08 | 1.67 | 2.61 | 14.65 | | |
| 1973 | 2.33 | 1.64 | 0.61 | 0.46 | 0.39 | 0.94 | 0.73 | 0.08 | 0.31 | 0.35 | 4.00 | 3.50 | 15.34 | | |
| 1974 | 2.79 | 0.99 | 2.21 | 0.30 | T | 0.02 | 0.25 | 0.23 | 0.00 | M0.78 | 0.55 | 1.46 | 9.58 | | |
| 1975 | 2.13 | 3.37 | 2.78 | 1.95 | 0.36 | 0.73 | 0.26 | 0.30 | T | 1.87 | 1.78 | 1.49 | 17.02 | | |
| 1976 | 2.24 | 2.90 | 1.48 | 0.75 | 0.49 | 0.41 | 0.26 | 1.94 | 1.50 | 0.11 | 0.02 | 0.03 | 12.13 | | |
| 1977 | 0.85 | 0.40 | 0.21 | 0.07 | 1.42 | 1.48 | 0.94 | 0.22 | 0.29 | 0.15 | 1.49 | 4.11 | 11.63 | | |
| 1978 | 2.71 | 3.08 | 0.75 | 1.79 | 0.40 | 0.31 | 1.37 | 0.13 | 2.21 | 0.00 | 0.57 | 1.26 | 14.58 | | |
| 1979 | 2.06 | 1.86 | 1.13 | 0.69 | 1.11 | 0.24 | 1.22 | 1.03 | 0.09 | 1.76 | 1.30 | 1.77 | 14.26 | | |
| 1980 | 3.75 | 1.61 | 0.51 | 0.80 | 2.34 | 0.60 | 0.84 | 0.19 | 1.64 | 0.30 | 1.03 | M2.95 | 16.56 | | |
| 1981 | 0.94 | 1.15 | 0.93 | 2.03 | 2.63 | 0.42 | 0.02 | 0.25 | 0.17 | 1.05 | 4.32 | M3.83 | 17.74 | | |
| 1982 | M2.35 | 2.80 | 1.83 | 1.74 | 0.71 | 0.49 | M2.30 | 0.38 | M1.60 | M2.37 | M0.92 | | 17.49 | | |
| 1983 | M2.95 | M2.34 | 3.61 | 2.15 | 0.76 | 0.69 | 0.93 | 2.24 | 0.47 | 1.53 | 4.47 | M4.65 | 26.79 | | |
| 1984 | M0.45 | 2.07 | 1.32 | 2.08 | 1.23 | 2.08 | 2.37 | M0.91 | 0.25 | M0.53 | 3.42 | 1.24 | 17.95 | | |
| 1985 | 0.36 | 2.50 | M1.16 | 0.44 | 1.34 | 0.27 | 1.92 | 0.15 | 3.04 | 1.45 | 1.51 | 1.28 | 15.42 | | |
| 1986 | 1.93 | 5.24 | 1.83 | 0.70 | 0.80 | 0.86 | 0.23 | 0.30 | 1.83 | 0.18 | 0.52 | 0.09 | 14.51 | | |
| 1987 | 1.43 | 1.00 | M1.61 | 0.26 | 3.27 | 0.68 | 1.72 | 0.02 | 0.00 | 0.00 | 1.39 | 1.90 | 13.28 | | |
| 1988 | 1.30 | 0.30 | 0.95 | 1.33 | 1.60 | 0.10 | 0.35 | 0.76 | 0.24 | 0.00 | 5.83 | 1.48 | 14.24 | | |
| 1989 | 1.46 | 0.36 | 0.90 | 0.28 | | | 0.26 | 0.52 | 0.52 | M1.76 | 0.95 | 0.05 | 7.06 | | |
| 1990 | 2.02 | 1.35 | | | | | 0.00 | M0.00 | | | | | 3.37 | | |

| | | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1991 | | | 4.76 | 1.54 | 2.41 | 0.50 | 0.82 | 0.54 | 1.13 | 1.68 | 1.98 | 0.28 | 15.64 |
| 1992 | 0.32 | 2.01 | 0.24 | 0.84 | 0.00 | 1.33 | 0.32 | 0.00 | 0.14 | 1.13 | M1.25 | M3.13 | 10.71 |
| 1993 | M3.96 | M1.91 | 3.21 | 1.28 | 0.75 | 2.48 | 0.20 | 0.38 | 0.01 | 0.57 | 0.53 | 1.49 | 16.77 |
| 1994 | 1.07 | 1.87 | T | 1.83 | 1.47 | 0.06 | 0.03 | 0.00 | 0.25 | 0.57 | M1.91 | M4.61 | 13.67 |
| 1995 | M0.53 | M1.64 | 3.14 | 0.79 | 2.43 | 2.02 | 0.03 | 0.05 | M0.00 | 0.12 | 1.81 | M2.27 | 14.83 |
| 1996 | M0.63 | M0.16 | 1.90 | 1.23 | 4.05 | 0.41 | 0.16 | 0.00 | 0.40 | 0.91 | 3.01 | M4.04 | 16.90 |
| 1997 | M3.97 | 0.33 | M1.31 | M0.36 | | M0.97 | 0.00 | 0.00 | 0.30 | 0.43 | M0.84 | M0.38 | 8.89 |
| 1998 | M3.00 | M0.90 | 1.62 | 0.00 | M4.53 | M2.04 | 0.00 | 0.00 | 0.80 | 0.00 | M2.00 | 2.20 | 17.09 |
| 1999 | M2.73 | M3.08 | 0.73 | 1.67 | 0.00 | 1.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | M0.78 | 10.14 |
| 2000 | M2.74 | M2.20 | 0.45 | M0.78 | 0.00 | M0.04 | 0.00 | 0.41 | 1.80 | M2.27 | 0.55 | 1.65 | 12.89 |
| 2001 | M0.92 | M0.25 | M0.32 | 0.97 | 0.25 | 0.00 | M0.48 | 0.19 | 0.28 | M0.84 | 1.34 | M2.89 | 8.73 |
| 2002 | M1.21 | M0.22 | M0.80 | M0.67 | 0.00 | M0.10 | 0.00 | 0.00 | 0.40 | 0.48 | M0.83 | M2.43 | 7.14 |
| 2003 | M1.92 | M0.40 | M1.25 | 1.87 | M0.95 | 0.27 | 0.24 | 0.48 | 0.00 | 0.13 | 1.04 | M2.71 | 11.26 |
| 2004 | 1.31 | 1.72 | M0.04 | 0.92 | 1.09 | 0.15 | 0.55 | M0.48 | 0.55 | 1.49 | M0.00 | 1.62 | 9.92 |
| 2005 | | M0.10 | 1.34 | 0.73 | 4.62 | 0.89 | 0.00 | M0.00 | M0.02 | 0.64 | M0.15 | M5.77 | 14.26 |
| 2006 | M3.67 | | | M0.04 | M0.11 | 0.80 | 0.07 | 0.00 | M0.00 | 1.18 | 1.34 | | 7.21 |
| 2007 | M0.05 | M0.00 | 0.05 | M0.93 | 0.30 | 0.00 | 0.12 | 0.00 | M0.84 | 1.41 | 0.55 | | 4.25 |
| 2008 | | M1.02 | 0.71 | | 0.78 | 0.20 | 0.00 | 0.00 | 0.05 | 0.45 | 2.30 | 2.76 | 8.27 |
| 2009 | M0.58 | 0.70 | M0.42 | 0.69 | 1.33 | 2.06 | 0.06 | 0.34 | 0.15 | 1.90 | 0.52 | 1.01 | 9.76 |
| 2010 | 2.36 | 0.33 | 0.61 | 0.94 | 0.88 | 1.33 | 0.12 | 0.19 | 0.20 | 0.77 | 1.64 | 3.43 | 12.80 |
| 2011 | M0.16 | M0.30 | 1.62 | M0.00 | 1.02 | 0.30 | 0.06 | 0.06 | 0.13 | M1.65 | M0.64 | 0.99 | 6.93 |
| 2012 | M2.73 | 0.05 | 1.89 | M0.77 | 0.58 | 0.00 | M0.28 | M0.00 | | | | | 6.30 |
| 2013 | | | | | | | M0.00 | 0.05 | M0.93 | M0.00 | M0.15 | 0.36 | 1.50 |
| 2014 | M1.03 | 2.44 | 1.02 | 0.78 | 0.42 | 0.00 | 0.06 | M2.66 | M1.60 | 0.09 | 1.77 | 2.78 | 14.65 |
| 2015 | 1.29 | 1.35 | 0.00 | 0.00 | 3.08 | M0.02 | 0.00 | 0.89 | 0.40 | 1.22 | 1.97 | 4.01 | 14.23 |
| 2016 | 2.16 | 0.08 | 1.59 | M0.00 | 1.58 | M0.00 | 0.24 | 0.00 | 1.31 | 3.41 | 0.06 | 2.92 | 13.35 |
| 2017 | 4.37 | 1.29 | 2.95 | 0.99 | 1.24 | M0.31 | M0.05 | 0.39 | M0.70 | M0.85 | 2.43 | 0.31 | 15.88 |
| 2018 | 0.80 | 0.63 | 2.05 | 0.73 | 3.69 | 0.47 | 0.20 | M0.20 | 0.00 | M0.11 | 1.17 | 0.71 | 10.76 |
| 2019 | 1.30 | M3.83 | 0.51 | M1.73 | 4.21 | 0.00 | 1.07 | 0.22 | 1.11 | 0.65 | 0.57 | 0.67 | 15.87 |
| 2020 | 2.07 | 0.07 | M0.00 | | | | | | | | | | 2.14 |
| 2021 | | | | | | | | | | | | | |
| 2022 | | | | | | | | | | | | | |
| 2023 | | | | | M1.46 | 1.19 | 0.06 | 2.68 | 0.35 | 0.75 | 1.40 | 1.00 | 8.89 |
| 2024 | 2.60 | 2.13 | 1.25 | M0.41 | M0.12 | | | | | | | | 6.51 |

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a

month or year is blank.

Creation date: 2024-05-21

USDA Soil Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
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States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Camas County Area, Idaho



November 1, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map





































The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



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MAP LEGEND

| | | |
|---|------------------------|---|
| Area of Interest (AOI) | |  Spoil Area |
|  | Area of Interest (AOI) |  Stony Spot |
| Soils | |  Very Stony Spot |
|  | Soil Map Unit Polygons |  Wet Spot |
|  | Soil Map Unit Lines |  Other |
|  | Soil Map Unit Points |  Special Line Features |
| Special Point Features | | Water Features |
|  | Blowout |  Streams and Canals |
|  | Borrow Pit | Transportation |
|  | Clay Spot |  Rails |
|  | Closed Depression |  Interstate Highways |
|  | Gravel Pit |  US Routes |
|  | Gravelly Spot |  Major Roads |
|  | Landfill |  Local Roads |
|  | Lava Flow | Background |
|  | Marsh or swamp |  Aerial Photography |
|  | Mine or Quarry | |
|  | Miscellaneous Water | |
|  | Perennial Water | |
|  | Rock Outcrop | |
|  | Saline Spot | |
|  | Sandy Spot | |
|  | Severely Eroded Spot | |
|  | Sinkhole | |
|  | Slide or Slip | |
|  | Sodic Spot | |

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Camas County Area, Idaho
 Survey Area Data: Version 19, Aug 22, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 15, 2021—Sep 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 35 | Manard-Rock outcrop complex, 0 to 8 percent slopes | 3.4 | 21.7% |
| 36 | Marshdale loam, 0 to 4 percent slopes | 10.2 | 64.4% |
| 45 | Riceton coarse sandy loam, 0 to 4 percent slopes | 1.0 | 6.0% |
| 52 | Simonton loam, 4 to 12 percent slopes | 1.2 | 7.7% |
| 56 | Vodermaier gravelly coarse sandy loam, 0 to 4 percent slopes | 0.0 | 0.2% |
| Totals for Area of Interest | | 15.8 | 100.0% |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

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was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Camas County Area, Idaho

35—Manard-Rock outcrop complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2r3c
Elevation: 4,800 to 6,200 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 41 to 46 degrees F
Frost-free period: 70 to 100 days
Farmland classification: Not prime farmland

Map Unit Composition

Manard, stony surface, and similar soils: 60 percent
Rock outcrop: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Manard, Stony Surface

Setting

Landform: Lava plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over bedrock derived from rhyolite and/or basalt

Typical profile

A - 0 to 9 inches: very stony silt loam
Bt1 - 9 to 18 inches: silty clay loam
Bt2 - 18 to 26 inches: silty clay
Bkqm - 26 to 28 inches: cemented material
R - 28 to 38 inches: bedrock

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: 20 to 37 inches to duripan; 21 to 38 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R010XA001ID - Clayey 12-16 PZ ARARL/FEID
Hydric soil rating: No

Description of Rock Outcrop

Typical profile

R - 0 to 60 inches: bedrock

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Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: Unranked

36—Marshdale loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2r3d

Elevation: 4,800 to 6,000 feet

Mean annual precipitation: 12 to 16 inches

Mean annual air temperature: 39 to 45 degrees F

Frost-free period: 60 to 100 days

Farmland classification: Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Marshdale and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marshdale

Setting

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Mixed alluvium

Typical profile

A - 0 to 33 inches: loam

Cg - 33 to 47 inches: clay loam

2C1 - 47 to 60 inches: loamy coarse sand

2C2 - 60 to 65 inches: coarse sand

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 2.00 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: Frequent

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

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Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: R010XA027ID - Meadow DECA18-CANE2
Hydric soil rating: Yes

Minor Components

Houk

Percent of map unit: 5 percent
Landform: Flood-plain playas
Ecological site: R010XA027ID - Meadow DECA18-CANE2
Hydric soil rating: Yes

Strom, loam surface

Percent of map unit: 5 percent
Landform: Flood-plain playas
Ecological site: R010XA028ID - Dry Meadow 8-15 PZ PONE3-PHAL2
Hydric soil rating: Yes

Strom, sandy clay loam surface

Percent of map unit: 5 percent
Landform: Flood-plain playas
Ecological site: R010XA028ID - Dry Meadow 8-15 PZ PONE3-PHAL2
Hydric soil rating: Yes

45—Riceton coarse sandy loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2r3q
Elevation: 4,800 to 6,000 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Riceton and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riceton

Setting

Landform: Fan remnants, terraces
Down-slope shape: Linear
Across-slope shape: Linear

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Typical profile

A - 0 to 21 inches: coarse sandy loam
Bw - 21 to 54 inches: gravelly coarse sandy loam
C - 54 to 70 inches: sand, gravel

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: R010XA004ID - Loamy 12-16 PZ ARTRV/FEID-PSSPS
Hydric soil rating: No

52—Simonton loam, 4 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2r3z
Elevation: 4,800 to 6,200 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 60 to 100 days
Farmland classification: Not prime farmland

Map Unit Composition

Simonton and similar soils: 80 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Simonton

Setting

Landform: Fan remnants, terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or colluvium derived from igneous rock

Typical profile

A - 0 to 10 inches: loam
Bt - 10 to 37 inches: loam
C - 37 to 62 inches: loamy sand

Properties and qualities

Slope: 4 to 12 percent

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Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R010XA004ID - Loamy 12-16 PZ ARTRV/FEID-PSSPS
Hydric soil rating: No

56—Vodermaier gravelly coarse sandy loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2r43
Elevation: 4,800 to 5,500 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 39 to 43 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Vodermaier and similar soils: 80 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vodermaier

Setting

Landform: Fan remnants, terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

Ap - 0 to 7 inches: gravelly coarse sandy loam
A - 7 to 43 inches: gravelly loamy coarse sand
C - 43 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

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Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3c

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: A

Ecological site: R010XA009ID - South Slope Gravelly 12-16 PZ

Hydric soil rating: No

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Custom Soil Resource Report

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Attachment C. Hydraulic Analysis

HYDRAULIC REPORT

FROM: Tim Richard, P.E. (Forsgren)

DATE: October 24, 2025

SUBJECT: Leading Idaho Local Bridge Program –
Bridge Key Number 23801 – 200 S Rd. over Camas Creek

The Local Highway Technical Assistance Council (LHTAC) has engaged Forsgren Associates (FA) to provide a truncated hydraulic report for the 200 S Rd. crossing over Camas Creek (Bridge Key No. 23800 & 23795) that will be replaced as part of the Leading Idaho Local Bridge (LILB) Program. This report summarizes the hydrologic and conceptual hydraulic conditions and alternatives for the proposed crossing replacement (New Bridge Key No. 23801) based on ITD's Bridge Hydraulics Manual (BHM) (July 2021). Given the complexities of the crossing replacement described hereafter, three design alternatives were previously prepared and discussed in the Conceptual Hydraulics Report dated November 1, 2024, as part of an alternatives analysis. This Final Hydraulic Report was developed for the preferred alternative selected by LHTAC and the client.



Figure 1. Vicinity Map

1.0 DESIGN REQUIREMENTS AND ASSUMPTIONS

1.1 Hydraulic Design Flows

Table 2.1 of the BHM was used to determine the hydraulic capacity standards and criteria. All structures, except over a canal or USCG navigable waterway, shall be designed to accommodate a minimum design flow frequency of the 50-year flood event and a check flow frequency of the 100-year flood event.

1.2 Freeboard Requirements

For a bridge with length greater than 50-ft, a minimum of 2-ft of freeboard over the design flood event is required at all points under the bridge. In addition, the bridge is required to pass the check flood event without contacting the bridge low chord.

| Bridge Length or Culvert Hydraulic Opening Width | Design Flood | Design Flood Criterion* | Check Flood | Check Flood Criterion |
|--|--------------|--------------------------------------|-------------|---|
| All bridges with length 50 feet and greater or with multiple spans | 50-year | Minimum 2 ft freeboard at all points | 100-year | Flow passes through structure without contacting low chord. |

Table 1. Hydraulic Capacity Standards from ITD BHM

1.3 Scour Design Flows

ITD's BHM (Section 2.2) states "The structure must be designed to withstand the *Scour Design Flood (SDF)* at the Service Limit State and to withstand the *Scour Check Flood (SCF)* at the Extreme Limit State as defined in the AASTHO LRFD Bridge Design Specifications". In this case, the SDF is the 100-year flood and the SCF is the lesser of the 500-year flood or the overtopping flood. The SCF can also be defined as any lesser flood found by hydraulic modeling to produce more severe scour than the SDF.

1.4 Effective FEMA Products

The project site is located in Camas County. There are no effective FEMA products for Camas County, ID except for the City of Fairfield. Therefore, the project area is not within a mapped Special Flood Hazard Area (SFHA).

1.5 Floodplain Permitting Requirements

As Camas County is not a participating community for the NFIP and the project is not within a mapped floodplain, the County does not require a floodplain development permit.

2.0 HYDROLOGY

2.1 Watershed

The Camas Creek watershed is located within a high intermountain valley in south central Idaho between the Snake River Plain to the south and the Sawtooth Mountains to the north. Camas Creek flows through the 40-mile-long valley, known locally as the Camas Prairie, from west to east until it eventually flows into the Magic Reservoir. The creek crosses 200 S Rd. approximately 5-miles downstream from where the Soldier Creek tributary flows into Camas Creek and approximately 16-mi upstream of Magic Reservoir. According to USGS StreamStats, the total drainage area is approximately 480-sq. mi. with a mean basin elevation of 5,540-ft, mean basin slope of 13%, and a mean annual precipitation of 17.5-inches. The drainage area consists primarily of surficial volcanic rock (57.5%), with little forest cover (2%). Predominant land used is range land

for grazing and dryland agriculture (30.9%) (USGS 2022). Peak runoff is typically observed in spring when runoff from snow melt peaks. Spring runoff in the basin generally occurs early and is rapid, with major peak events often occurring during years when large amounts of runoff are stored in the Camas Prairie either by attenuation and/or ice dams that are then suddenly released. The majority of flow generally occurs in March and April with little flow occurring in the summer months.

2.2 Flood History

Per Camas County maintenance personnel, 200 South Rd has been known to overtop during high flood events. The left photo below shows flooding at the 200 South Rd bridges over Camas Creek that occurred in 2017. Floodwater appears to be above the bridge's high cord and overtopping the north roadway approach of bridge KN23795. The right photos shows where maintenance personnel breached the roadway to relieve the high flows. Floodwater appears to be receding following the breach of the roadway. A 4-ft corrugated metal pipe was installed where the roadway was breached after floodwaters receded to provide additional relief flow during future high flood events. Overtopping is known to occur on 200 Rd S where Knowlton Creek discharges to Camas Creek less than 1-mi upstream of the 200 Rd S bridges over Camas Creek as well.

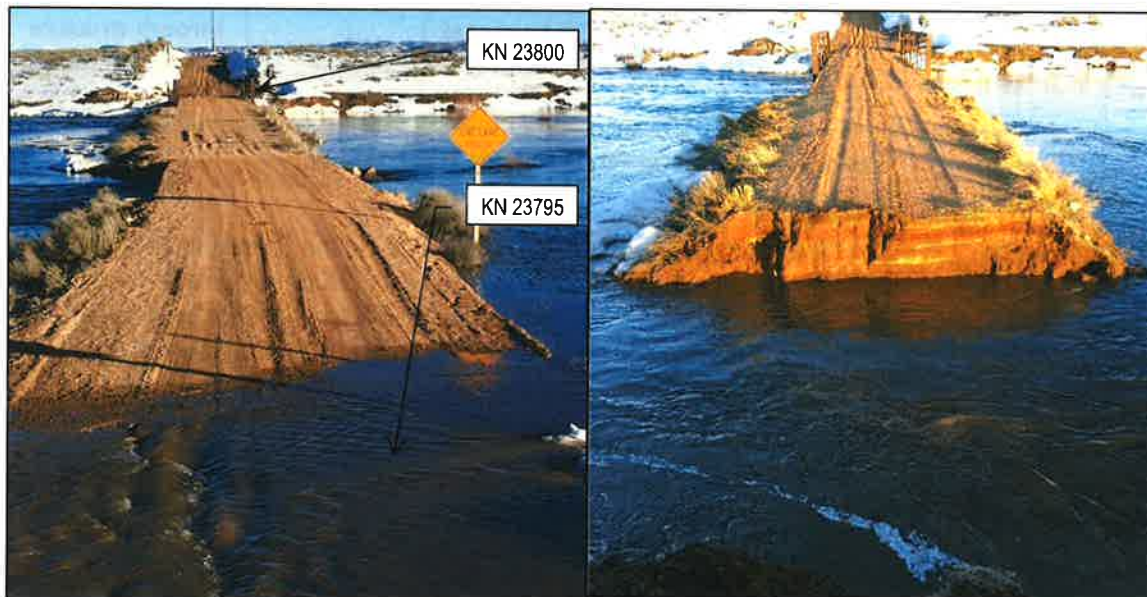


Photo 1. Floodwaters in 2017 at bridges KN23800 & KN23795 on 200 Rd S. (Looking Southwest) Take by Camas County maintenance personnel.

2.3 Analysis Methods

Several flood estimation methods and published sources were explored to determine design flood magnitudes for the project. A summary of the review and analysis results is described in the section below, which determined that the peak discharge values estimated from flood frequency analysis based on gage data and adjusted per drainage area was the most appropriate estimate of the design flood magnitudes for Camas Creek at the project location.

2.3.1 Stream Gage Data

USGS Gage 13141500 exists on Camas Creek approximately 6-miles downstream of the project site. This gauge contains a continuous record of 98 years from 1924 to 2022. Review of this gage revealed there were a wide range of flows recorded on Camas Creek, with peak flows ranging from 67 cfs to 9,780 cfs, likely due

to the capacity of the basin to store and attenuate runoff or release it all at once. Most notable were the years prior to 1966, where the gage recorded numerous years with particularly high stages that resulted in peak flows over 7,000 cfs (see Figure 2).

In an effort to corroborate this period of high flows, a nearby gage on the Big Wood River at Hailey ID (Gage 13139510) was examined. This gage is within the same regression region, contains a similar period of record, and the Big Wood River shares a similar drainage area and basin characteristics to Camas Creek. The primary difference is that the Big Wood River drainage basin contains higher average elevation and slopes than Camas Creek. Although this could explain a slight reduction in recorded annual peak flows on the Big Wood River as compared to Camas Creek considering the snowpack in the basin will not heat as quickly at the higher elevations and is less susceptible to sudden large ice jam releases, we would still expect to see some correspondence in annual peak streamflow between the two gages. However, the annual peak stream flows recorded by the Big Wood River gage do not show notably high peak flows during any years prior to 1966. After 1966, the peak streamflow appears to correspond better, with high streamflow recorded at both gages during notable events in 2006 and 2017. This seems to suggest the period of high flow years prior to 1966 recorded at the Camas Creek gage could be outlier or anomalous data points.

Table 2. Basin Characteristics Comparison

| <u>Basin Characteristic</u> | <u>Gage 13141500 on Camas Creek</u> | <u>Gage 13139510 on Big Wood River</u> |
|------------------------------------|--|---|
| Drainage Area | 625.75 sq. mi | 627.6 sq. mi |
| Mean Annual Precipitation | 18-in | 29.4-in |
| Mean Basin Elevation (NAVD88) | 5,630-ft | 7,686-ft |
| Slopes based on 10 m DEM | 15% | 42.7% |
| Percent Volcanic | 59.3 % | 27.5% |

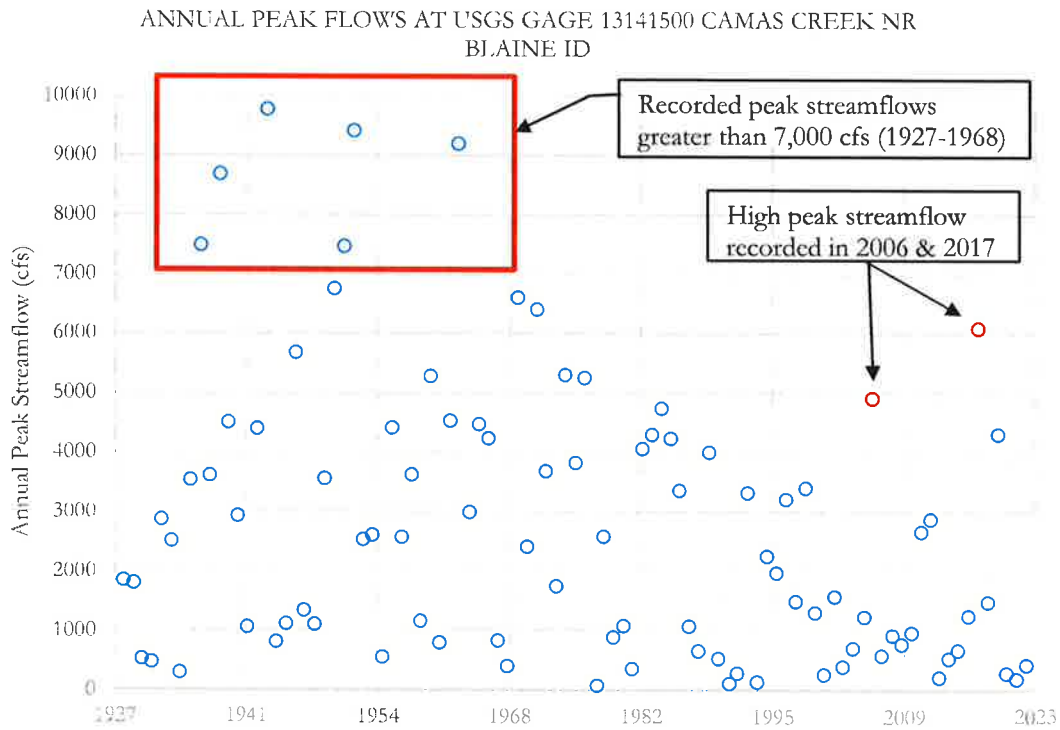


Figure 2. Annual peak streamflow at USGS Gage on Camas Creek

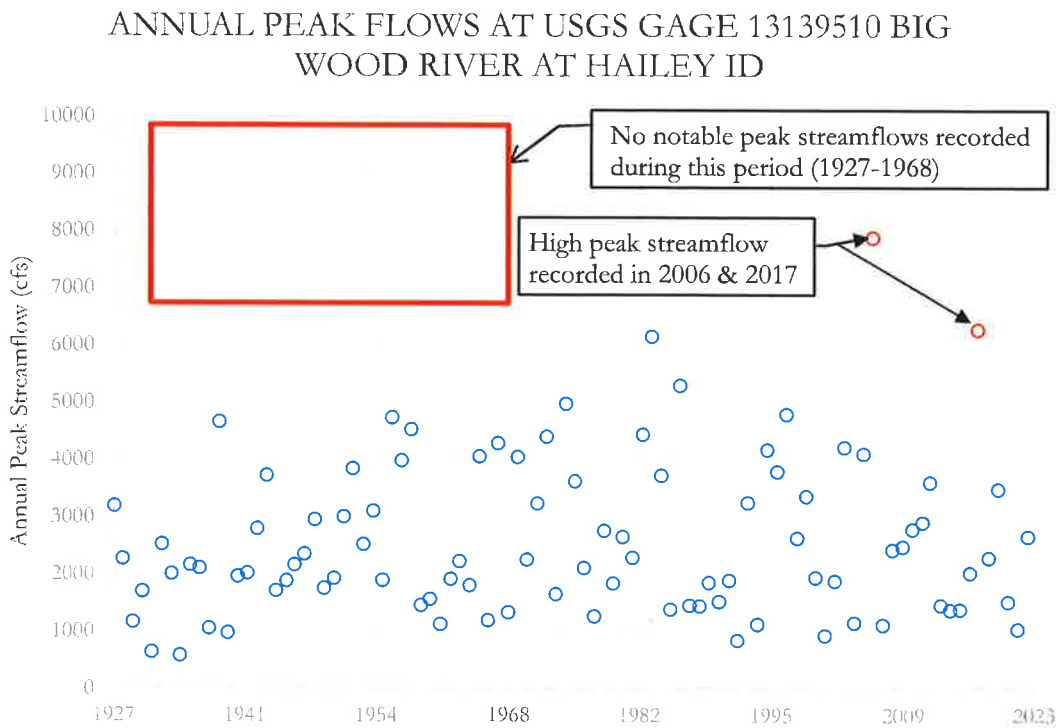


Figure 3. Annual peak streamflow at USGS Gage on the Big Wood River.

Forsgren reached out to USGS's Boise Field Office Chief Michael Allen to see if there were any additional notes recorded with the Camas Creek gage data that would explain the series of high peaks. Prior to 1966, the gage data was denoted with Qualification Code 3 indicating the gage had been moved. Michael Allen confirmed the gage location had been moved in 1967 to a new site 600-ft upstream. The reason is unknown, but USGS logs also included a note from 1963 regarding the shelter having been destroyed by floodwater and ice which may have been the reason for relocation.

Based on the information gathered at this gage, we feel there is a lack of confidence in the gage data prior to 1967 and that it would be appropriate to exclude these years in the flood frequency analysis. The gage still has a sufficient record beyond 1967 to reliably estimate design flows. The annual peak discharges from USGS Flood Frequency Analysis using USGS PeakFQ V7.4.1 for the years 1968-present are shown in the table below. Per guidance in the latest Bulletin 17C, large deviations between the regional skew and station skew may indicate that flood frequency characteristics of the watershed are different from those used to develop the regional skew. Regional skew is thought to be a function of rainfall skew, channel storage, and basin storage. Given that the station skew for this gage (-1.275) deviates from the regional skew for the Pacific Northwest (-0.07) by more than 0.5, and that this basin is known to store significant quantities of early spring runoff, we feel that the peak flow estimates without the regional skew are most representative for Camas Creek and are reported below.

Table 3. Summary of USGS Gage 13113500 peak flows from Flood Frequency Analysis Using Gaged Data

| <u>Drainage Area (sq. mi)</u> | <u>50-yr</u> (cfs) | <u>100-yr</u> (cfs) | <u>500-yr</u> (cfs) |
|-------------------------------|--------------------|---------------------|---------------------|
| 625.75 | 7,944 | 8,688 | 9,828 |

2.3.1.1 Drainage Area Adjustment Ratio

For projects that are not at gage locations but cross gaged creeks, the gage analysis may be transferred to the crossing location using a drainage-area ratio adjustment when the ratio of the ungaged site to gaged site is between 0.5 and 1.5 (ITD, Bridge Hydraulics Manual 2021). For the project location, this ratio is 0.7662 (479.46 mi²/625.75 mi²). Using Equation 9 in the USGS publication *Estimating Peak-Flow Frequency Statistics for Selected Gaged and Ungaged Sites in Naturally Flowing Streams and Rivers in Idaho* (USGS, 2017), the adjusted peak flows were computed and presented in Table 4.

Table 4. Summary of Drainage Area Adjustment for Bridges KN23800 & 23795 on Camas Creek

| <u>Parameter</u> | <u>50-yr</u> (cfs) | <u>100-yr</u> (cfs) | <u>500-yr</u> (cfs) |
|--|-----------------------|------------------------|------------------------|
| Gage 13141500 Peak Flow | 7,944 | 8,688 | 9,828 |
| Ungaged Drainage Area to Gaged Drainage Area Ratio (DA _U /DA _G) | 0.7662 | 0.7662 | 0.7662 |
| Regression Coefficient for Q ¹ | 0.919 | 0.916 | 0.912 |
| Adjusted Peak Flow | 6,220 | 6,808 | 7,709 |

1. Estimating Peak-Flow Frequency Statistics for Selected Gaged and Ungaged Sites in Naturally Flowing Streams and Rivers in Idaho, USGS Scientific Investigations Report 2016-5083; Page 24, Tab 6, Region 5.

2.3.2 **FEMA Flood Insurance Study**

No published FEMA flow data exists for Camas Creek.

2.3.3 **USGS StreamStats**

2017 USGS StreamStats regression analysis equations were utilized to estimate peak flood magnitudes for Camas Creek at the project site for comparison to the stream gage data. StreamStats predicted less conservative flood magnitudes that ranged from 20-60% of the flood frequency analysis estimates based on gage data. Given the flood frequency estimates based on gage data utilize real data for the project site and are preferred by ITD over StreamStats, as well as the known flood history of the project site, the StreamStats values appear under conservative and were not used in this analysis. The StreamStats design flood magnitudes are presented in Table 5 for reference.

Table 5. Summary of peak flows from 2017 USGS StreamStats

| | <u>50-yr</u> (cfs) | <u>100-yr</u> (cfs) | <u>500-yr</u> (cfs) |
|-----------------|-----------------------|------------------------|------------------------|
| Peak Flow (cfs) | 1,620 | 1,840 | 2,310 |

2.3.4 **Hydrology Adopted for Analysis**

Based on the preference for using actual gage data, the projects locations within the limits of the drainage area adjustment ratio, and the known flooding history at the project site, the flood frequency analysis using USGS Gage 13113500 peak flow data adjusted with the drainage area adjustment applied was adopted for this analysis as summarized in Table 6.

Table 6. Summary of Peak Flows Adopted for Analysis

| | <u>50-yr</u> (cfs) | <u>100-yr</u> (cfs) | <u>500-yr</u> (cfs) |
|------------------------|-----------------------|------------------------|------------------------|
| Peak Flow (cfs) | 6,220 | 6,808 | 7,709 |

3.0 HYDAULICS

3.1 **Hydraulic Model**

Given the wide shallow floodplains and complex braided channel of Camas Creek at this location, it was determined that a single 2D hydraulic model was most appropriate to evaluate the 200 S bridge crossings. SMS SRH-2D (V13.3.13) was developed to estimate the existing and proposed hydraulic conditions for the design flood magnitudes at the crossing.

3.2 **Topography Data**

FA collected bathymetric and topographic survey data in 2023 to create a digital terrain surface from which the hydraulic model was based on. The topographic data references the Idaho State Plane Central coordinate system and the NAVD88 vertical datum. The survey data was supplemented with LiDAR published by the USGS in 2023 to extend the model perimeter across the entire 500-yr floodplain.

3.3 **Existing Structure**

The 200 South Road crossing Camas Creek contains two aging bridges and two CMP relief culverts of which can be seen in Figure 4. Bridge 23800 crosses over the main channel and bridge 23795 crosses over an auxiliary side channel.

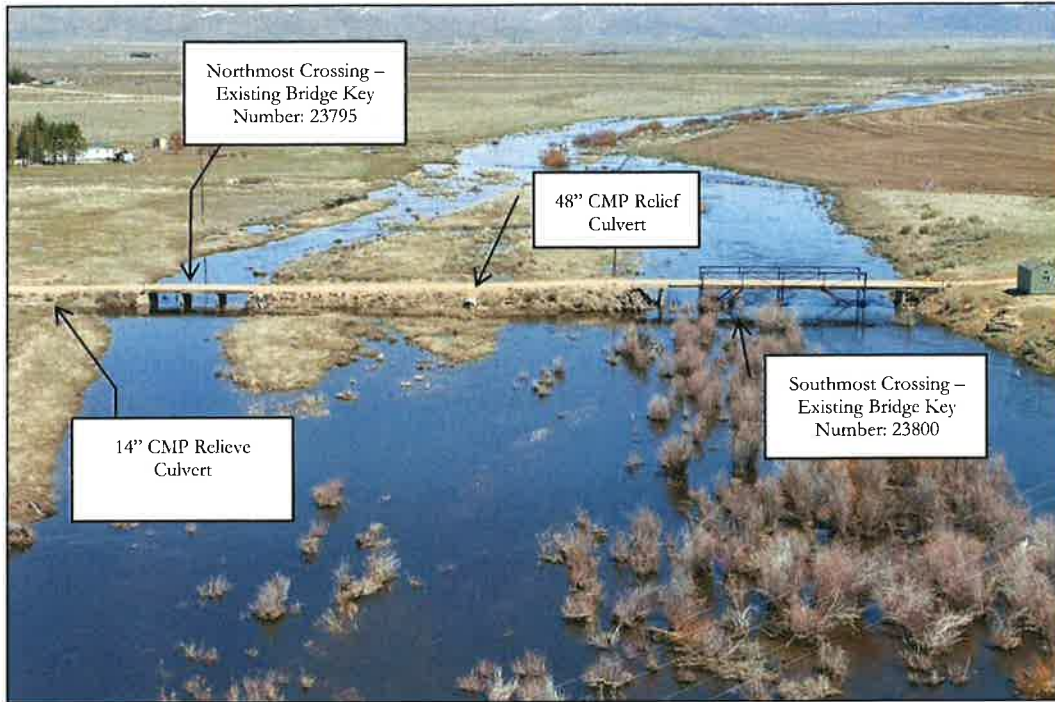


Figure 4. Upstream face of 200 S Rd over Camas Creek (FA Survey, Spring 2023)

The southern crossing (existing bridge key number 23800) was built in 1920 and was later reconstructed in 1950. The structure consists of four main spans and two approach spans. The main spans are supported on steel columns, while the approach spans are supported on reinforced concrete pier walls and abutments. The bridge deck consists of corrugated steel supported on timber girders. The total hydraulic opening is 107-ft wide normal to channel, with a surveyed low chord elevation of 4,992.70-ft (NAVD88). Several wetland species were identified during a field survey conducted on September 25th, 2023, along the banks of the main channel at and around the main bridge.

The most recent inspection report dated June of 2023 found that the structure condition was rated a 2 (intolerable). The inspection noted visible distortion on several of the steel members, with bending and torsional distortion noted at the steel columns. Both reinforced concrete and steel pier footings are exposed, with riprap in place to reduce sediment transport. The embankments were noted to be in good condition and are well vegetated. It should be noted that scour critical was rated to be unknown, no undermining of the bridge piers/abutments was noted.



Figure 5. 23800 bridge, downstream (left) and upstream (right) bridge faces (FA Survey, 2023)

The northmost crossing (existing bridge key number 23795) was built in 1950 and was later reconstructed in 1978. The structure consists of a three-span, corrugated steel deck, timber girders supported on reinforced concrete abutments and pier footing. The total hydraulic opening is 35-ft wide normal to channel, with a surveyed low chord elevation of 4,990.31-ft (NAVD88). During the environmental field survey, Hairy Water Clover was Identified under bridge 23795, along with other wetlands species such as Reed Canary Grass and Arroyo Willows that were found at and around the bridge 23795 indicating the side channel consists of wetland areas.

The most recent inspection report dated June of 2023 found that the structure condition was rated a 4 (minimum tolerable). The inspection noted the pier walls and abutments were in poor condition due to excessive spalling, cracking, and abrasion. The embankments were noted to be in good condition and are well vegetated. It should be noted that scour critical was rated to be unknown, no undermining of the bridge piers/abutments was noted.



Figure 6. 23795 bridge, downstream (left) and upstream (right) bridge faces (FA Survey, 2023)

3.4 Existing Conditions Model

The existing conditions model was based on observed and measured data to form a baseline from which to compare post-project results. Sensitivity analyses were performed on the downstream normal depth boundary condition and Manning's roughness coefficient. The channel has a very low gradient slope through the project site and was sensitive to changes in the downstream boundary condition slope at the bridge crossing even after it was moved 2,000-ft downstream of the crossing location. Moving it farther downstream would not reduce sensitivity since the channel cross-section became less defined beyond this point. The roughness properties were less sensitive to reasonable changes in the parameters used.

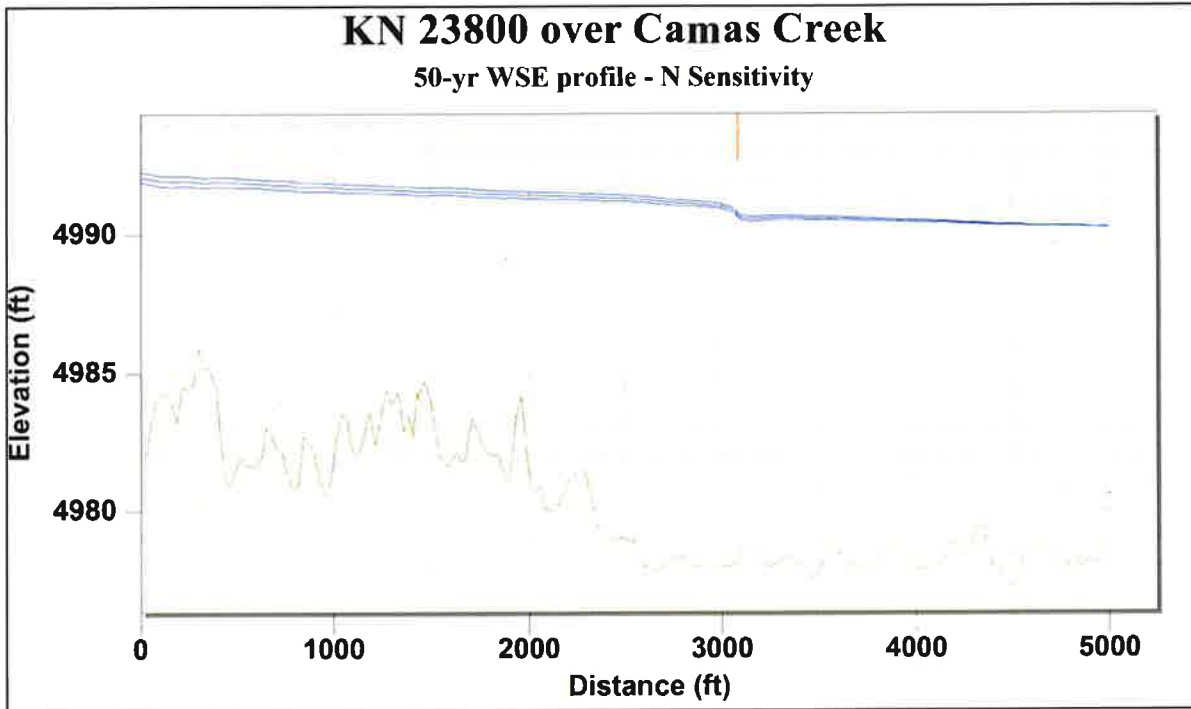


Figure 7. 50-yr Water Surface Elevation Profile – Mannings N Sensitivity Analysis

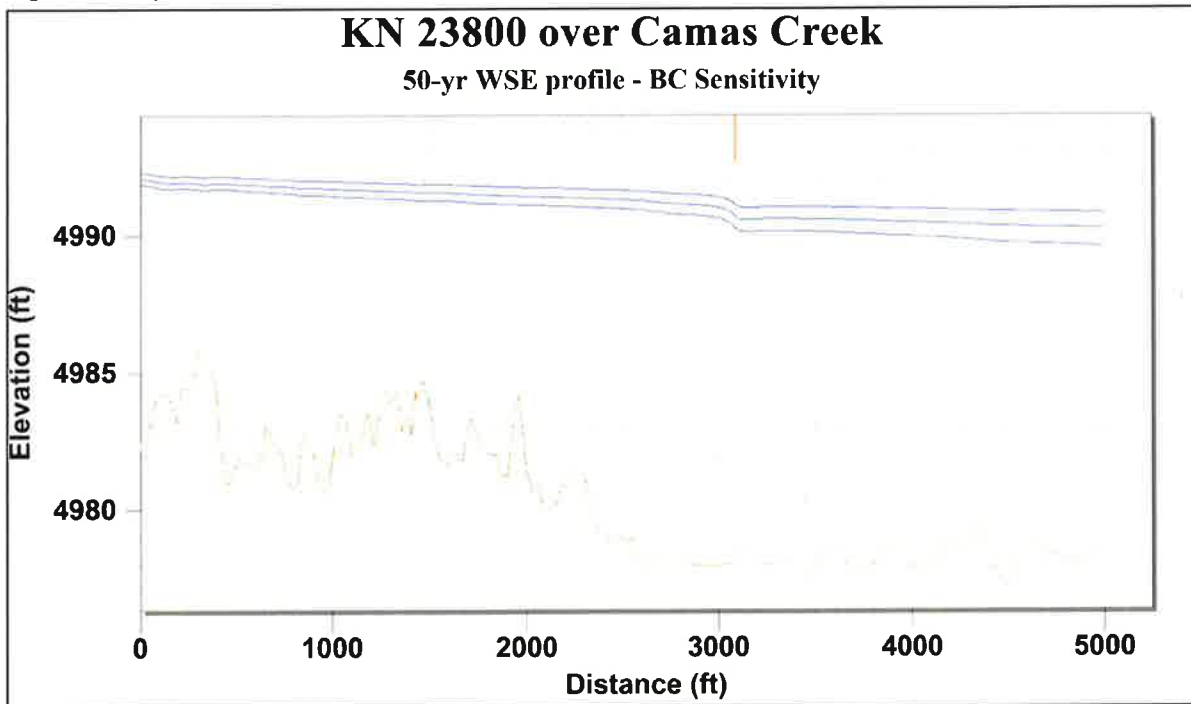


Figure 8. 50-yr Water Surface Elevation Profile – DS Boundary Condition Sensitivity Analysis

To calibrate the model inputs, first-hand accounts and photographs of recent flood events along with stream gage data were used to determine appropriate normal depth slope and roughness coefficients. Photos were taken during a high flood event in 2017 by Camas County officials (see Photo 1). The photos show floodwaters above the bridges low chord's and overtopping the roadway just north of Bridge 23795 where the roadway elevation is lowest. The water surface elevation for that flood event was determined to be 2"-4" above the minimum roadway elevation.

It was assumed this event occurred during the peak flood that year. Therefore, streamflow was estimated using the peak stream flow recorded at USGS gage 13141500 in the year 2017 (6,080 cfs). This flood magnitude is estimated to be near the 10-yr recurrence interval, therefore the USGS's drainage area ratio adjustment for the 10-yr regression coefficient was applied to compute a streamflow at the project site of 4,756 cfs. Running this flow data in the model yields a water surface elevation that is consistent with that estimated for the photographed flood event and verifies the model's input parameters and the output water surface elevations are reasonable. The calibration simulation did not include the 4-ft CMP culvert as this had not been installed until after flooding occurred in 2017.

The existing conditions model was then run with the calibrated model inputs (including the 4-ft CMP culvert). The model indicates bridge neither bridge meets current ITD freeboard requirements. See Table 7 for a summary of the existing bridge freeboard for the design flood magnitudes and Figure 10 for the cross-section and Figures 11 & 12 for the water surface profile through the existing bridges.

Table 7. Summary of Existing Bridge Freeboard Results

| <i>Design Flood Magnitude</i> | <i>Bridge 23800</i> | | | <i>Bridge 23795</i> | | |
|-------------------------------|---------------------|-----------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|
| | <i>WSE (ft)</i> | <i>Freeboard (ft)</i> | <i>Existing Low Chord Elev. (ft)</i> | <i>WSE (ft)</i> | <i>Freeboard (ft)</i> | <i>Existing Low Chord Elev. (ft)</i> |
| <i>50-yr Flood</i> | 4,991.00 | 1.70 | 4,992.70 | 4,991.03 | -0.72 | 4,990.31 |
| <i>100-yr Flood</i> | 4,991.25 | 1.45 | | 4,991.30 | -0.99 | |
| <i>500-yr Flood</i> | 4,991.56 | 1.14 | | 4,991.61 | -1.30 | |

**All elevations refer to NAVD88 vertical datum.*

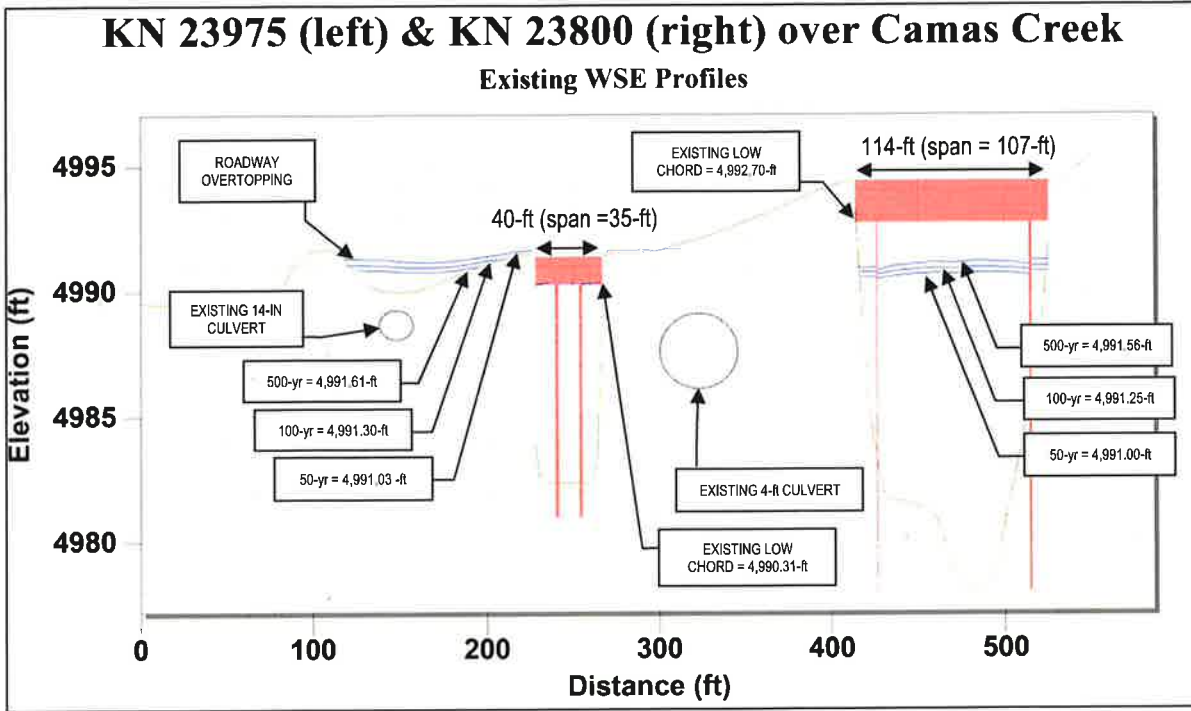


Figure 9. Existing Cross-section (SMS SRH-2D)

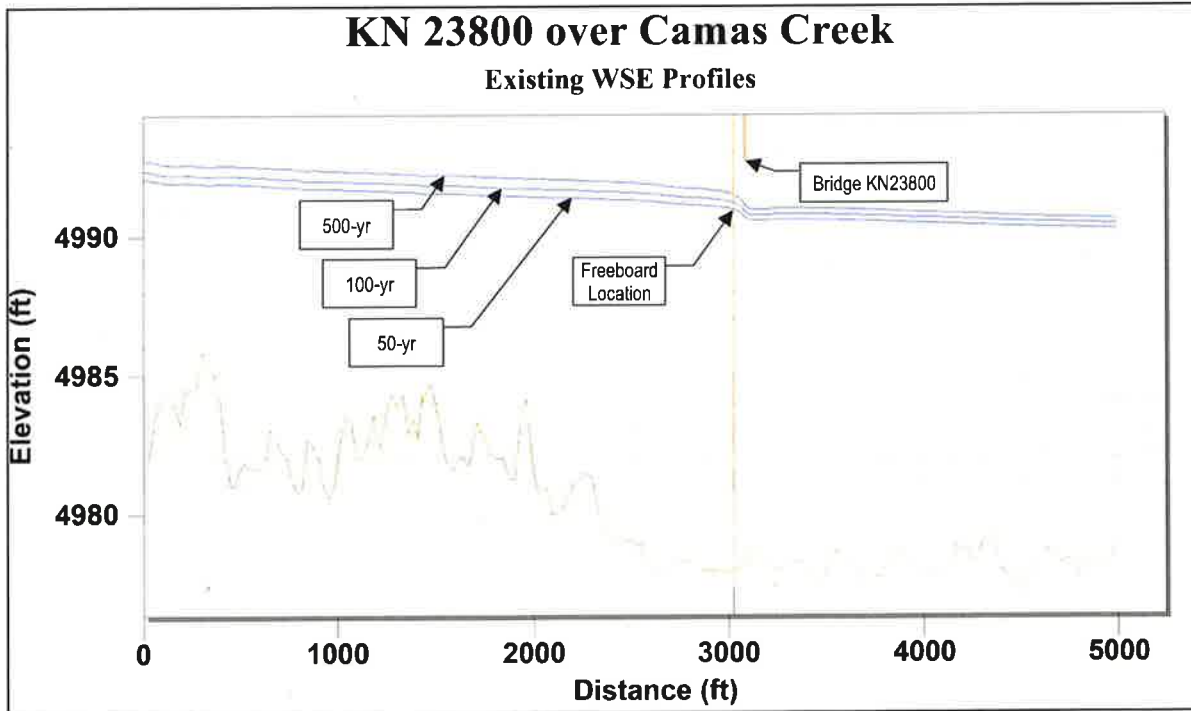


Figure 10. 50-yr, 100-yr, & 500-yr water surface profile through the existing bridge 23800.

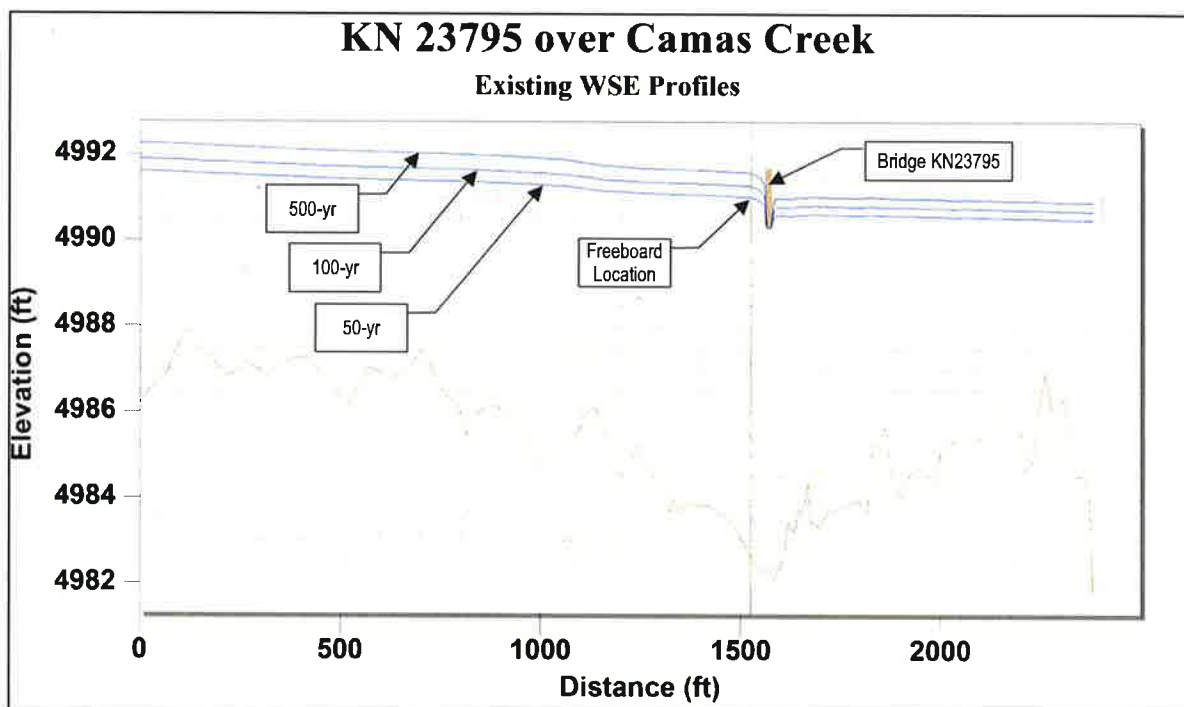


Figure 11. 50-yr, 100-yr, & 500-yr water surface profile through the existing bridge 23795.

3.5 Proposed Structure

A two span symmetric prestressed concrete girder bridge with an out-to-out width of 30-ft is proposed for the 200 S crossing over Camas Creek. Each 101.75-ft span, each resulting in a 99-ft hydraulic opening, will be supported by the reinforced concrete spread footings. A 2-ft wide round nose wall pier is proposed with a 3.5-ft wide by 3.5-ft tall round nose pier cap. The abutments will have 16-ft long wingwalls at a 90-degree angle relative to the roadway centerline.

3.6 Proposed Conditions Model

The proposed conditions model was developed from the existing conditions model to represent the replacement of the two existing bridge crossings with a single, two-span bridge structure. Under existing conditions, the main channel bifurcates upstream into two flow paths: the primary (southern) channel, which conveys most of the flow through the southern bridge (KN 23800), and a secondary (northern) relief channel, which passes through a separate bridge crossing (KN 23795) at the northern extent of the floodplain.

Under proposed conditions, the southern bridge will be replaced by a larger two-span bridge that will accommodate both the main and relief channel flow paths. The northern relief channel will be regraded and redirected to pass through the northeast span of the proposed structure, consolidating both flow paths under a single crossing. The existing northern bridge will be removed along with the existing culverts, and the abutment area will be filled and replaced with two 48-inch diameter CMP culverts to maintain local wetland hydrology and ecological connectivity. The two proposed culverts are set at a 0.675% grade and are each 80-ft in length.

The proposed channel realignment geometry was developed in Civil 3D and imported into SRH-2D for hydraulic modeling. The realigned relief channel follows a similar longitudinal profile to existing conditions

to limit changes in sediment transport and minimize risk of aggradation or degradation. To maintain grade continuity with the main channel, a 2-foot drop structure was incorporated near the downstream tie-in.

The proposed relief channel has a 25-foot bottom width and 5H:1V side slopes that daylight into existing ground replicating the existing overflow channel. A minimum depth of approximately 2 feet from channel invert to top of bank is maintained by incorporating a 2-foot-wide berm that daylights at a 5H:1V slope. To improve hydraulic tie-in at the downstream end, the side slopes transition from 5H:1V to 2H:1V over a length of approximately 40 feet prior to merging with the existing main channel.

All terrain and mesh element spacing remain consistent with the existing conditions model beyond the proposed impact areas. Manning’s n values were maintained consistent with existing conditions for comparable channel and overbank areas. The revised flow path was verified to maintain continuity with the existing floodplain hydraulics and to remain stable under a 2-year design flow.

The proposed conditions model indicates the proposed bridge meets current ITD freeboard requirements as summarized in Table 8. Water surface elevation for freeboard measurement was taken 50-ft upstream of the bridge along an arc perpendicular to flow vectors as shown in Figure 12. The proposed bridge cross-section with design flood water surface elevations are shown in Figure 13 the water surface profiles through the proposed bridge is shown in Figure 14.

Table 8. Proposed Results Summary

| Design Flood Magnitude | Bridge 23796 | | |
|------------------------|--------------|----------------|----------------------|
| | WSE (ft) | Freeboard (ft) | Low Chord Elev. (ft) |
| 50-yr Flood | 4990.78 | 2.02 | 4992.80 |
| 100-yr Flood | 4990.99 | 1.81 | |
| 500-yr Flood | 4991.24 | 1.56 | |

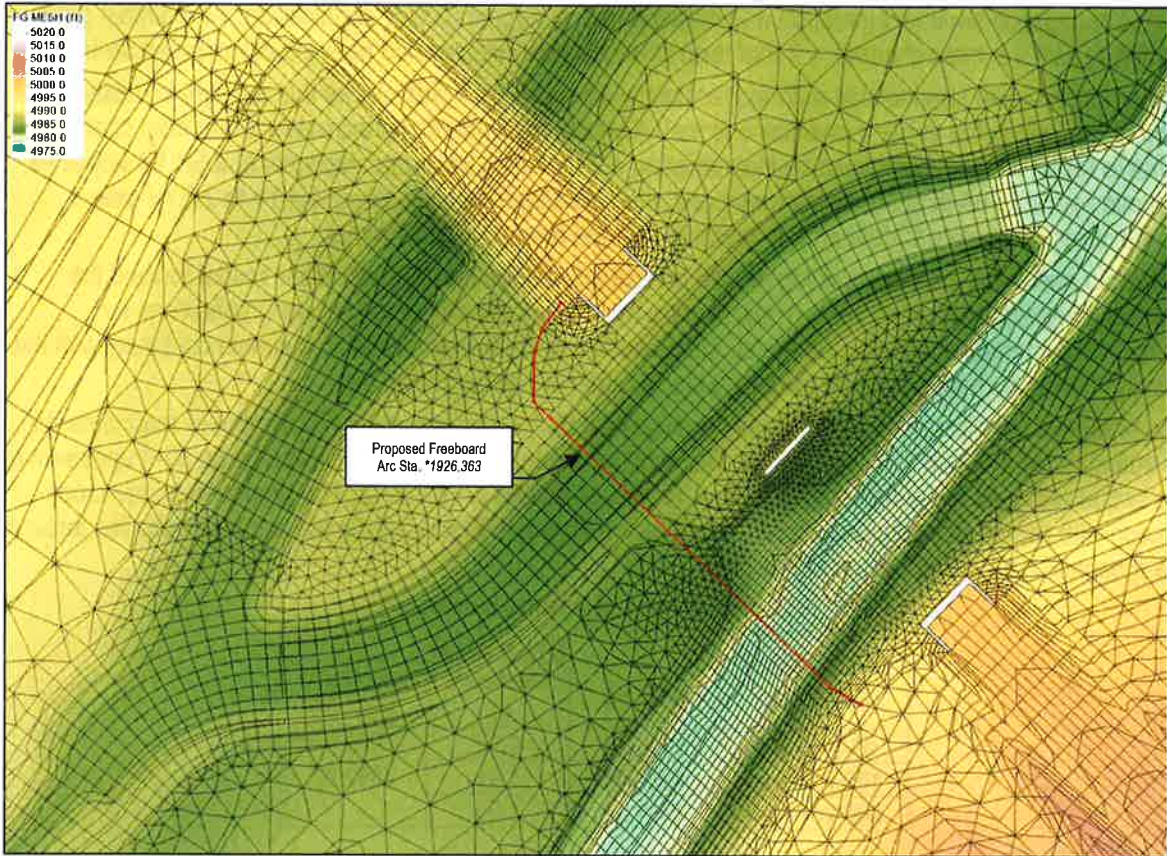


Figure 12. Proposed model mesh with freeboard arc location (SMS SRH-2D)

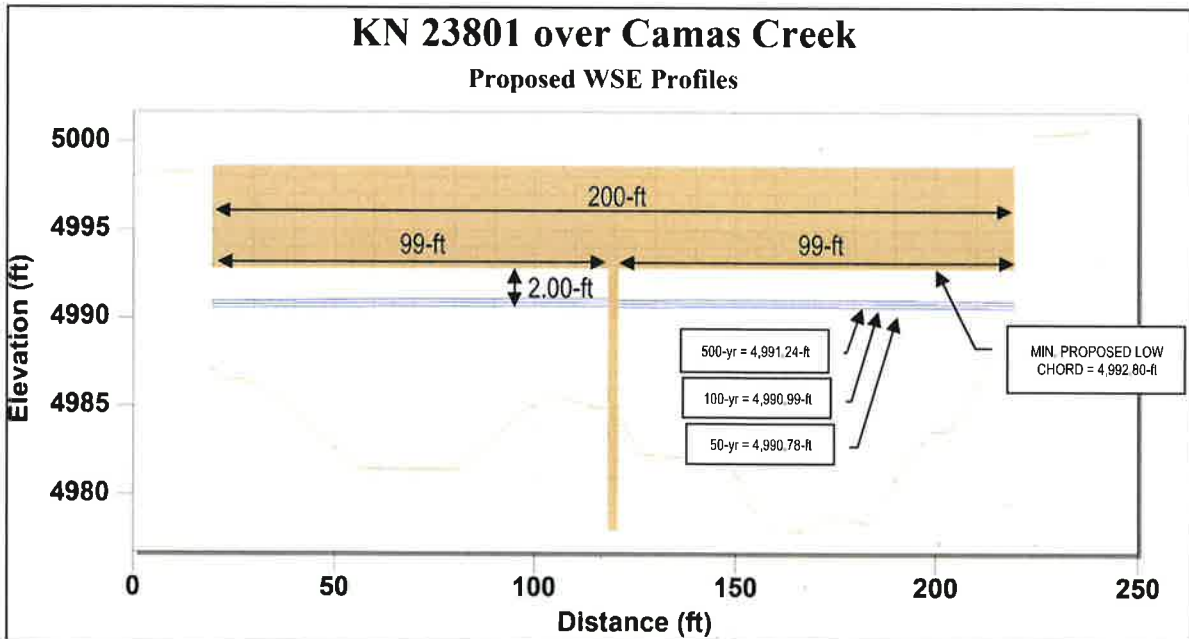


Figure 13. Proposed Bridge XS (SMS SRH-2D)

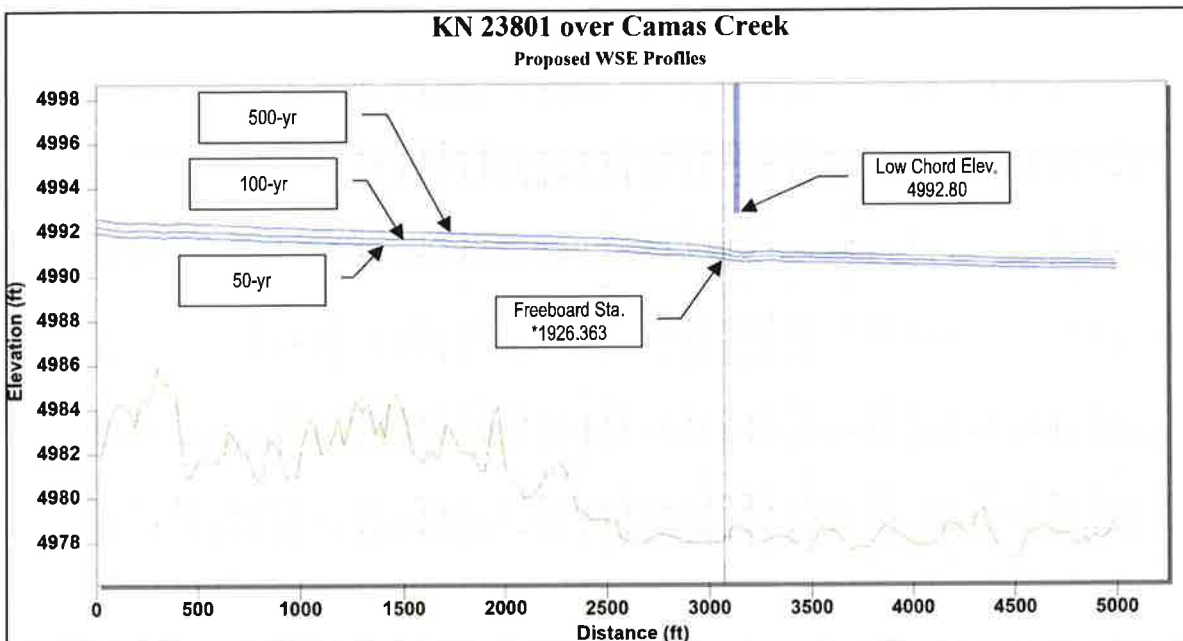


Figure 14. 50-yr, 100-yr, & 500-yr water surface profile through the proposed bridge 23801.

4.0 SCOUR

4.1 Scour Assessment

A review of historical aerial imagery indicated Camas Creek in the vicinity of the proposed bridge site is laterally stable showing no discernable changes over the last 30 years. Based on available data, there is no evidence of long-term degradation, and we do not assume any adjustments to scour depth due to site specific soil conditions or long-term general scour at the bridge site.

Shannon and Wilson performed three borings at the project site in December 2024. Borings were located at the proposed North Abutment (B-1), Pier (B-2), and South Abutment (B-3). Depth to bedrock (basalt or weathered basalt) from existing ground was determined to be 8.5-ft (Elev. 4977.9) at the North Abutment, 7-ft (Elev. 4978.1) at the Pier, and 2-ft (Elev. 4992.4) at the south abutment. Shannon and Wilson also conducted a sieve analysis on a stream bed sample, and a median particle diameter size of 0.636-mm was obtained and described as poorly graded sand. Upon visiting the site, the bed consisted mostly of fine sand, with minimal gravel and cobbles. A preliminary scour assessment was made, and scour depths exceeded the depth of bedrock. Considering these factors, reinforced concrete spread footings were selected as the foundation type for both abutments and the center pier.

Contraction scour was evaluated based on the proposed conditions model to assess if armoring was necessary to bedrock depth. Contraction scour elevations were down to bedrock as shown in Table 9. It is recommended that riprap be placed down at 2:1 from the face of abutment down to bedrock elevation for each abutment. Since both the abutments and pier will be founded on bedrock, evaluation of abutment scour and pier scour were not performed.

Table 9. Contraction Scour Results

| Scour Event | SDF (Q_{100}) | SCF (Q_{500}) |
|------------------------------------|----------------------|----------------------|
| Flow (cfs) | 6,808 | 7,709 |
| Flow Condition | Free-Flow | Free-Flow |
| General Scour | | |
| Long-term Degradation(LTD) | 0.00 | 0.00 |
| Streambed Thalweg Elev. | 4,978.02 | 4,978.02 |
| Min. Channel Elev. with LTD | 4,978.02 | 4,978.02 |
| Contraction Scour | | |
| Contraction Scour | 8.05 | 8.46 |
| Contraction Scour Elev. (with LTD) | 4,969.97 | 4,969.56 |

A critical velocity index (CVI) plot was prepared to evaluate mobility of the bed material based on the critical velocity of 2.19 fps calculated for the D_{50} bed sediment size provided in the geotechnical analysis. This evaluation indicated that most of the channel bed throughout the reach would be mobile in the 50-year flood as shown in Figure 15. Similarly, a critical velocity index (CVI) plot for the 2-year flood was prepared, Figure 16, indicating that sediment mobility occurs in the main channel but not much of the overbank area. One location along the south bank of the channel realignment indicated sediment mobility and is proposed to be protected with riprap. Additionally, the channel realignment transitions, upstream and downstream, and two intermediate grade controls are proposed at the upstream and downstream side of the bridge.

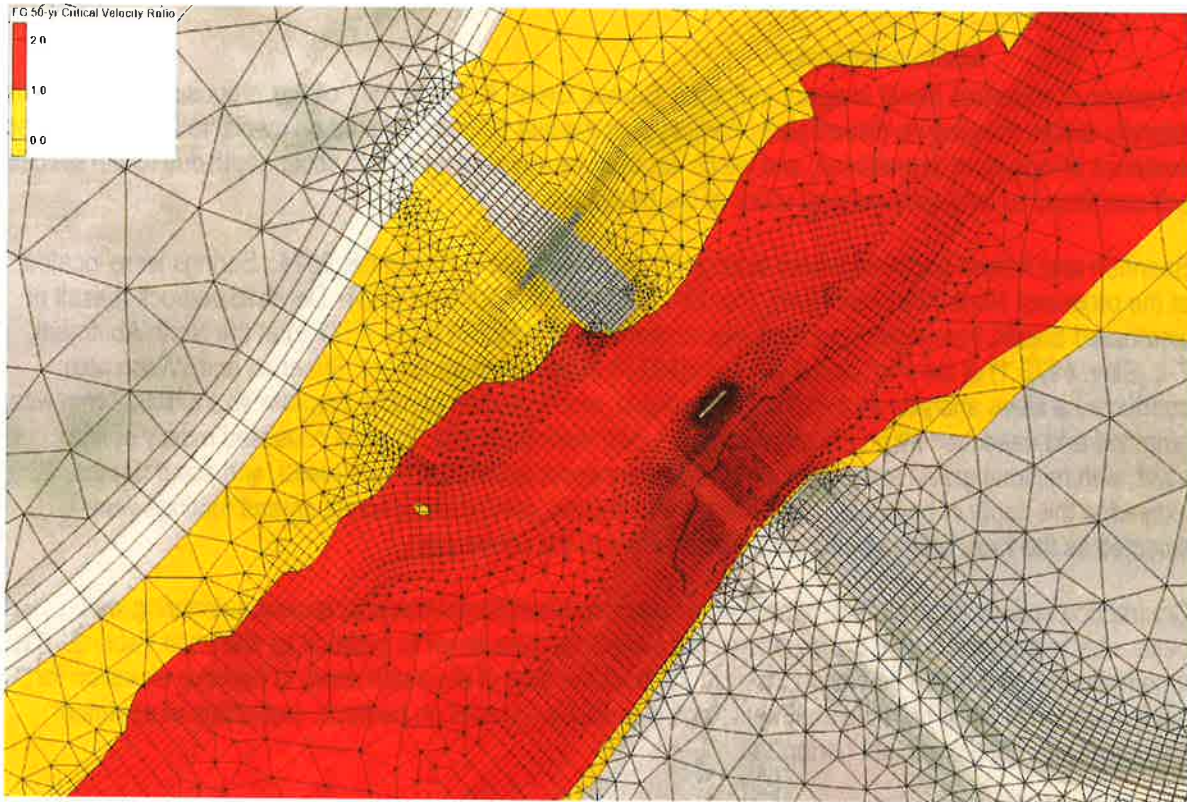


Figure 15. Critical Velocity Index for 50-year flood at proposed bridge 23801. CVI>1 red (mobile) and CVI<1 stable (yellow).

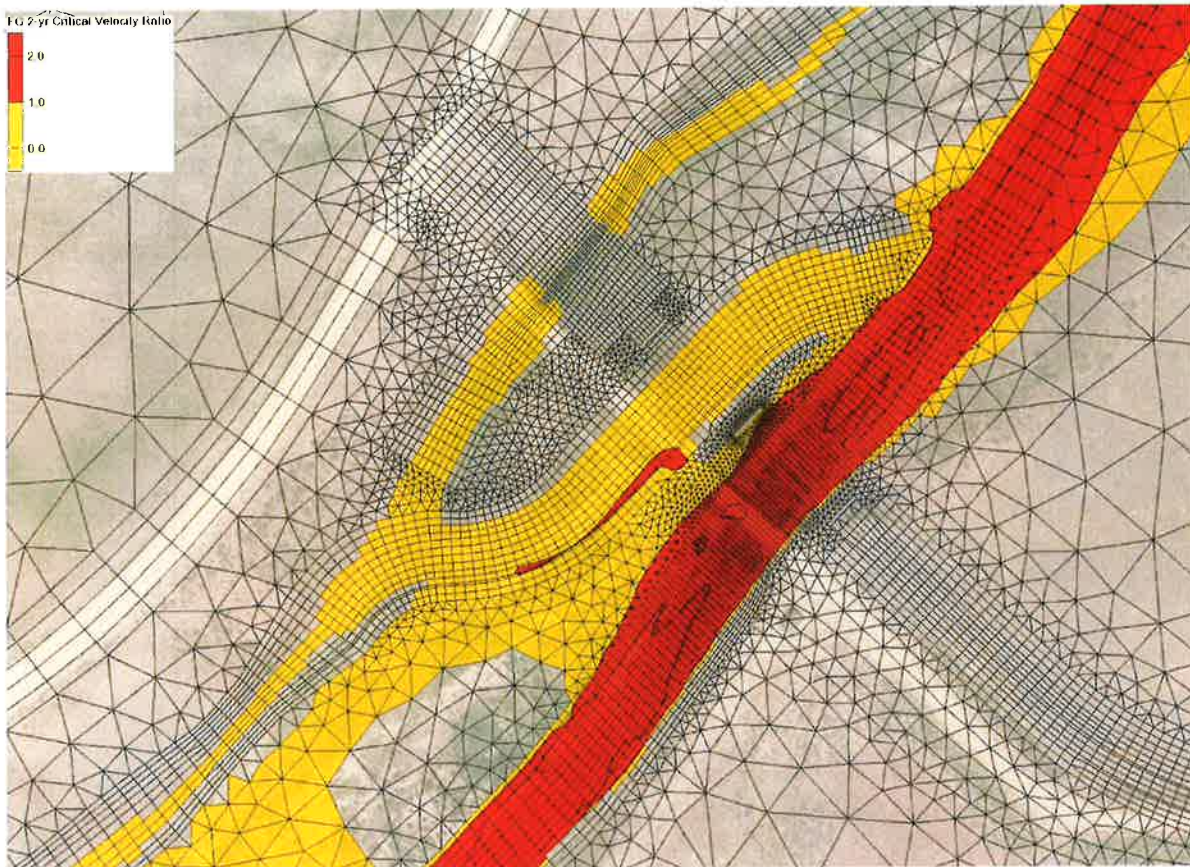


Figure 16. Critical Velocity Index for 2-year flood at proposed bridge 23801. CVI>1 red (mobile) and CVI<1 stable (yellow).

4.2 Scour Countermeasure Evaluation

Based on guidance in the FHWA Technical Brief for Shallow Foundations (FHWA A-HIF-19-007) and ITD Bridge Hydraulics Manual, a riprap scour countermeasure is required to protect the bridge approach embankments from scour. The following are recommended riprap size and layout guidelines following HEC-23 Design Guide 14 for riprap at bridge abutments are summarized as follows:

- 1) Riprap D_{50} = 1-ft (min) underlain with geosynthetic filter fabric per ITD 718.06 construction spec.
- 2) Riprap blanket thickness = 2.0ft (min)
- 3) Riprap top elevation: Flush with top of bank (Minimum Elev. 4991.99)
- 4) Riprap should be configured to cover the abutment embankment extending a minimum distance of 25-ft upstream and downstream of the bridge. Riprap should be buried so that the top of the riprap is flush with the existing grade and has a maximum slope of 2H:1V.
- 5) Spread footings and pier must be founded on competent rock.
- 6) Riprap grade control structures will be added at the proposed channel realignment. The grade control structures shall match the typical section of the proposed channel configuration, with a bottom width of 25-ft and 5H:1V side slopes that daylight to existing, minimum 2-ft depth. Grade control structure must utilize the same D_{50} of 1-ft and a blanket thickness of 2-ft.
- 7) Where the proposed bottom of channel is less than 2-ft from the top of the proposed channel bank, a 2-ft berm from the channel bed should be provided. This section should have a 2-ft thickness of riprap than extends 4-ft out from toe of slope and 2-ft back of top of slope.

Rock Riprap at Bridge Abutments (HEC-23 - DG.14)

Project KN 23801
 200 S over Camas Creek
 Date: 10/15/2025
 Prepared By: Grayson Marshall
 Checked By: Timothy Richard, PE

| Channel Property | Value | Units | Remarks |
|------------------|---------|-----------------|----------------------------|
| y | 12.49 | ft | Flow depth in main channel |
| Q | 2023.13 | cfs | Discharge in main channel |
| A | 388.39 | ft ² | Flow area in main channel |

*Hydraulic Inputs from Hydraulic Model

Step 1. Determine SBR (set-back distance divided by the average channel flow depth)

Determine the set-back ratio (SBR) of each abutment. SBR is the ratio of the set-back length to channel flow depth. The set-back length is the distance from the near edge of the main channel to the toe of abutment.

SBR = Set-back length/average channel flow depth

| | | |
|----------------------|-------|----|
| Set-Back Length = | 0.00 | ft |
| Channel flow depth = | 12.49 | ft |
| SBR = | 0.00 | |

Step 2. Determine characteristic average velocity, V.

| | | | |
|------------|------|------|--|
| V = | 5.21 | ft/s | Used 100-year maximum velocity through bridge opening. |
| Check Vc = | 5.21 | ft/s | |

The SBR method is well suited for estimating velocity at an abutment if the estimated velocity does not exceed the maximum velocity in the channel.

Step 3. Determine the Froude Number of the flow.

| | |
|------|------|
| Fr = | 0.26 |
|------|------|

Step 4. Determine the D50 of the riprap for the abutment.

| | | | |
|-------|------|----|------------|
| D50 = | 0.52 | ft | FR <= 0.80 |
| D50 = | 3.58 | ft | FR > 0.80 |

For Froude Numbers <= 0.80, Equation 14.1 is recommended:

$$\frac{D_{50}}{y} = \frac{K}{(S_s - 1)} \left[\frac{V^2}{gy} \right]$$

| | | |
|-----|------|-------------------------|
| K = | 1.02 | Vertical Wall Abutments |
| K = | 0.89 | Spill-Through Abutments |

For Froude Numbers > 0.80, Equation 14.2 is recommended:

$$\frac{D_{50}}{y} = \frac{K}{(S_s - 1)} \left[\frac{V^2}{gy} \right]^{0.14}$$

| | | |
|-----|------|-------------------------|
| K = | 0.69 | Vertical Wall Abutments |
| K = | 0.61 | Spill-Through Abutments |

| | | | |
|--|---|------|----|
| D ₅₀ (minimum) | = | 0.52 | ft |
| D ₅₀ (design) | = | 1.00 | ft |
| Rip-Rap Thickness (1.5 x D ₅₀) | = | 1.5 | ft |
| Recommended Rip Rap Thickness | = | 2 | ft |

Figure 17. Riprap minimum D50 size

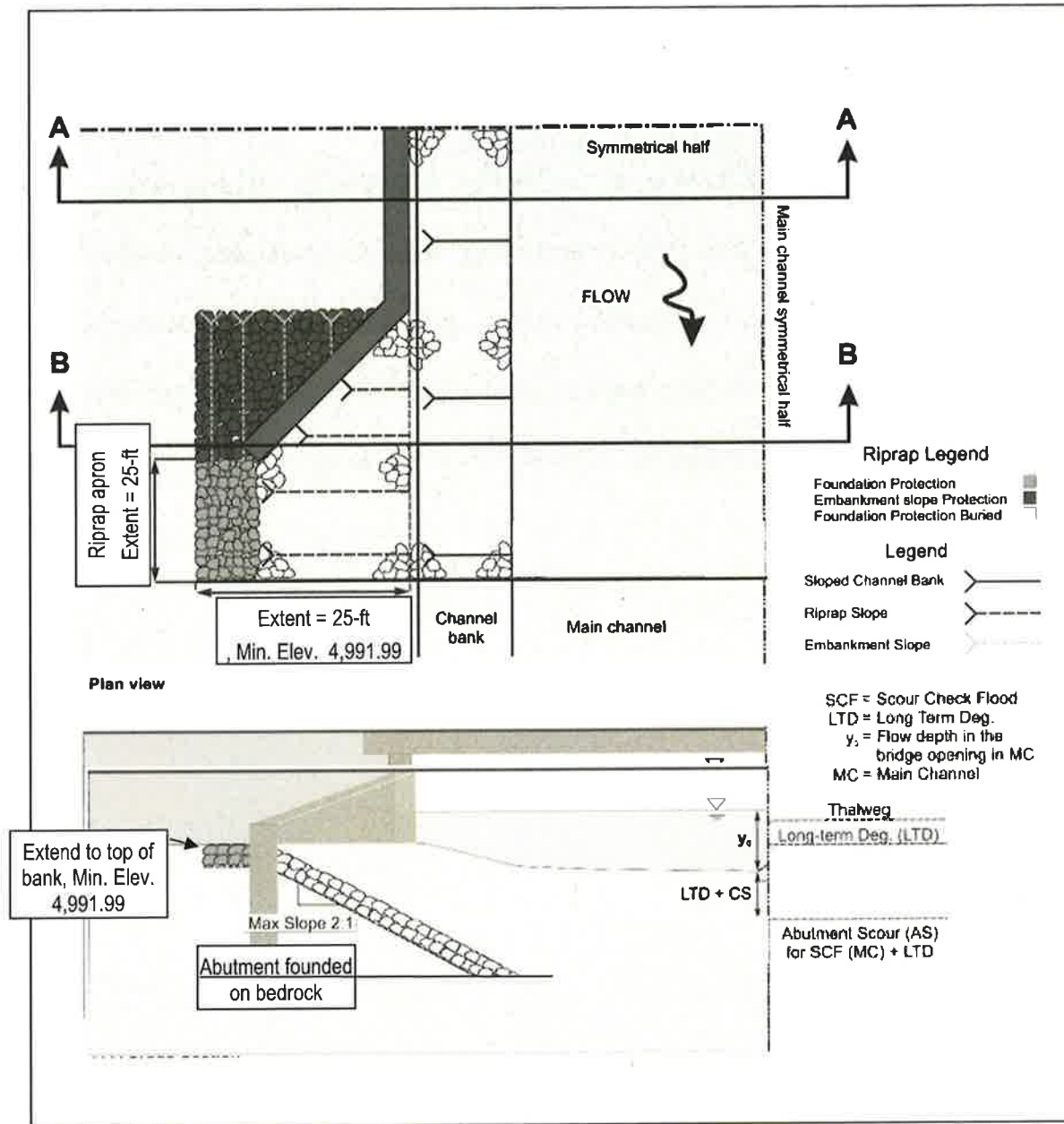


Figure 18. Free-Flow Surface Flow, Wide-Opening scour countermeasure, abutment near channel bank (Fig. 6) from FHWA A-HIF-19-007 Technical Brief modified for bridge founded on bedrock.

5.0 REFERENCES

Idaho Department of Environmental Quality. 2007. Camas Creek Total Maximum Daily Load Implementation Plan for Agriculture.

Idaho Transportation Department. 2021. Bridge Hydraulics Manual.

Federal Highway Administration. 2020. Hydraulic Considerations for Shallow Abutment Foundations, FHWA-HIF-19-007.

Federal Highway Administration. 2012. Hydraulic Engineering Circular No. 18, Evaluating Scour at Bridge (Fifth Edition).

Federal Highway Administration. 2019. Hydraulic Considerations for Shallow Abutment Foundations, Tech Brief.

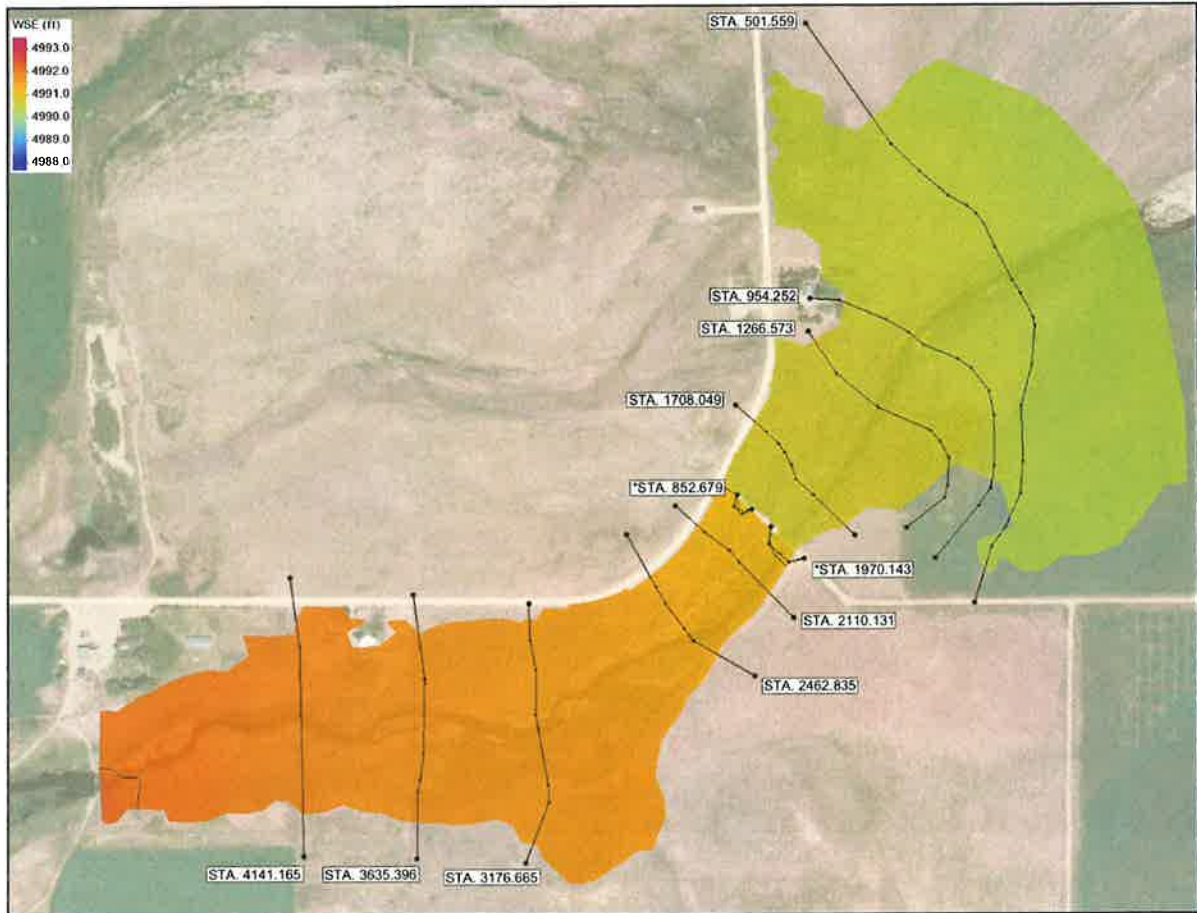
Shannon & Wilson. August 18, 2025. Geotechnical Engineering Report 200 S. Ove Camas Creek Bridge Key NO. 23800, Camas County, Idaho.

U.S. Geological Survey. 2019. Guidelines for Determining Flood Flow Frequency Bulletin 17C. Techniques and Methods 4–B5.

PRE-PROJECT MODEL RESULTS

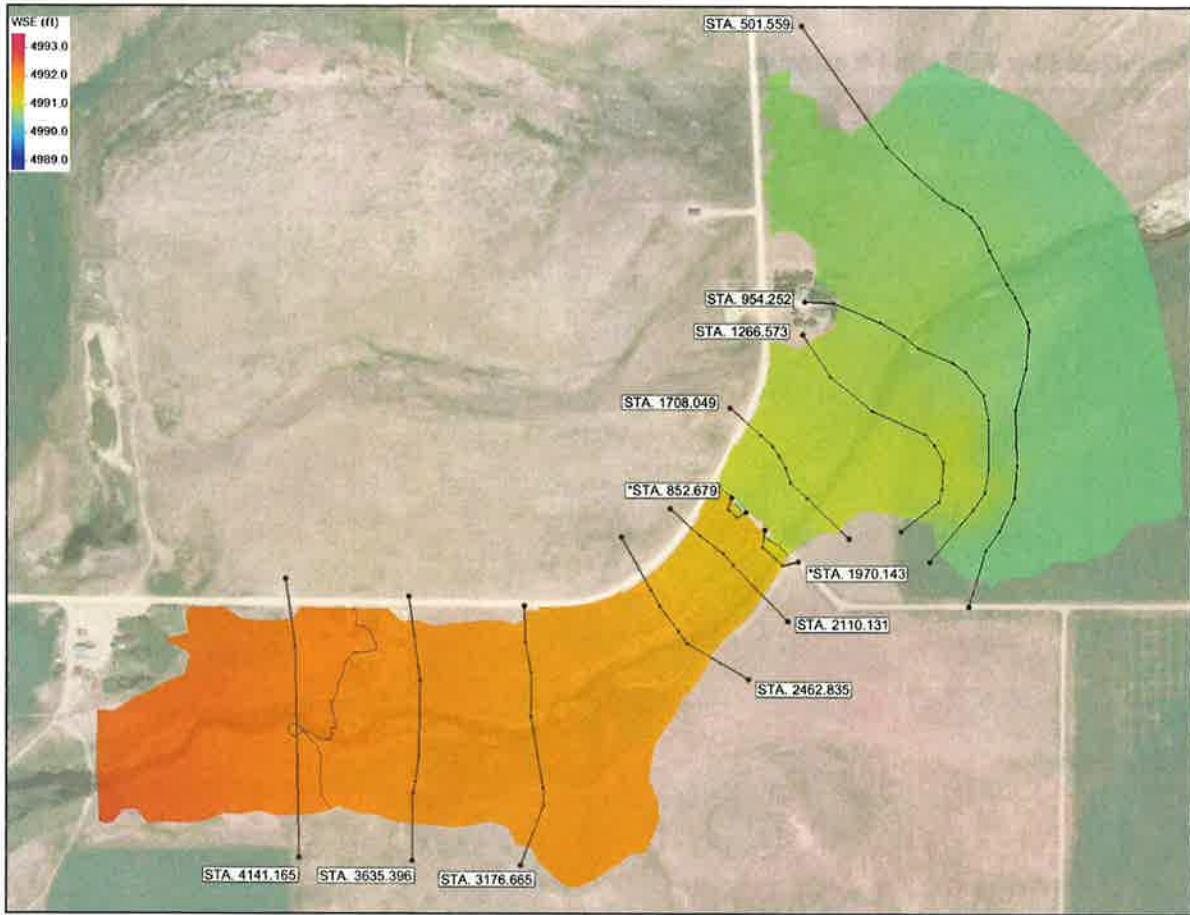
WSE Results

Pre-Project 50-yr WSE with 1-ft contours



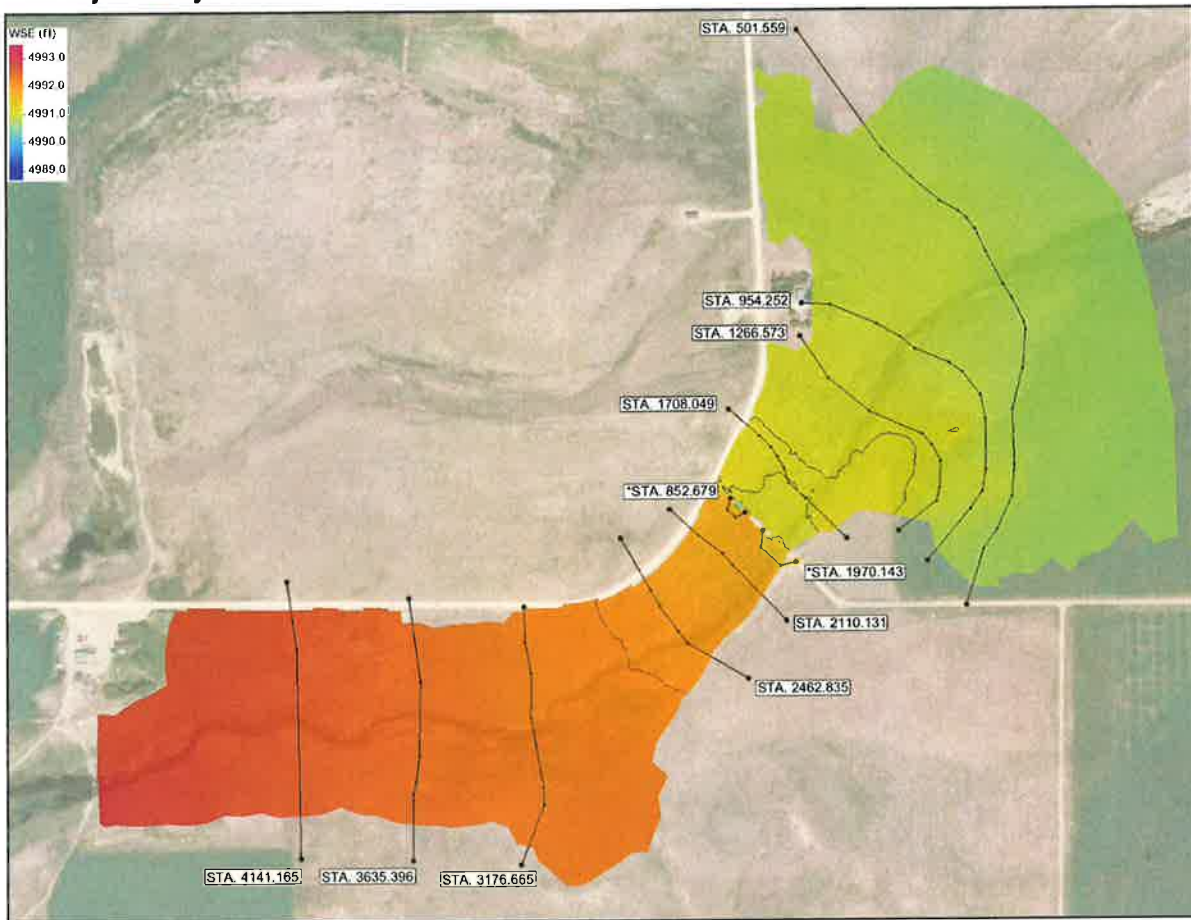
| EG 50-yr WSE (ft) | | | |
|-------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.25 | 4990.33 | 4990.37 |
| 954.252 | 4990.38 | 4990.42 | 4990.48 |
| 1266.573 | 4990.54 | 4990.55 | 4990.58 |
| 1708.049 | 4990.59 | 4990.61 | 4990.66 |
| *1970.143 | 4990.96 | 4991 | 4991.1 |
| 2110.131 | 4991.07 | 4991.1 | 4991.16 |
| 2462.835 | 4991.26 | 4991.28 | 4991.31 |
| 3176.665 | 4991.43 | 4991.48 | 4991.52 |
| 3635.396 | 4991.58 | 4991.6 | 4991.62 |
| 4141.165 | 4991.7 | 4991.75 | 4991.77 |
| *852.679 | 4991.01 | 4991.03 | 4991.08 |

Pre-Project 100-yr WSE with 1-ft contours



| EG 100-yr WSE (ft) | | | |
|--------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.46 | 4990.53 | 4990.59 |
| 954.252 | 4990.55 | 4990.63 | 4990.72 |
| 1266.573 | 4990.69 | 4990.76 | 4990.84 |
| 1708.049 | 4990.79 | 4990.81 | 4990.86 |
| *1970.143 | 4991.21 | 4991.25 | 4991.36 |
| 2110.131 | 4991.33 | 4991.36 | 4991.42 |
| 2462.835 | 4991.53 | 4991.55 | 4991.58 |
| 3176.665 | 4991.71 | 4991.76 | 4991.8 |
| 3635.396 | 4991.87 | 4991.89 | 4991.91 |
| 4141.165 | 4991.98 | 4992.04 | 4992.06 |
| *852.679 | 4991.26 | 4991.3 | 4991.35 |

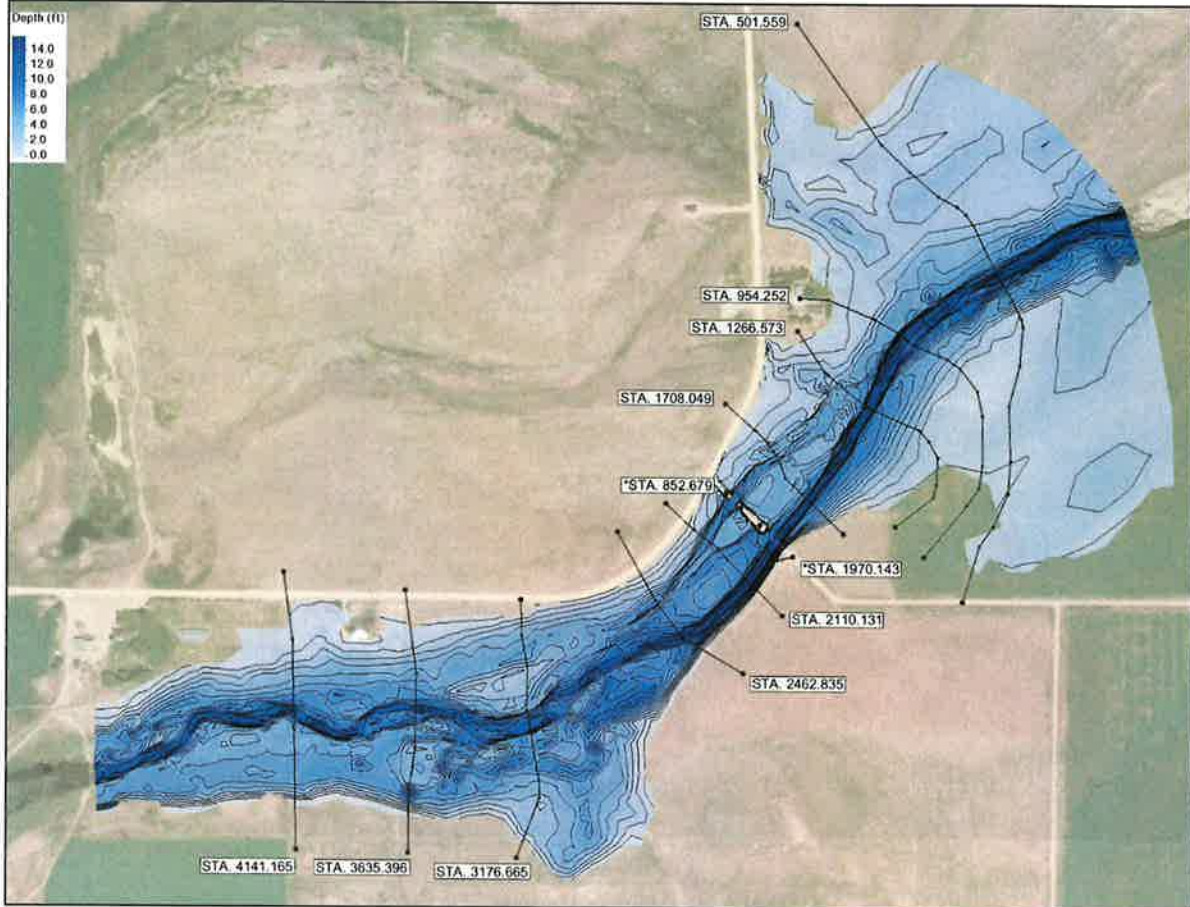
Pre-Project 500-yr WSE with 1-ft contours



| EG 500-yr WSE (ft) | | | |
|--------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.67 | 4990.72 | 4990.76 |
| 954.252 | 4990.72 | 4990.81 | 4990.88 |
| 1266.573 | 4990.87 | 4990.94 | 4990.98 |
| 1708.049 | 4991 | 4991.02 | 4991.09 |
| *1970.143 | 4991.49 | 4991.56 | 4991.76 |
| 2110.131 | 4991.64 | 4991.67 | 4991.74 |
| 2462.835 | 4991.86 | 4991.9 | 4991.93 |
| 3176.665 | 4992.08 | 4992.13 | 4992.17 |
| 3635.396 | 4992.24 | 4992.25 | 4992.27 |
| 4141.165 | 4992.35 | 4992.41 | 4992.44 |
| *852.679 | 4991.45 | 4991.61 | 4991.68 |

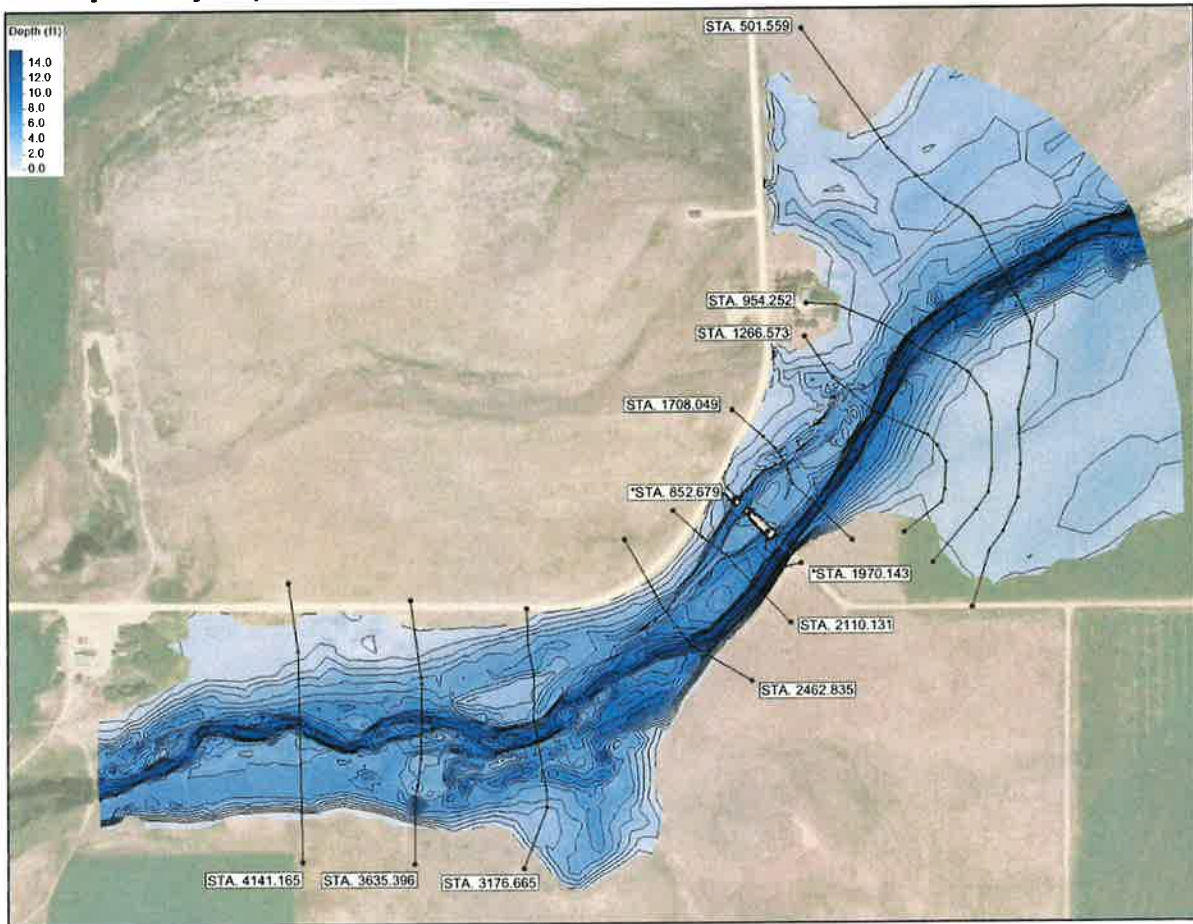
Depth Results

Pre-Project 50-yr depth with 1-ft contours



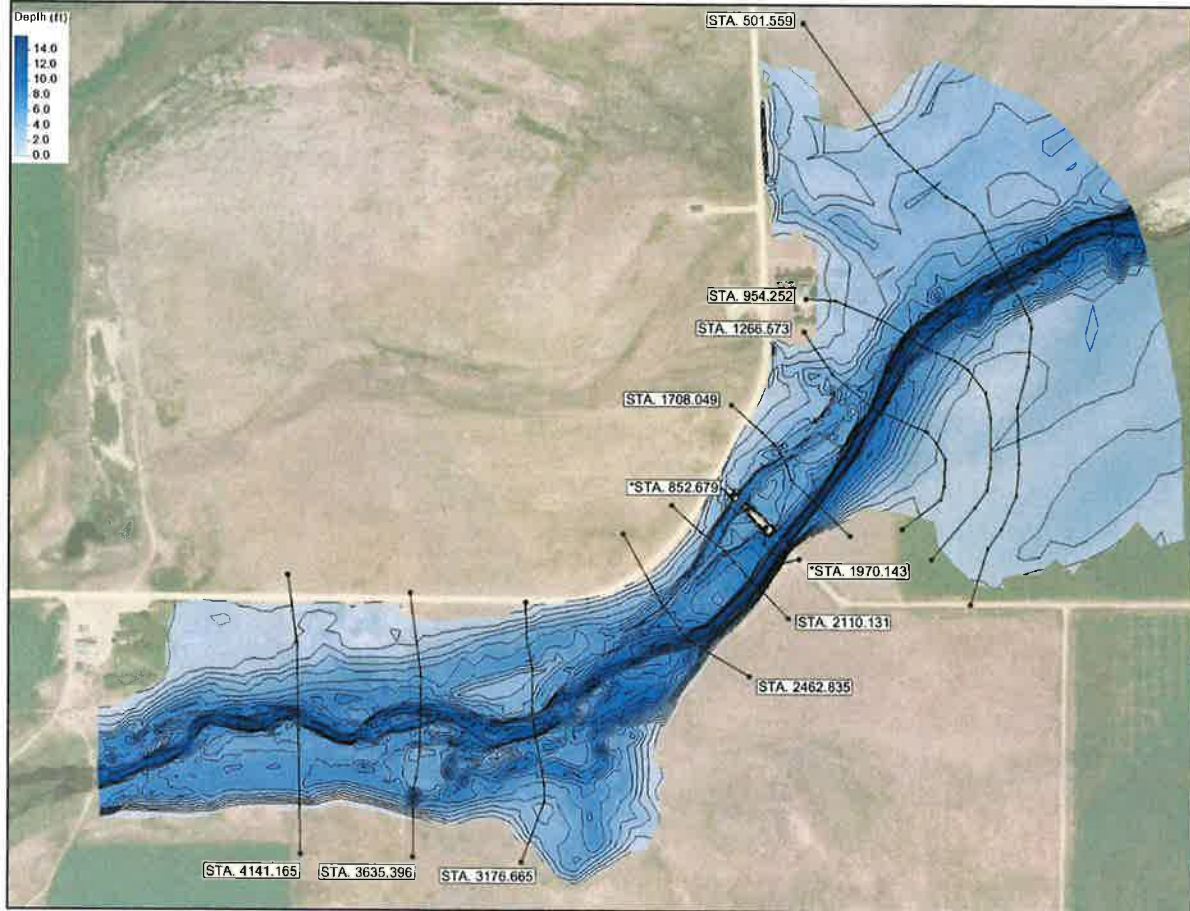
| EG 50-yr Depth (ft) | | |
|---------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 1.78 | 13.2 |
| 954.252 | 2.53 | 12.75 |
| 1266.573 | 3.6 | 12.91 |
| 1708.049 | 4.48 | 12.75 |
| *1970.143 | 8.68 | 13.11 |
| 2110.131 | 5.9 | 13.28 |
| 2462.835 | 6.15 | 12.6 |
| 3176.665 | 4.17 | 10.22 |
| 3635.396 | 4.46 | 10.94 |
| 4141.165 | 3.81 | 11.05 |
| *852.679 | 5.87 | 8.55 |

Pre-Project 100-yr depth with 1-ft contours



| EG 100-yr Depth (ft) | | |
|----------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 1.91 | 13.39 |
| 954.252 | 2.1 | 12.94 |
| 1266.573 | 2.96 | 13.11 |
| 1708.049 | 4.68 | 12.94 |
| *1970.143 | 8.93 | 13.36 |
| 2110.131 | 6.16 | 13.55 |
| 2462.835 | 6.42 | 12.87 |
| 3176.665 | 4.34 | 10.51 |
| 3635.396 | 4.45 | 11.23 |
| 4141.165 | 4.01 | 11.34 |
| *852.679 | 5.81 | 8.8 |

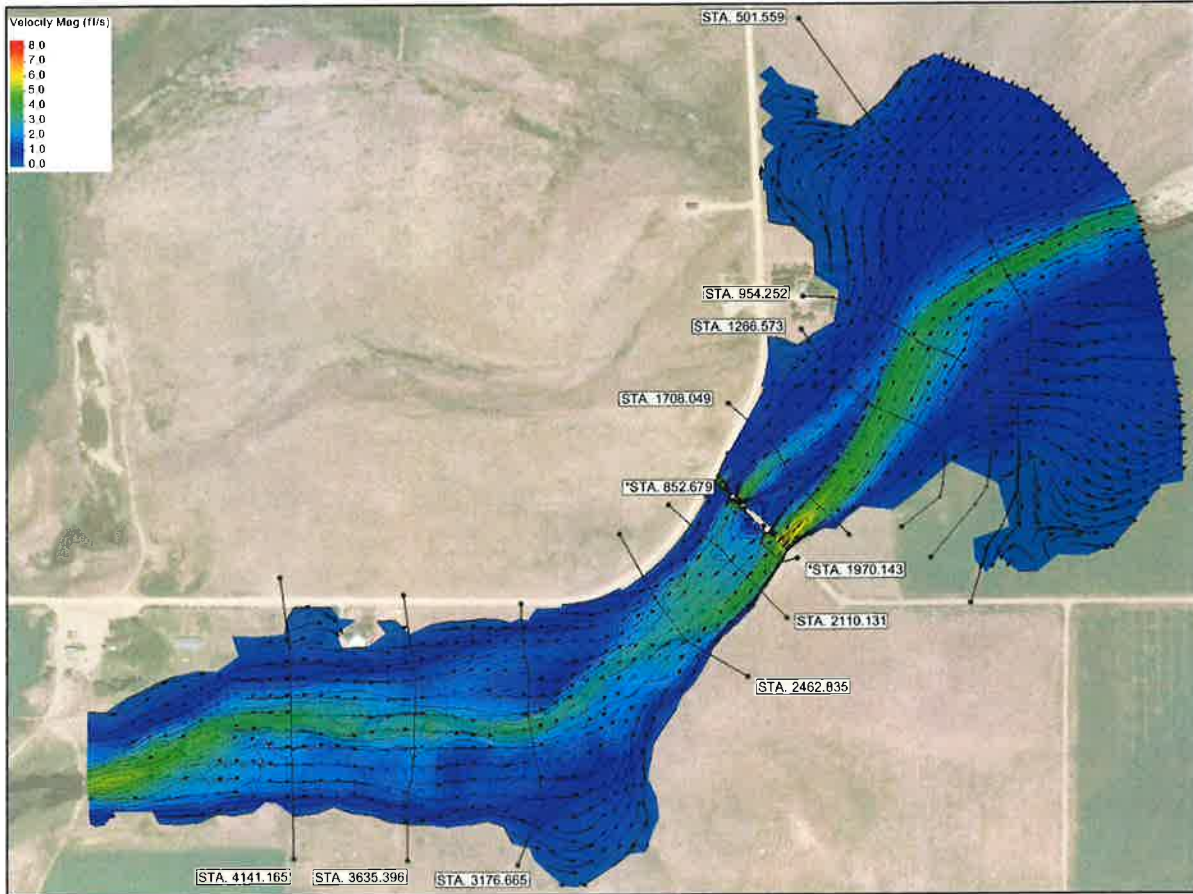
Pre-Project 500-yr depth with 1-ft contours



| EG 500-yr Depth (ft) | | |
|----------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 2.07 | 13.58 |
| 954.252 | 2.13 | 13.14 |
| 1266.573 | 3.14 | 13.32 |
| 1708.049 | 4.89 | 13.15 |
| *1970.143 | 8.35 | 13.65 |
| 2110.131 | 6.48 | 13.87 |
| 2462.835 | 6.77 | 13.22 |
| 3176.665 | 4.63 | 10.88 |
| 3635.396 | 4.82 | 11.59 |
| 4141.165 | 4.15 | 11.72 |
| *852.679 | 5.89 | 9.11 |

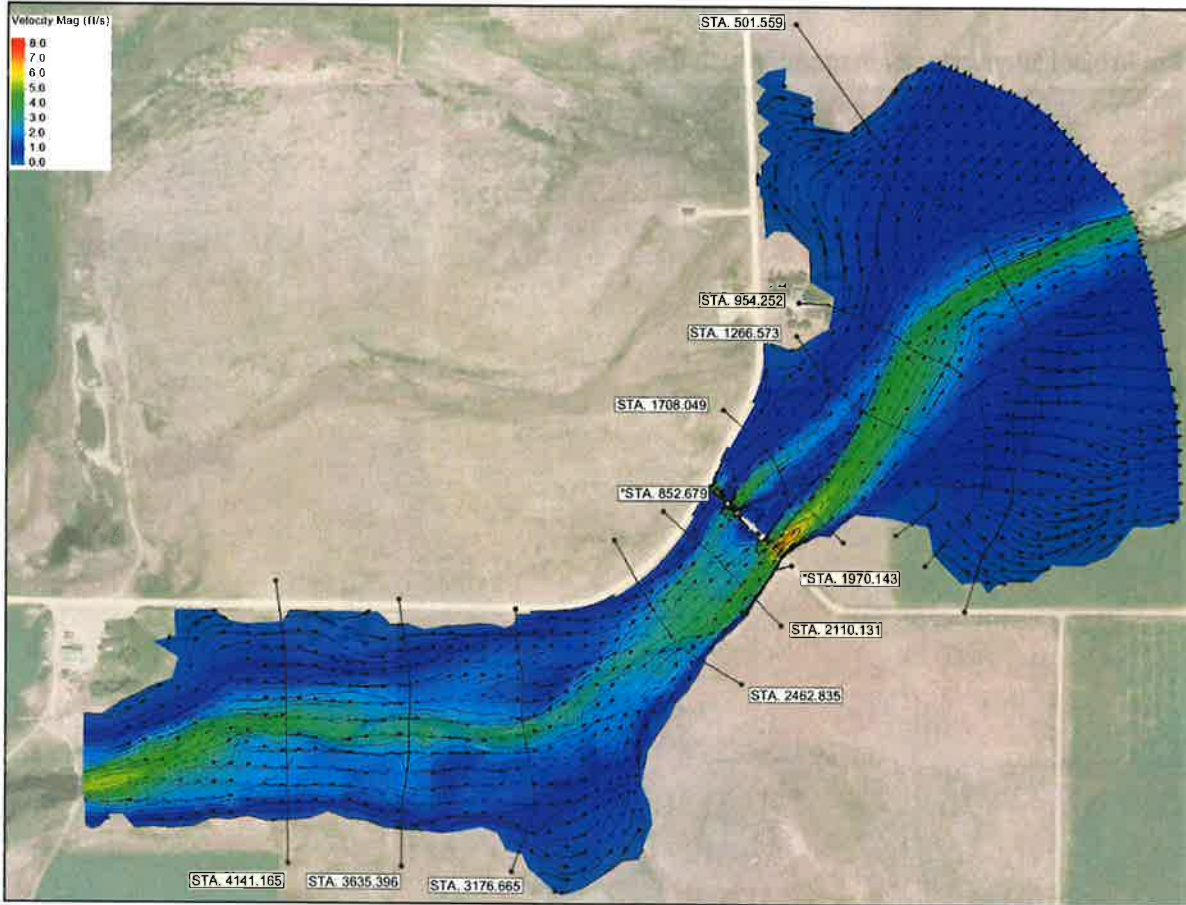
Velocity Results

Pre-Project 50-yr velocity magnitude with 0.5-ft contours



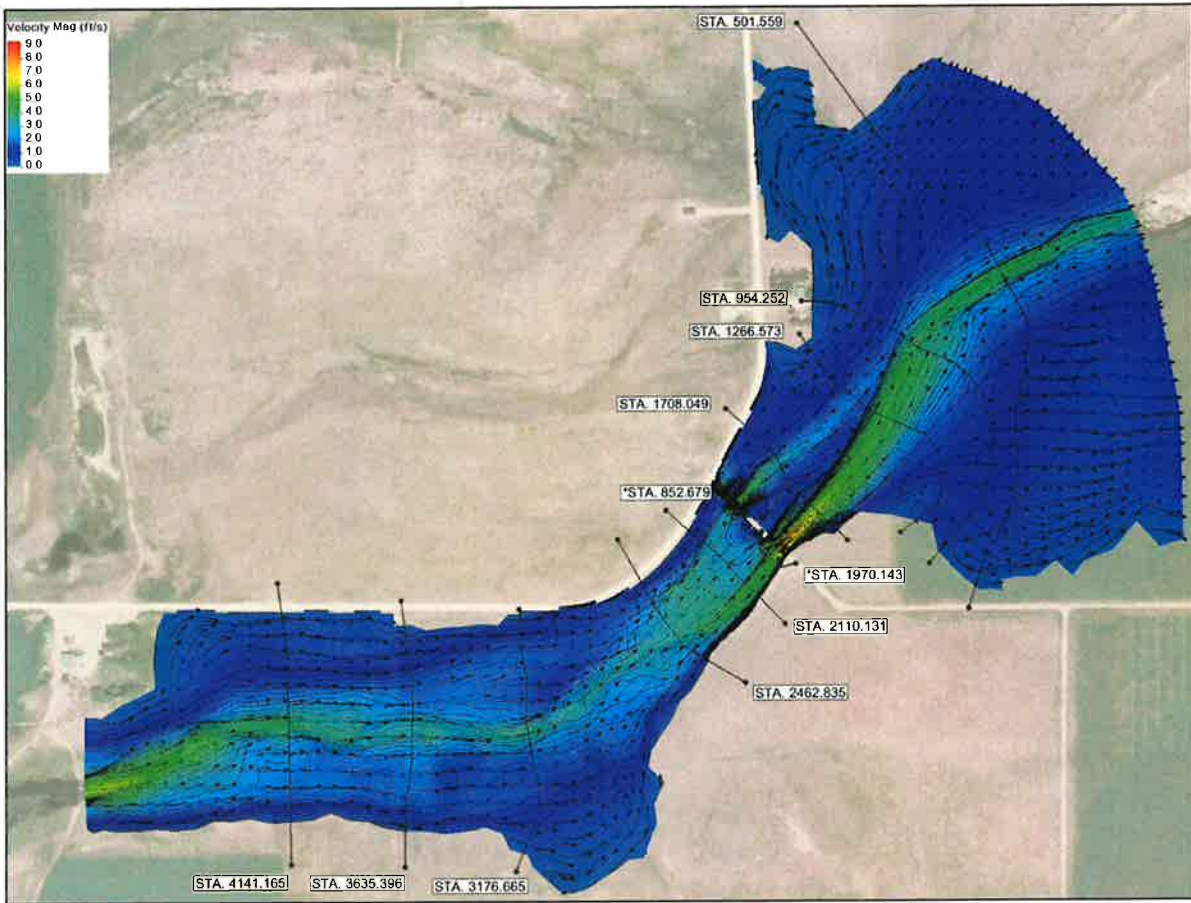
| EG 50-yr Velocity Mag (ft/s) | | |
|------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.73 | 3.56 |
| 954.252 | 1.2 | 3.53 |
| 1266.573 | 1.35 | 3.69 |
| 1708.049 | 1.7 | 5 |
| *1970.143 | 3.3 | 4.57 |
| 2110.131 | 2.23 | 3.74 |
| 2462.835 | 2 | 2.91 |
| 3176.665 | 1.3 | 3.13 |
| 3635.396 | 1.51 | 2.83 |
| 4141.165 | 1.47 | 3.44 |
| *852.679 | 1.99 | 2.76 |

Pre-Project 100-yr velocity magnitude with 0.5-ft contours



| EG 100-yr Velocity Mag (ft/s) | | |
|-------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.83 | 3.63 |
| 954.252 | 1.12 | 3.64 |
| 1266.573 | 1.24 | 3.84 |
| 1708.049 | 1.84 | 5.31 |
| *1970.143 | 3.49 | 4.8 |
| 2110.131 | 2.38 | 3.89 |
| 2462.835 | 2.13 | 3.04 |
| 3176.665 | 1.34 | 3.18 |
| 3635.396 | 1.49 | 2.91 |
| 4141.165 | 1.53 | 3.51 |
| *852.679 | 2.08 | 2.89 |

Pre-Project 500-yr velocity magnitude with 0.5-ft contours

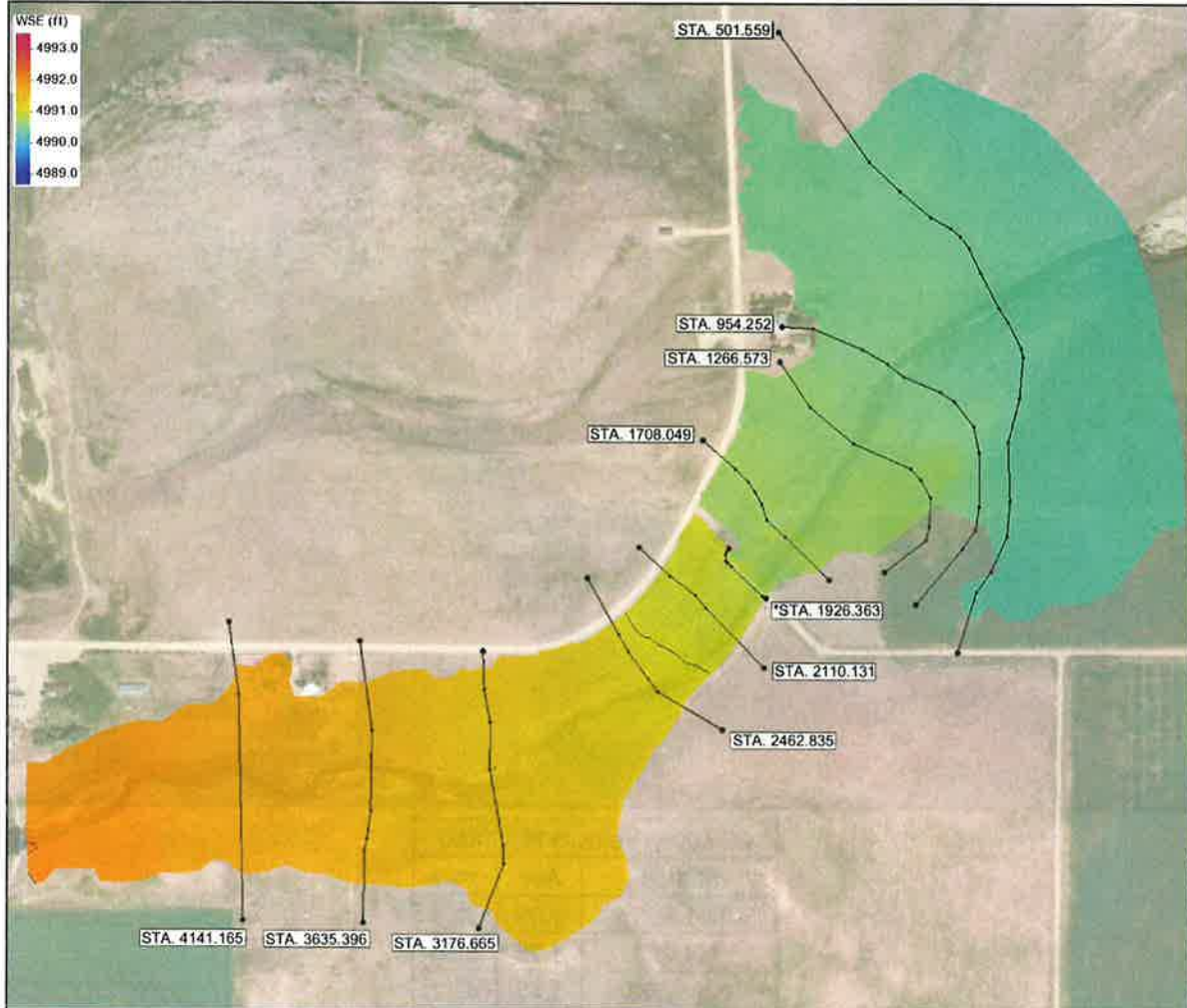


| EG 500-yr Velocity Mag (ft/s) | | |
|-------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.95 | 3.81 |
| 954.252 | 1.25 | 3.85 |
| 1266.573 | 1.45 | 4.12 |
| 1708.049 | 2.05 | 5.78 |
| *1970.143 | 3.51 | 5.15 |
| 2110.131 | 2.61 | 4.15 |
| 2462.835 | 2.32 | 3.26 |
| 3176.665 | 1.42 | 3.29 |
| 3635.396 | 1.6 | 3.05 |
| 4141.165 | 1.59 | 3.63 |
| *852.679 | 2.43 | 3.48 |

POST-PROJECT MODEL RESULTS (FINAL)

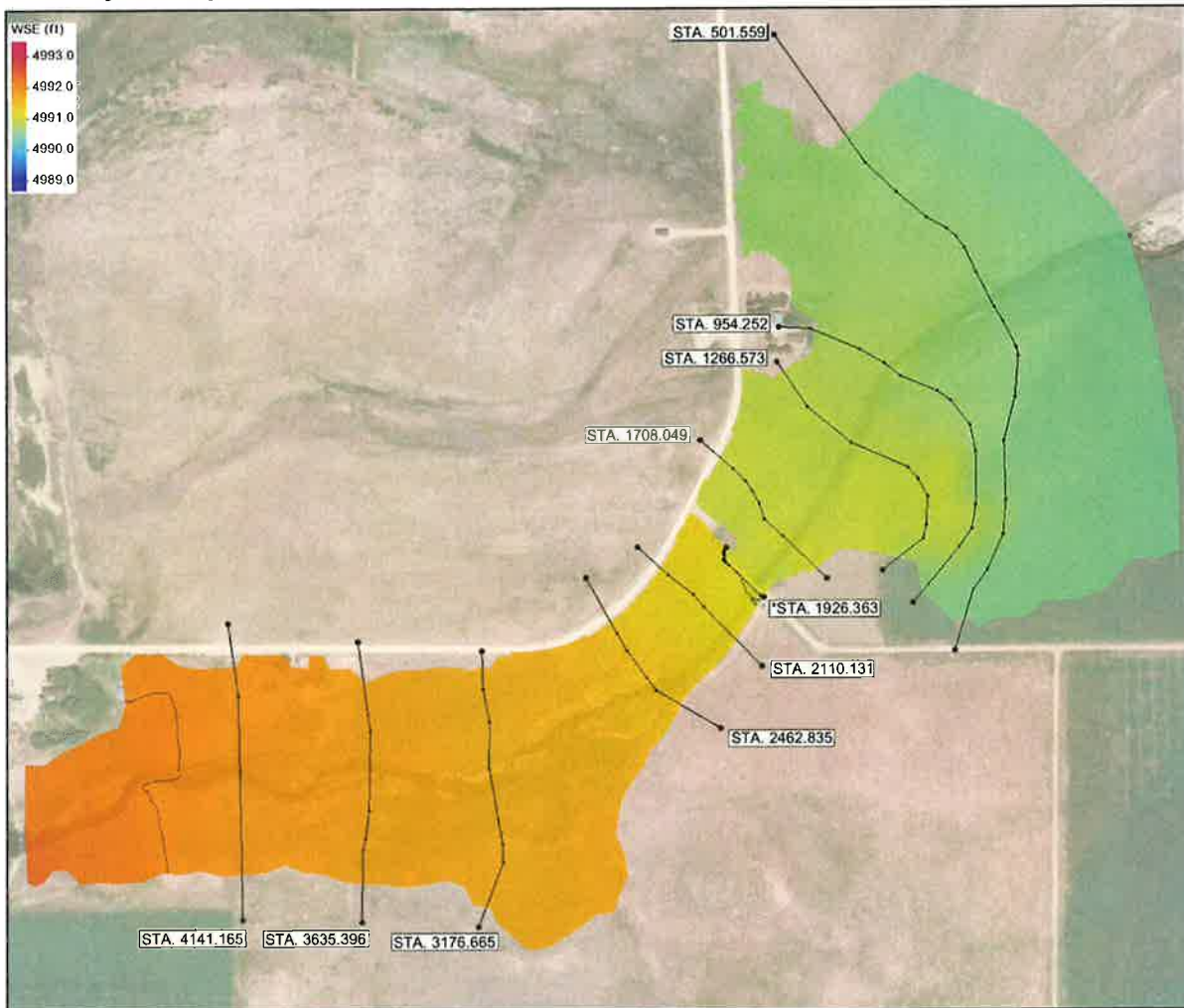
WSE Results

Post-Project 50-yr WSE with 1-ft contours



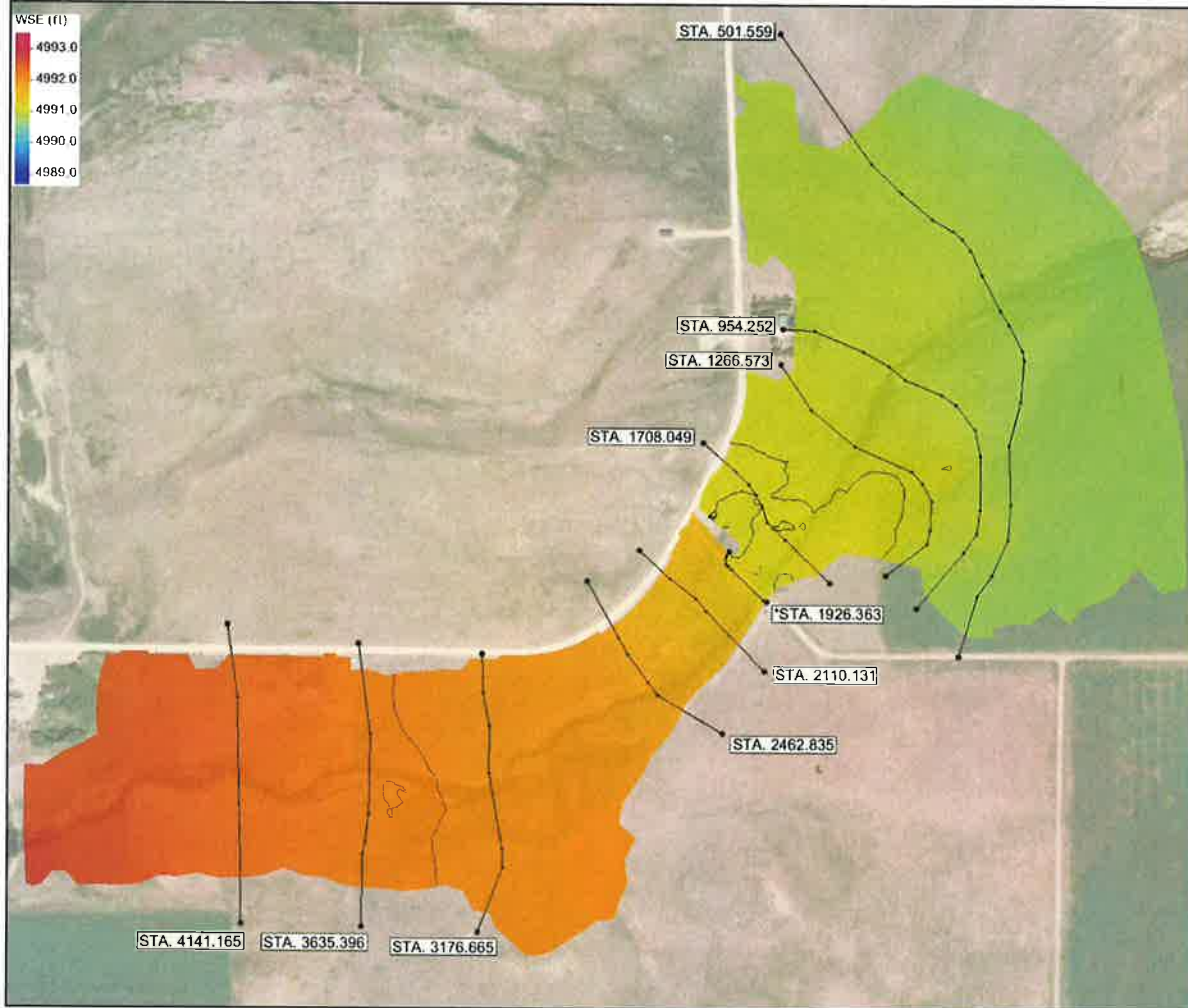
| FG 50-yr WSE (ft) | | | |
|-------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.25 | 4990.33 | 4990.37 |
| 954.252 | 4990.38 | 4990.43 | 4990.48 |
| 1266.573 | 4990.54 | 4990.56 | 4990.58 |
| 1708.049 | 4990.61 | 4990.64 | 4990.7 |
| *1926.363 | 4990.64 | 4990.78 | 4990.85 |
| 2110.131 | 4990.89 | 4990.91 | 4990.96 |
| 2462.835 | 4991.08 | 4991.1 | 4991.13 |
| 3178.665 | 4991.26 | 4991.31 | 4991.35 |
| 3635.396 | 4991.43 | 4991.45 | 4991.47 |
| 4141.165 | 4991.55 | 4991.61 | 4991.64 |

Post-Project 100-yr WSE with 1-ft contours



| FG 100-yr WSE (ft) | | | |
|--------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.46 | 4990.53 | 4990.59 |
| 954.252 | 4990.55 | 4990.63 | 4990.72 |
| 1266.573 | 4990.69 | 4990.76 | 4990.84 |
| 1708.049 | 4990.8 | 4990.83 | 4990.9 |
| *1926.363 | 4990.86 | 4990.99 | 4991.08 |
| 2110.131 | 4991.12 | 4991.14 | 4991.2 |
| 2462.835 | 4991.32 | 4991.35 | 4991.38 |
| 3176.665 | 4991.52 | 4991.57 | 4991.62 |
| 3635.396 | 4991.69 | 4991.72 | 4991.73 |
| 4141.165 | 4991.82 | 4991.88 | 4991.91 |

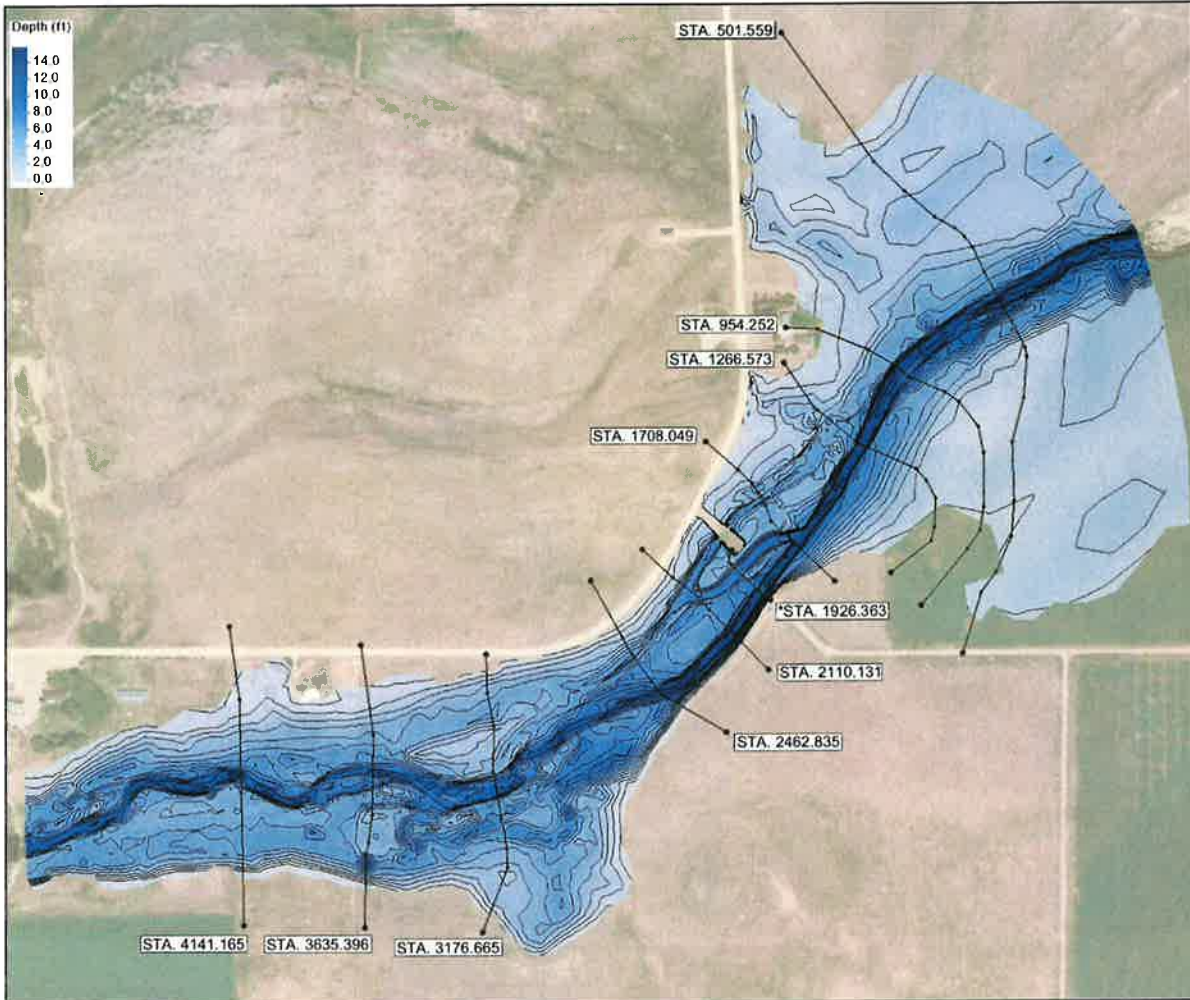
Post-Project 500-yr WSE with 1-ft contours



| FG 500-yr WSE (ft) | | | |
|--------------------|---------|---------|---------|
| Station | Min | Ave | Max |
| 501.559 | 4990.67 | 4990.71 | 4990.76 |
| 954.252 | 4990.72 | 4990.81 | 4990.88 |
| 1266.573 | 4990.86 | 4990.94 | 4990.98 |
| 1708.049 | 4991 | 4991.04 | 4991.12 |
| *1926.363 | 4991.09 | 4991.24 | 4991.34 |
| 2110.131 | 4991.38 | 4991.41 | 4991.48 |
| 2462.835 | 4991.62 | 4991.65 | 4991.68 |
| 3176.665 | 4991.85 | 4991.9 | 4991.96 |
| 3635.396 | 4992.03 | 4992.05 | 4992.07 |
| 4141.165 | 4992.16 | 4992.23 | 4992.26 |

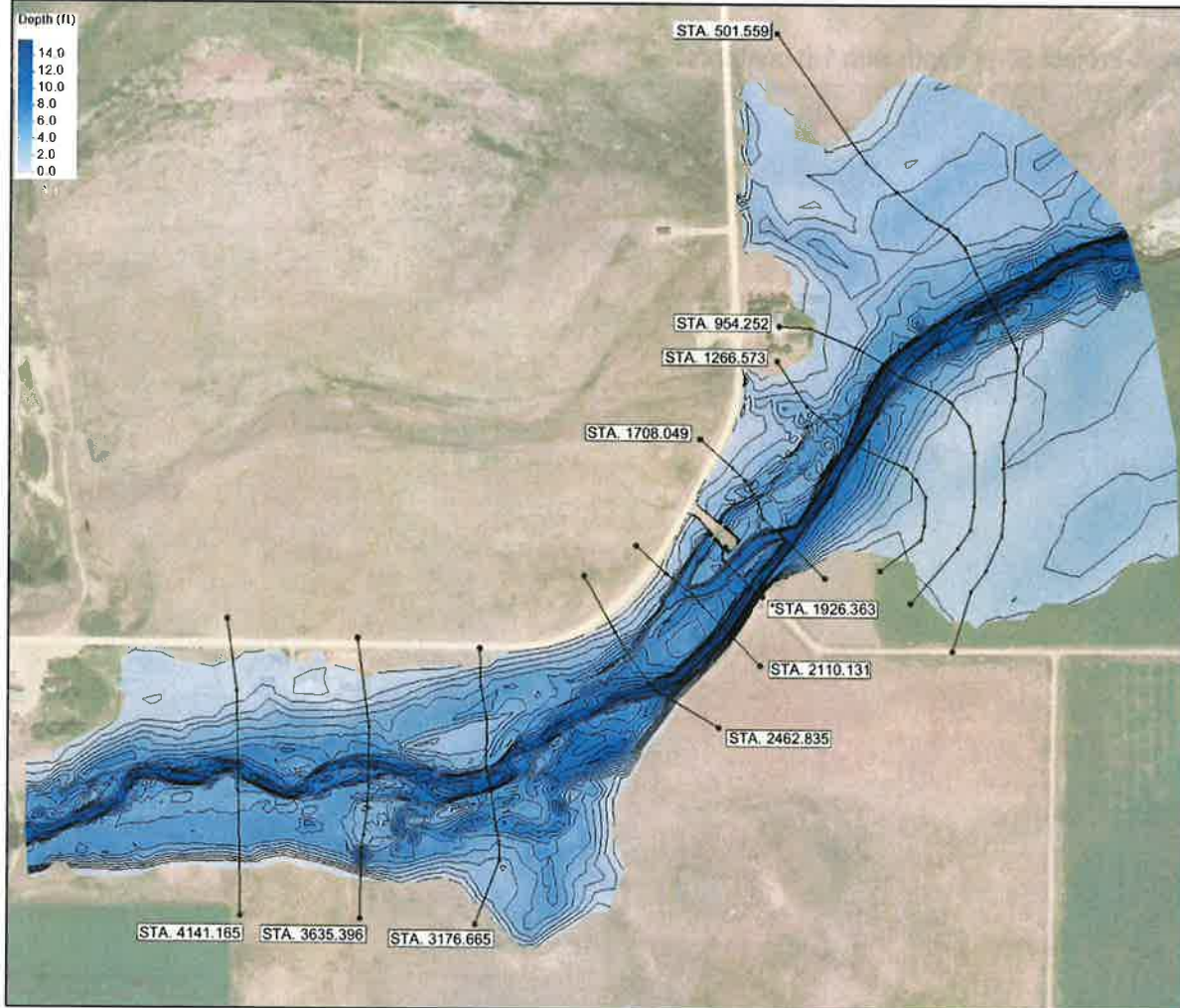
Depth Results

Post-Project 50-yr depth with 1-ft contours



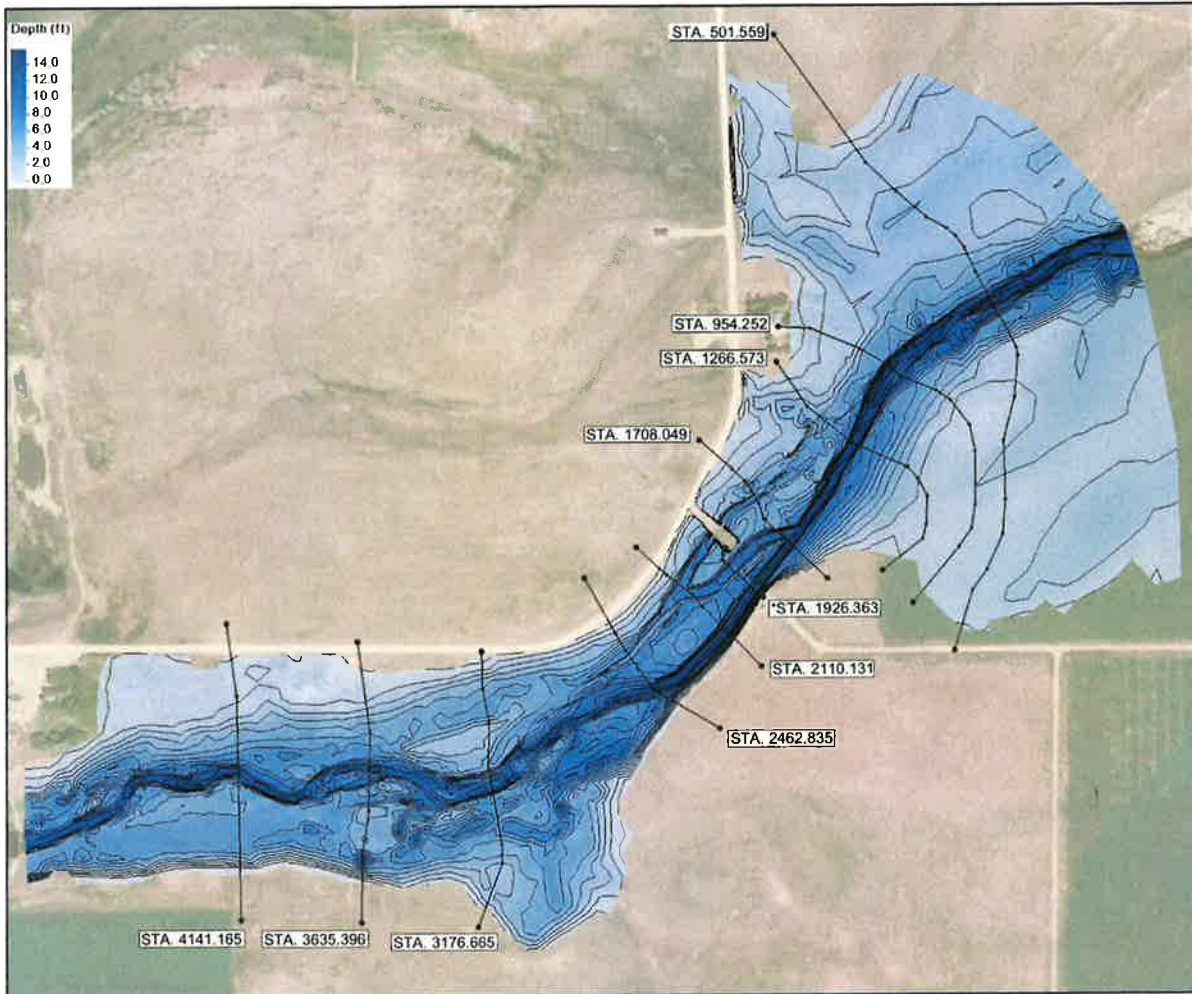
| FG 50-yr Depth (ft) | | |
|---------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 1.78 | 13.2 |
| 954.252 | 2.53 | 12.75 |
| 1266.573 | 3.61 | 12.91 |
| 1708.049 | 4.93 | 12.78 |
| *1926.363 | 7.36 | 12.69 |
| 2110.131 | 6.07 | 13.08 |
| 2462.835 | 5.97 | 12.42 |
| 3176.665 | 4.01 | 10.06 |
| 3635.396 | 4.34 | 10.79 |
| 4141.165 | 3.68 | 10.92 |

Post-Project 100-yr depth with 1-ft contours



| FG 100-yr Depth (ft) | | |
|----------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 1.91 | 13.39 |
| 954.252 | 2.1 | 12.94 |
| 1266.573 | 2.96 | 13.11 |
| 1708.049 | 5.13 | 12.98 |
| *1926.363 | 7.58 | 12.9 |
| 2110.131 | 6.31 | 13.32 |
| 2462.835 | 6.22 | 12.67 |
| 3176.665 | 4.27 | 10.32 |
| 3635.396 | 4.57 | 11.06 |
| 4141.165 | 3.85 | 11.19 |

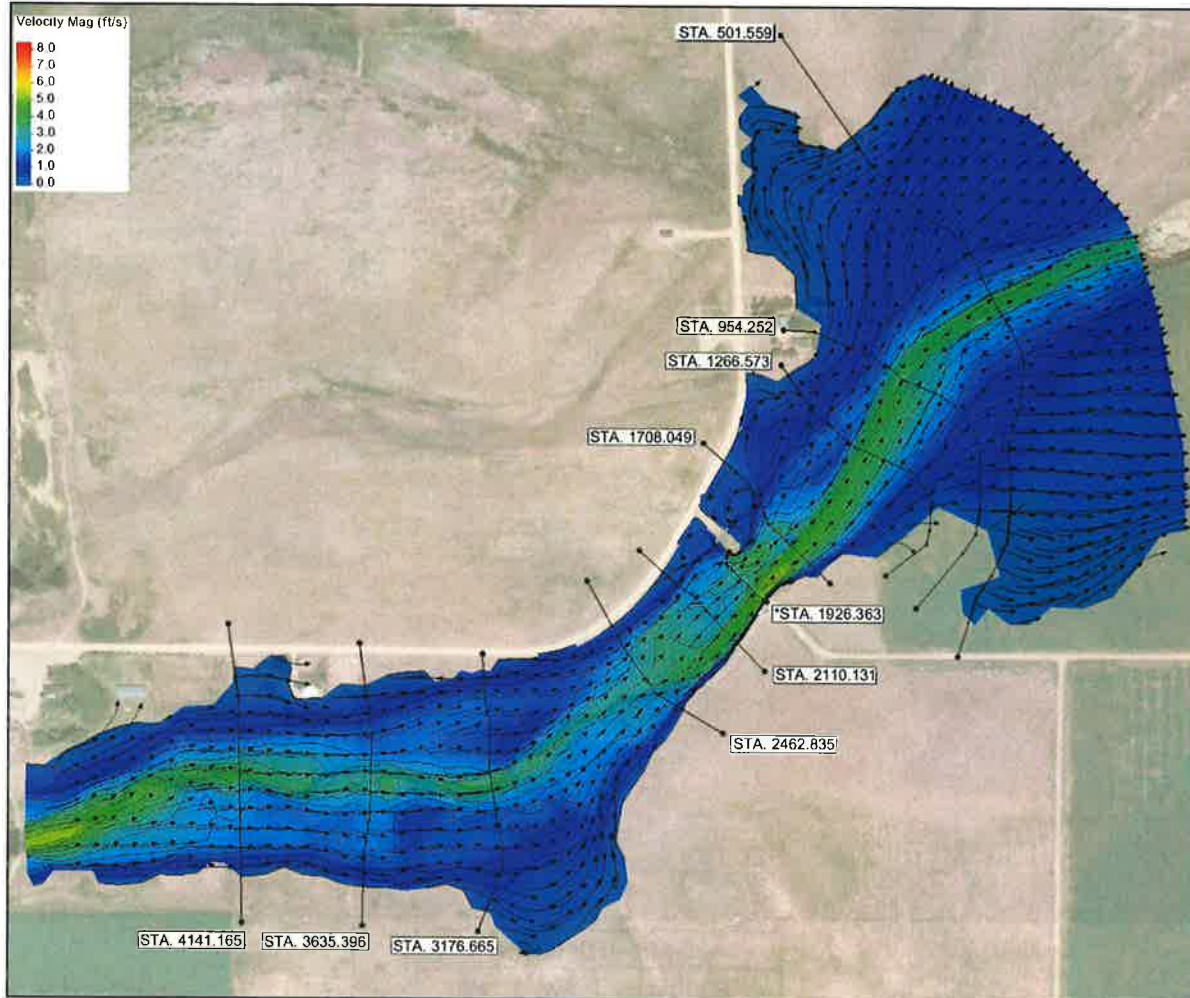
Post-Project 500-yr depth with 1-ft contours



| FG 500-yr Depth (ft) | | |
|----------------------|------|-------|
| Station | Ave | Max |
| 501.559 | 2.07 | 13.58 |
| 954.252 | 2.13 | 13.14 |
| 1266.573 | 3.14 | 13.32 |
| 1708.049 | 5.34 | 13.19 |
| *1926.363 | 7.82 | 13.13 |
| 2110.131 | 6.58 | 13.59 |
| 2462.835 | 6.52 | 12.97 |
| 3176.665 | 4.4 | 10.66 |
| 3635.396 | 4.61 | 11.39 |
| 4141.165 | 3.97 | 11.53 |

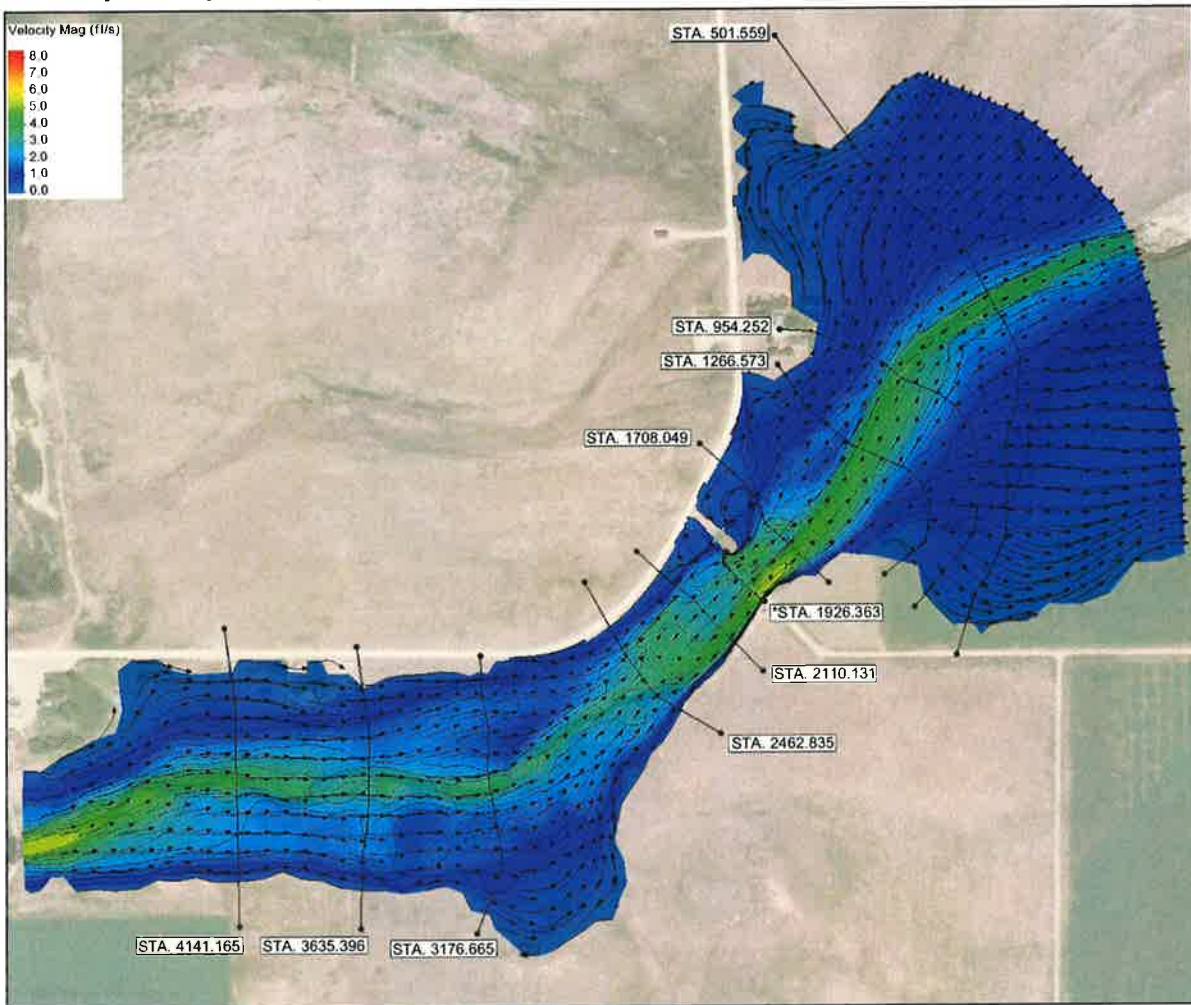
Velocity Results

Post-Project 50-yr velocity magnitude with 0.5-ft contours



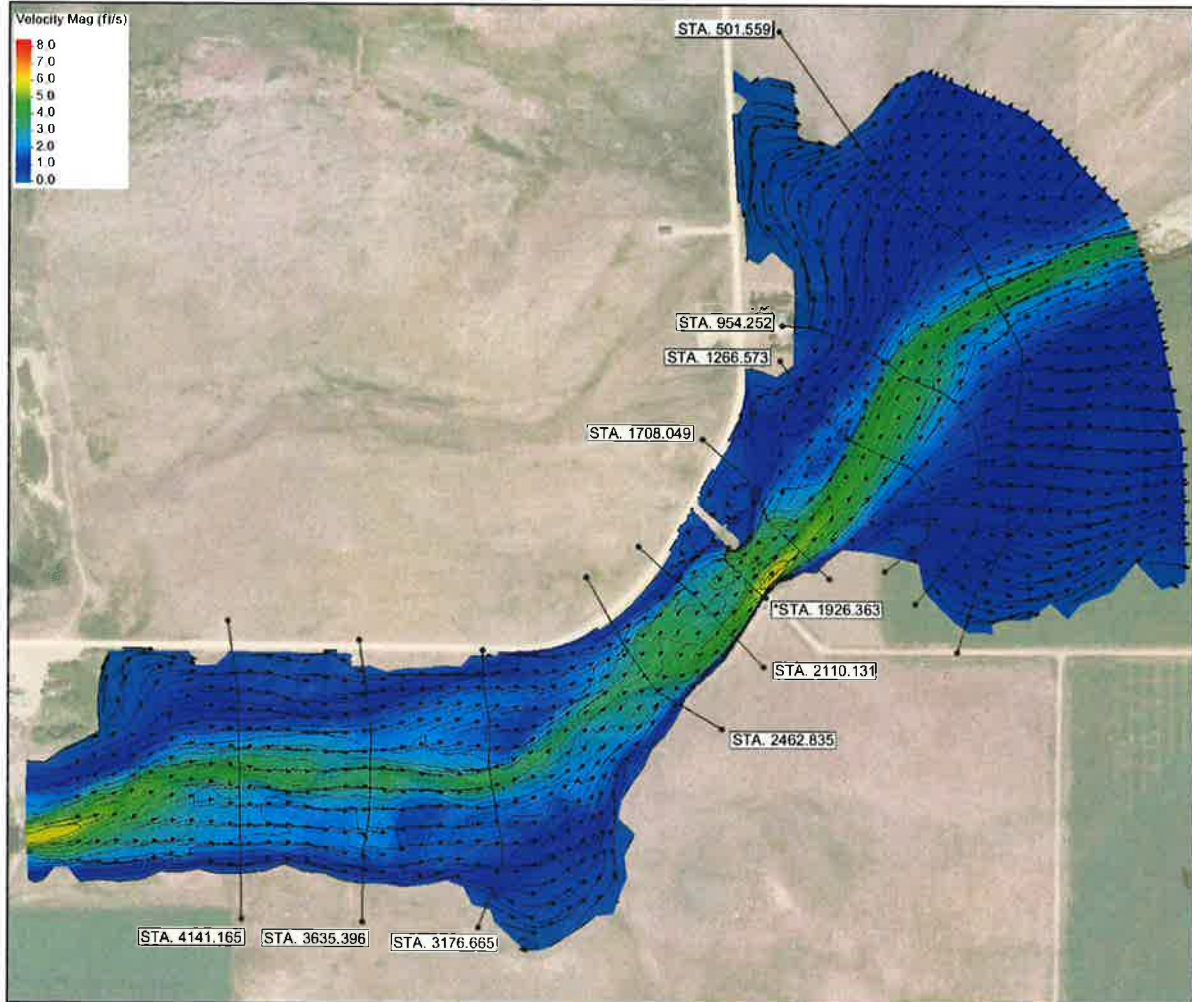
| FG 50-yr Velocity Mag (ft/s) | | |
|------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.73 | 3.56 |
| 954.252 | 1.2 | 3.5 |
| 1266.573 | 1.36 | 3.57 |
| 1708.049 | 1.7 | 4.31 |
| *1926.363 | 3.14 | 4.7 |
| 2110.131 | 2.1 | 3.88 |
| 2462.835 | 2.04 | 3 |
| 3176.665 | 1.34 | 3.26 |
| 3635.396 | 1.56 | 2.93 |
| 4141.165 | 1.5 | 3.56 |

Post-Project 100-yr velocity magnitude with 0.5-ft contours



| FG 100-yr Velocity Mag (ft/s) | | |
|-------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.83 | 3.63 |
| 954.252 | 1.12 | 3.62 |
| 1266.573 | 1.25 | 3.71 |
| 1708.049 | 1.82 | 4.58 |
| *1926.363 | 3.35 | 4.97 |
| 2110.131 | 2.24 | 4.07 |
| 2462.835 | 2.17 | 3.14 |
| 3176.665 | 1.41 | 3.33 |
| 3635.396 | 1.63 | 3.02 |
| 4141.165 | 1.56 | 3.65 |

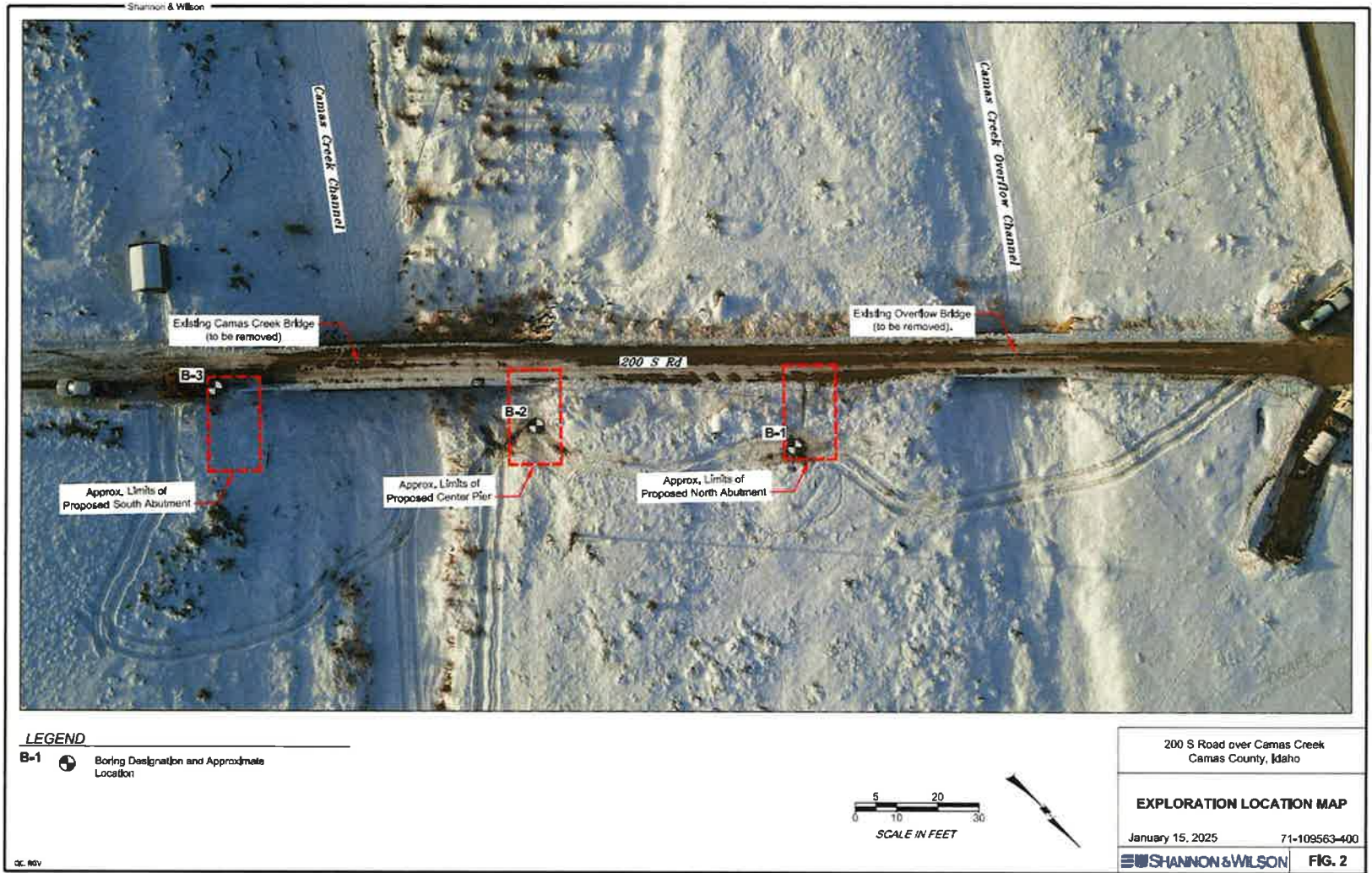
Post-Project 500-yr velocity magnitude with 0.5-ft contours



| FG 500-yr Velocity Mag (ft/s) | | |
|-------------------------------|------|------|
| Station | Ave | Max |
| 501.559 | 0.95 | 3.82 |
| 954.252 | 1.25 | 3.84 |
| 1266.573 | 1.45 | 3.97 |
| 1708.049 | 2 | 5.01 |
| *1926.363 | 3.68 | 5.41 |
| 2110.131 | 2.46 | 4.38 |
| 2462.835 | 2.37 | 3.39 |
| 3176.665 | 1.46 | 3.47 |
| 3635.396 | 1.65 | 3.18 |
| 4141.165 | 1.62 | 3.79 |

SCOUR CALCULATIONS

ATTACHMENTS FROM GEOTECHNICAL INVESTIGATION



Depth to Bedrock

The tops of the basalt or weathered basalt bedrock were encountered at the following approximate depths and elevations.

| Top of Basalt or Weathered Basalt Bedrock | | | |
|---|----------------|--------------|-------------------|
| Feature | Rock Probe No. | Depth (Feet) | Elevation* (Feet) |
| South Abutment | B-3 | 2 | 4992.4 |
| Center Pier | B-2 | 7.0 | 4978.1 |
| North Abutment | B-1 | 8.5 | 4977.9 |

Based on boring ground surface elevations provided by Forsgren.

Figure 19. Page 7 from Geotechnical Report prepared by Shannon & Wilson, August 18th, 2025.

Shannon & Wilson



Project Information

Report to: LHTAC
 Project: 200 S Camas Creek (Large Bridge)
 Report Date: 11/21/2022
 File No.: 109563

Material Information

Date Sampled: 10/10/2022
 Sampled By: Shannon & Wilson
 Date Received: 10/27/2022
 Date Tested: 11/15/2022

SUMMARY OF LABORATORY RESULTS

| Lab Number | Borehole | Sample Type | Depth (ft) | Water Content (%) | % Passing #200 Sieve | Liquid Limit (%) | Plasticity Index | Soil Type | Remarks |
|------------|----------|-------------|------------|-------------------|----------------------|------------------|------------------|-----------|---------|
| 22-1414 | Scour | BK-159 | 0.0'-0.0' | -- | 0.6 | -- | -- | SP | -- |

QC: KB
 Shannon & Wilson

Prepared By: Allona Chernish

January 7, 2026

Idaho Department of Water Resources
file@idwr.idaho.gov
322 E Front St.
Boise, ID 83702

LHTAC LILB Bridge Nos. 23795 & 23800 – 200 S Road Bridges, Camas County

To IDWR's Permitting Staff:

Forsgren Associates is submitting a Joint Application for Permit to the Idaho Department of Water Resources (IDWR) on behalf of Camas County to apply for a Stream Channel Alteration Permit for the replacement of two existing bridges with a single, longer structure over Camas Creek at 200 S Road in Camas County, Idaho. The existing bridges have surpassed their service life and will be replaced under the Local Highway Technical Assistance Council's Leading Idaho Local Bridge Program.

Project activities will impact Camas Creek, a water of the United States, and its adjacent wetlands. Forsgren and the Local Highway Technical Assistance Council (LHTAC) held a pre-application meeting with representatives from the U.S. Army Corps of Engineers (USACE) and IDWR on March 15, 2024, to review the proposed design and discuss potential water and wetland impacts. At that meeting, agency representatives requested that the permit application includes a summary of project alternatives and justification for the selected alignment. The justification for the selected alignment is included in the Joint Application for Permit.

A hydraulic model was created to simulate the expected hydraulic conditions for the 50-year, 100-year, and 500-year floods. The investigation shows that the proposed bridge meets the requirements of the Stream Channel Alteration Rules, IDAPA 37.03.07, a 1-ft minimum for the 100-year flood, with an estimated freeboard of 1.81-ft. This freeboard exceeds the minimum design standards as stated by Rule 62.04.c and Rule 62.04.e.

A check for \$20 is included with this application.

This action will also require a US Army Corps of Engineers Reporting 2021 Nationwide Permit (NWP) No. 14 – Linear Transportation, which does require Pre-Construction Notification. This action will also require an Individual 401 Water Quality Certification from the Idaho Department of Environmental Quality.

Sincerely,



Patrick A. Wickman, M.S.
Forsgren Associates, Inc., An Apex Company

CC List (via email):
Boise Regulatory Office, USACE
Karissa Nelson, Samuel Larrondo, LHTAC
Josh Ashmead, Road Foreman, Camas County Road & Bridge
Steven Yearsley, Forsgren

U.S. Army Corps of Engineers (USACE)

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

*Form Approved -
OMB No. 0710-0003
Expires 2027-10-31*

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Walla Walla District, Regulatory Office.

The certification can be submitted by email at cenww-rd@usace.army.mil @usace.army.mil or by mail at the below address:

U.S. Army Corps of Engineers
Boise Regulatory District Office
 Street Address: 720 E. Park Blvd., Suite 245
 City: Boise State: Idaho ZIP Code: 83712

COMPLETED BY THE CORPS

Corps Action Number: NWW-2024-00151
 Permit Type: General Permit
 General Permit Number and Name (if applicable): NWP 14: Linear Transportation
 Name of Permittee: Camas County Road & Bridge
 Project Name: LILB Bridge No. 23795 & 23800 Replacement
 Project Location (physical address): Near coordinates 43.314446, -114.657970 and
43.314006, -114.657315

PERMITTEE'S CERTIFICATION

Date Work Started: _____
 Date Work Completed: _____

Enclose photographs showing the completed project (if available).

I Enter FName LName hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

| | | |
|------|------|-----------|
| Name | Date | Signature |
|------|------|-----------|



Idaho Department of Environmental Quality Final Section 401 Water Quality Certification

March 9, 2026

Project Name: LILB Bridge 23795 & 23800 Replacement, NWW-2024-00151

Permit Name and Number: Nationwide Permit 14, Linear Transportation Projects

Applicant/Authorized Agent: Josh Ashmead, Camas County Road & Bridge; Patrick Wickman, Forsgren Associates, Inc.

Project Location: The project is located at Fairfield, Camas County, Idaho; 43° 18' 51.25" N, - 114° 39' 27.74"W

Receiving Water Body: Camas Creek - Soldier Creek to Elk Creek

Pursuant to Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); 40 CFR § 121; and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review and certify that any discharge of dredged or fill material into waters of the United States will comply with water quality requirements under state law and the Clean Water Act. Consistent with DEQ's May 6, 2024, *Scope Directive for 2023 Clean Water Act § 401 Water Quality Certifications for § 404 Permits* (Scope Directive), this review is limited to the water quality-related impacts from the activity subject to the US Army Corps of Engineers (USACE) § 404 permit, including the activity's construction and any integral operational elements directly tied to that activity. DEQ's review does not extend to general project operations or ancillary upland activities that are subject to other federal, state, or local regulatory authorities. Moreover, the US Environmental Protection Agency's (EPA) May 21, 2025, clarification memorandum reiterates that CWA § 401 is limited to considering adverse impacts to water quality, and only insofar as they may prevent compliance with applicable water quality requirements. Conditions or denials may not be based on impacts unrelated to water quality or not within the scope of the federal permit.

In accordance with federal regulations at 40 CFR § 121.4, all project proponents must submit a request for a pre-filing meeting at least thirty days in advance of submitting a certification request. A pre-filing meeting request was received by DEQ on 12/1/2025. To facilitate early engagement and project coordination, DEQ accepted an opportunity to host a pre-filing meeting which was conducted on 12/4/2025, to seek clarification as well as to discuss the project and potential information needs.

Accessibility Services: The Idaho Department of Environmental Quality will provide reasonable language access services and/or disability services for documents at no charge. To request an accommodation under Title VI of the Civil Rights Act of 1964 or Americans with Disabilities Act, contact DEQ's nondiscrimination coordinator at (208) 373-0271 or accessibility@deq.idaho.gov. Para obtener información en español, visite <https://www.deq.idaho.gov/about-us/accessibility/>.

Based upon review of the federal permit application, readily available water quality related materials, and certification request in accordance with 40 CFR §§ 121.5 (b) and (c) and 121.7 (c), received on, 1/9/2026, DEQ, certifies that if the permittee complies with the terms and conditions imposed by the federal permit and the conditions set forth in this water quality certification, then it is reasonable for DEQ to conclude that the activity will comply with water quality requirements, including applicable requirements of the Clean Water Act §§ 301, 302, 303, 306, and 307, Idaho's "Water Quality Standards" (IDAPA 58.01.02), and other appropriate water quality requirements of state law. This finding is based on DEQ's evaluation of the water quality-related impacts from the activity subject to the § 404 permit, consistent with DEQ's May 6, 2024, Scope Directive and EPA's May 21, 2025, clarification. Potential impacts unrelated to the permitted activity, or regulated under other authorities, were not evaluated or conditioned under this certification.

Pursuant to Clean Water Act § 401 (a)(1) and 40 CFR § 121.7 (d); and IDAPA 58.01.02.052.08, DEQ issued a 21-day public notice to solicit comments on the draft certification on 2/10/2026 through 3/3/2026. Any public comments received during the 21-day comment period were considered by DEQ to inform the certification decision and conditions.

This certification does not authorize activities by any other state or federal agency or any private individual or entity and does not relieve the permittee of the responsibility to obtain all other required approvals, authorizations, or permits that may be necessary for the project.

1 Project Description

The purpose of this project is to replace two deteriorated, load-posted existing bridges with a single, modern structure designed to accommodate two-way traffic and safely support heavy vehicle loads, including larger trucks and agricultural equipment. The proposed bridge will be engineered to withstand high-flow conditions in Camas Creek and reduce the potential for roadway overtopping. The project includes roadway realignment immediately downstream of the existing alignment and will enhance long-term transportation reliability by replacing two aging structures with a single modern bridge, thereby reducing future maintenance needs.

The project will replace Bridge 23795 and Bridge 23800. Bridge 23795 is approximately 16 feet wide and 43 feet long, and Bridge 23800 is approximately 17.8 feet wide and 117 feet long. The proposed bridge will be approximately 207 feet long (out-to-out) and 30 feet wide (out-to-out). The existing side channel currently conveyed beneath Bridge 23795 will be realigned and shifted to the southeast. The proposed project would result in approximately 830 linear feet of stream impacts and 3,514 square feet of wetland impacts.

2 Antidegradation Review

Idaho's antidegradation policy only applies to waters subject to the jurisdiction of the Clean Water Act and establishes three tiers of water quality protection (IDAPA 58.01.02.051, 58.01.02.052).

Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).

Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).

Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities do not lower water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ employs a water-body-by-water-body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved [DEQ Integrated Report](#) and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

2.1 Pollutants of Concern

The pollutant of concern for this project is sediment. As part of the § 401 water quality certification, DEQ requires the applicant to comply with various conditions to protect water quality and ensure compliance with Idaho's water quality standards, including applicable water quality criteria for this pollutant.

The project may result in short-term increases in suspended sediment during construction activities. These effects are evaluated in the context of the § 404 activity footprint and immediate downstream waters.

2.2 Receiving Water Body Level of Protection

This project is located on Camas Creek - Soldier Creek to Elk Creek within the Camas subbasin assessment unit (AU) ID17040220SK007_05 Camas Creek - Soldier Creek to Elk Creek. This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, and primary contact recreation (IDAPA 58.01.02.150.22). In addition to these uses, all waters within the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2024 Integrated Report, this AU is not fully supporting its aquatic life uses. Causes of impairment include total phosphorus, sedimentation/siltation, and temperature. As such, DEQ will provide Tier I protection for the aquatic life uses (IDAPA 58.01.02.051.01).

The primary pollutant of concern associated with this project is sediment. Given that sediment mainly affects aquatic life at concentrations significantly lower than those affecting recreational uses and does not degrade water quality necessary to support contact recreation uses, DEQ focuses its sediment evaluations on aquatic life protections. Consequently, DEQ does not conduct a Tier II antidegradation analysis for contact recreation uses when sediment is the main pollutant of concern, as aquatic life protections inherently address the more sensitive endpoints (IDAPA 58.01.02.052.08).

2.3 Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses must be maintained and protected. The numeric and narrative (non-numeric) criteria in the water quality standards are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants must be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Before developing the TMDL, the water quality standards require applying the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

An EPA-approved TMDL has been developed for this AU. The TMDL addresses concerns that were identified in the *Camas Creek Subbasin TMDL*. Goals of the TMDL are to reduce sediment in the watershed. The project will implement site-specific best management practices (BMPs) to mitigate sediment being introduced to the watershed.

Throughout the life of the project, the applicant will implement, install, maintain, monitor, and adaptively manage BMPs to reduce erosion and minimize turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented that will minimize or prevent future sediment contributions from the project area.

If the project is conducted according to the provisions of the project plans, federal permit, and conditions of this certification, then it is reasonable for DEQ to conclude that the project will comply with the state's numeric and narrative water quality criteria. These criteria are set at levels that protect and maintain existing and designated beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above. The conditions in this certification ensure that the level of water quality necessary to protect both existing and designated uses is maintained and protected in compliance with the Tier I provisions of IDAPA 58.01.02.051.01 and 58.01.02.052.07.

3 Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

The following conditions ensure the LILB Bridge 23795 & 23800 Replacement project complies with Idaho's water quality standards and other appropriate water quality requirements of state law applicable to Camas Creek - Soldier Creek to Elk Creek.

3.1 General Conditions

This certification is based on review of the federal permit application, readily available water quality related materials, and certification request submitted by Camas County Road & Bridge on 1/9/2026, and is conditioned upon the requirement that any modification (e.g., change in work windows, etc.) of the permitted activity must first be provided to DEQ for review to determine compliance with Idaho's water quality standards.

The following conditions apply solely to the activity subject to the § 404 permit. They are necessary to assure compliance with applicable water quality requirements as required by 40 CFR 121.3. Conditions do not extend to aspects of general project operation or unrelated upland activities regulated under other programs. Because DEQ is certifying only the activity described in the certification request, this condition ensures that discharges under circumstances that differ from those described in the certification request will comply with 33 U.S.C. § 1341, 40 CFR § 121, and other applicable water quality requirements, including without limitation 33 U.S.C. § 1311(a), Idaho Code § 39-108, IDAPA 58.01.02.051, IDAPA 58.01.02.052, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. DEQ reserves the right to modify this certification in accordance with 40 CFR § 121.10 if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state water quality standards—there is no longer reasonable assurance of compliance with the water quality standards or other appropriate requirements of state law.
2. If ownership of the project changes, the certification holder must notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator must request, in writing, the transfer of this water quality certification to the new name.
3. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.
4. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the federal permit.

5. The applicant must provide access to the project site upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
6. Projects must be conducted in a manner that complies with numeric and narrative criteria in Idaho's water quality standards, including criteria for sediment, turbidity, temperature, and dissolved oxygen.

3.2 Design, Implementation, and Maintenance of Best Management Practices (BMPs)

The following condition is necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.350, and IDAPA 58.01.02.401.

1. BMPs must be properly designed, implemented, and maintained to protect beneficial uses and minimize pollutant loading to surface waters. Proper installation and operation of BMPs are required to ensure the provisions of IDAPA 58.01.02.052 are met. To ensure that BMPs are operating properly and to demonstrate that degradation has not occurred, the permittee must monitor and evaluate BMP effectiveness daily during project activities to ensure that water quality standards are met. BMP inspection logs and documentation of corrective measures (if necessary) must be maintained on site, along with a copy of this certification and provided to DEQ upon request.

DEQ publishes the [Idaho Catalog of Storm Water Best Management Practices](#) (DEQ 2020), which identifies approved practices for controlling erosion and sediment during and following construction. Alternative sources of BMPs may be used only where consistent with state water quality standards and the conditions of this certification.

3.3 Fill Material

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Fill material subject to suspension will be free of easily suspended fine material. Only clean materials may be placed as fill.
2. If dredged material is proposed for use as fill material and there is a possibility the material may be contaminated, then the permittee must assess and characterize sediment to determine the suitability of dredge material for unconfined-aquatic placement; determine the suitability of post-dredge surfaces; and predict the effect on water quality during dredging. Sediment assessment and characterization following the procedures in the [Sediment Evaluation Framework for the Pacific Northwest](#) (RSET 2018) satisfies this requirement. A different assessment and characterization methodology may be used if DEQ approves the methodology in writing.

3. When sand is utilized as fill material, appropriate BMPs must be implemented to ensure sand will not be easily dispersed (e.g., filter fabric anchored over the sand or other confinement).
4. Temporary fills must be removed in their entirety on or before construction completion.

3.4 Erosion and Sediment Control

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. BMPs for sediment and erosion control suitable to prevent exceedances of Idaho's water quality standards and consistency with TMDLs must be selected and installed before starting construction at the site.
2. Temporary and permanent erosion and sediment control measures must be installed around the perimeter of the project or initial work areas to control and prevent excess sediment from entering waters of the United States.
3. Temporary and permanent erosion and sediment control measures must be installed at the earliest practicable time consistent with good construction practices and must be maintained as necessary throughout the project.
4. Structural fill or bank protection must consist of materials that are placed and maintained to withstand predictable high flows in the waters of the United States.
5. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation and replaced or augmented if they are not effective. BMP inspection logs and documentation of corrective measures (if necessary) must be maintained on site, along with a copy of this certification and provided to DEQ upon request.
6. All excess dredged or fill material generated by the authorized activity must be contained and properly disposed of so it does not enter waters of the United States or cause water quality degradation.
7. Disturbed areas suitable for vegetation must be seeded or revegetated to stabilize soils and prevent erosion to the maximum extent practicable (EPA 2000).
8. Maximum fill slopes must be material that is structurally stable once placed and does not slough into the stream channel during construction, during periods before revegetation, or after vegetation is established.
9. Sediment from disturbed areas or sediment that can be tracked by vehicles onto pavement must not leave the site in amounts reasonably expected to enter waters of the United States. Placement of clean aggregate at all construction entrances or exits and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces to prevent track-out.
10. Ensure sand/gravel bags used for dewatering are securely closed and routinely inspected for damage or tears to prevent sediment from entering surface waters.

3.5 Turbidity

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200.08, IDAPA 58.01.02.250.02.e, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Sediment resulting from activities—including BMP failures, construction mishaps, spills, or any unplanned event—must be mitigated to prevent violations of Idaho's water quality standards. Any violation of this standard must be reported to the DEQ regional office immediately.
2. Throughout the life of the project, the applicant must implement, maintain, monitor, and adaptively manage BMPs—such as silt curtains, geotextile fabrics, and silt fences—to minimize instream sediment suspension, turbidity, and the potential for spills or mishaps to affect surface waters.
3. Visual observation is acceptable to determine whether project activities, BMPs, or unanticipated events (e.g., construction mishaps or spills) are contributing to increased turbidity. If a sediment plume is observed, the project may be causing an exceedance of water quality standards, and the permittee must inspect BMPs and the project activity area to identify the cause. If the BMPs, site conditions, or any incident are contributing to turbidity, the permittee must take corrective measures and modify the activity, address the incident, and implement additional or revised BMPs.
4. If a visible sediment plume persists after corrective measures have been implemented, turbidity monitoring consistent with **Table 1** and Appendix A is required.
 - a. A properly and regularly calibrated turbidimeter is required for field measurements. The turbidimeter should be calibrated before each use or in accordance with the manufacturer's recommendations. Calibration logs must be maintained and made available to DEQ upon request. Instantaneous grab samples must be collected upstream of the disturbance to determine background turbidity and downstream within the visible plume to evaluate project impacts. Location, date, time, and turbidity values must be recorded for each sample.
 - b. Results from the downstream sampling location must be compared to the upstream sample location or background turbidity to determine whether project activities are causing an exceedance of Idaho's water quality standards. If the downstream turbidity is 50 nephelometric turbidity units (NTUs) or greater than the upstream turbidity, then the project is causing an exceedance of the water quality standards. Any exceedance of the turbidity standard must be reported to the DEQ regional office within 24 hours of the sample event.
 - c. Work (or earth-disturbing activities) may resume when turbidity readings return to within 50 NTU above background, or if turbidity has exceeded 25 NTU above background for more than 10 consecutive days, once readings have remained below 25 NTU above background for at least 24 consecutive hours.

- d. Daily turbidity monitoring logs must be available to DEQ upon request. Logs must describe all exceedances, the causes (including spills or incidents, if applicable), corrective measures taken, and the effectiveness of those measures.

Table 1. Turbidimeter monitoring and sampling when a plume is observed.

| Turbidity Above Background ^a | Monitoring/Sampling Frequency ^a | Additional Actions Required |
|---|--|---|
| 0 to 24 NTU | Visual monitoring every 2 hours. No sampling required. | None |
| 25 to 49 NTU | Collect samples every 2 hours. | Continue work for up to 8 hours within any 24-hour period, then STOP work until turbidity returns to acceptable levels. |
| 25 NTU for 10 or more consecutive days | Sample before and after implementing corrective actions, following instructions ^b | STOP work, implement corrective actions, and follow instructions ^b ; notify DEQ regional office |
| 50 NTU or more | Sample before and after implementing corrective actions, following instructions ^c | STOP work, implement corrective actions, and follow instructions ^c ; notify DEQ regional office |

- a. For any required turbidity sampling, collect and report three measurements at each monitoring location. Use the maximum value of three measurements to determine compliance following Table 1 directions.
- b. Instructions: If BMPs appear to be functioning properly, the permittee must modify the activity or implement corrective actions, such as installing additional or modifying existing BMPs, until turbidity measurements indicate turbidity standards are met. Sampling may cease once a sediment plume is no longer observed. Work may resume when the sediment plume is no longer visible and turbidity measurements remain consecutively below 25 NTU.
- c. Instructions: If BMPs appear to be functioning properly, the permittee must modify the activity or implement corrective action, such as installing additional or modifying existing BMPs, until turbidity measurements indicate turbidity standards are met. Sampling may cease when the sediment plume is no longer visible. Work may resume when the sediment plume is no longer visible and turbidity measurements remain below 50 NTU.

3.6 In-Water Work

The following conditions are necessary for the protection of beneficial uses according to Idaho’s water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. When practicable, equipment must work from an upland site to minimize disturbance of waters of the United States.
2. Construction affecting the streambed or streambanks must generally occur during low-flow periods, and where practicable, coincide with suitable in-water work periods for aquatic life.
3. To the maximum extent practicable, where fill is needed, temporary crossings must be installed perpendicular to the channel and located in areas that will result in the least environmental impact. Temporary crossings must be stabilized with clean gravel or treated with other measures that are equally effective in reducing impacts. All temporary crossings must be removed as soon as possible after project completion or when they are no longer needed.
4. To the maximum extent practicable, heavy equipment operating in wetlands must be placed on mats or suitably designed pads to prevent damage to wetland soil and vegetation. However, during winter conditions, mats or pads may not be required if the

ground is adequately frozen and construction activities are expected to result in minimal impacts.

5. In-water activities in spawning areas must be avoided to the maximum extent practicable during spawning and incubation periods.
6. Prior to project commencement, the applicant should consider contacting the Idaho Department of Lands (IDL) and Idaho Department of Fish and Game (IDFG) offices for potential permit applicability.
7. Prior to the start of in-water work, the applicant must contact the local [IDFG Regional Office](#) to determine if spawning areas are present in the work area, and if so, the applicant must work with IDFG to determine an appropriate work window so as not to disturb spawning fish, incubating fish eggs, or newly emerged fry.
8. Wastewater from concrete washout and equipment cleaning must be managed to prevent discharge to waters of the United States. Control measures must be maintained to prevent or minimize the potential for wet concrete, slurry, or wash water from entering waters of the United States.
9. Activities that construct and maintain intake structures must include adequate fish exclusion screening devices in accordance with the National Marine Fisheries Services [Fish Screening Criteria for Anadromous Salmonids](#) (NMFS 1997) to minimize and prevent fish entrainment or capture. Stranded fish found in dewatered segments must be moved to a location with water (preferably downstream) by IDFG. A collection permit must be obtained from IDFG, and the applicant may consult with IDFG to coordinate fish salvage.
10. To the maximum extent practicable, equipment operating over water or directly adjacent to the channel must utilize environmentally acceptable lubricants or hydraulic fluids that are less toxic to fish and other aquatic organisms.

3.7 Vegetation Protection and Restoration

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. To the maximum extent practicable, locate staging areas and access points in open, upland areas.
 - a. Fencing and other protective barriers should be used to mark the construction areas.
 - b. To the maximum extent practicable, minimize disturbance of native vegetation to reduce soil erosion, sediment delivery of sediment to waterways, and impacts to aquatic biota.
2. Existing riparian vegetation within the project area must remain undisturbed to the maximum extent practicable. Where disturbance is unavoidable, implement BMPs to

minimize impacts and replant disturbed areas with native riparian species that provide equivalent or improved shading, bank stability, and habitat functions within the current or next appropriate planting season.

3. Where project activities unavoidably remove native riparian or wetland vegetation, successfully reestablish native species within the current or next appropriate planting season to the maximum extent practicable. Restoration must achieve, at minimum, preproject levels of water quality benefit or result in an overall ecosystem improvement.

3.8 Management of Hazardous or Deleterious Materials

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.400, IDAPA 58.01.02.800, and IDAPA 58.01.02.850.

1. Petroleum products and hazardous, toxic, and/or deleterious materials must not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the United States. Adequate measures and controls must ensure that those materials will not enter waters of the United States because of high water, precipitation runoff, wind, storage facility failure, accidents, or unauthorized third-party activities.
2. Secondary containment must be provided for all chemical materials stored or used on-site to prevent spills, leaks, or releases to soil or waters of the United States. Containment systems must be designed and maintained in accordance with applicable industry standards and manufacturer recommendations.
3. Daily inspections of all fluid systems on equipment to be used in or near waters of the United States must ensure no leaks or potential leaks exist before equipment use. A logbook of daily equipment inspections must be kept on site and provided to DEQ upon request.
4. Equipment and machinery must not be refueled, repaired, or serviced within waters of the United States.
5. Equipment and machinery must be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment capability before entering waters of the United States. Any wastewater or wash water must not enter waters of the United States.
6. Emergency spill response procedures must be in place and include a spill response kit (e.g., oil absorbent booms or other equipment).
7. If an unauthorized release of hazardous material to waters of the United States or to land occurs and there is a likelihood it will enter waters of the United States, the responsible persons in charge must:
 - a. Make every reasonable effort to abate and stop a continuing spill.
 - b. Make every reasonable effort to contain spilled material so it will not reach waters of the United States.

- c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
 - d. Contact Twin Falls Regional Office: (208) 736-2190.
8. Collect, remove, and properly dispose of spill and cleanup materials in accordance with all federal, state, and local regulations.

3.9 Culverts

The following conditions to control erosion, sediment, and turbidity are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.200 and IDAPA 58.01.02.250.

1. To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include BMPs to retain road base and culvert bedding material. For perennial waters, the permittee should consider Idaho's "Stream Channel Alterations Rules" (IDAPA 37.03.07). Another source of BMPs for culvert installation are found in the "Rules Pertaining to the Idaho Forest Practices Act" (IDAPA 20.02.01). Examples of BMPs include, but are not limited to: parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, antiseep barriers such as bentonite clay, or other acceptable roadway retention systems.
2. Culverts must be sized appropriately to maintain the natural drainage patterns.
3. Culverts must not constrict the stream channel or direct flow toward the streambank. Adequate grade control must be installed to prevent channel erosion or sediment buildup.
4. Culverts for fish-bearing waterways must be installed so they do not impede fish passage.
5. The culvert outflow must be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.

3.10 Pollutants/Toxins

In conformance with IDAPA 58.01.02.200, the use of chemicals such as sterilants, growth inhibitors, fertilizers, and deicing salts during construction should be limited to the best estimate of optimum application rates. All reasonable measures must be taken to avoid excess application and introduction of chemicals into waters of the United States.

4 Required Notification

The permittee must notify the Twin Falls Regional Office when authorized work begins and if the applicant or organization is transferred or changes.

The applicant should consult Idaho Department of Fish and Game for appropriate fish protection and handling methods prior to the start of stream realignment work and prior to the start of any work that requires dewatering.

5 Right to Appeal Final Certification

The final § 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35-days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Jake Barnes, Twin Falls Regional Office – 650 Addison Avenue W. Suite 110 Twin Falls, ID, 208-736-2190, jake.barnes@deq.idaho.gov.



Sue Switzer
Regional Administrator
Twin Falls Regional Office

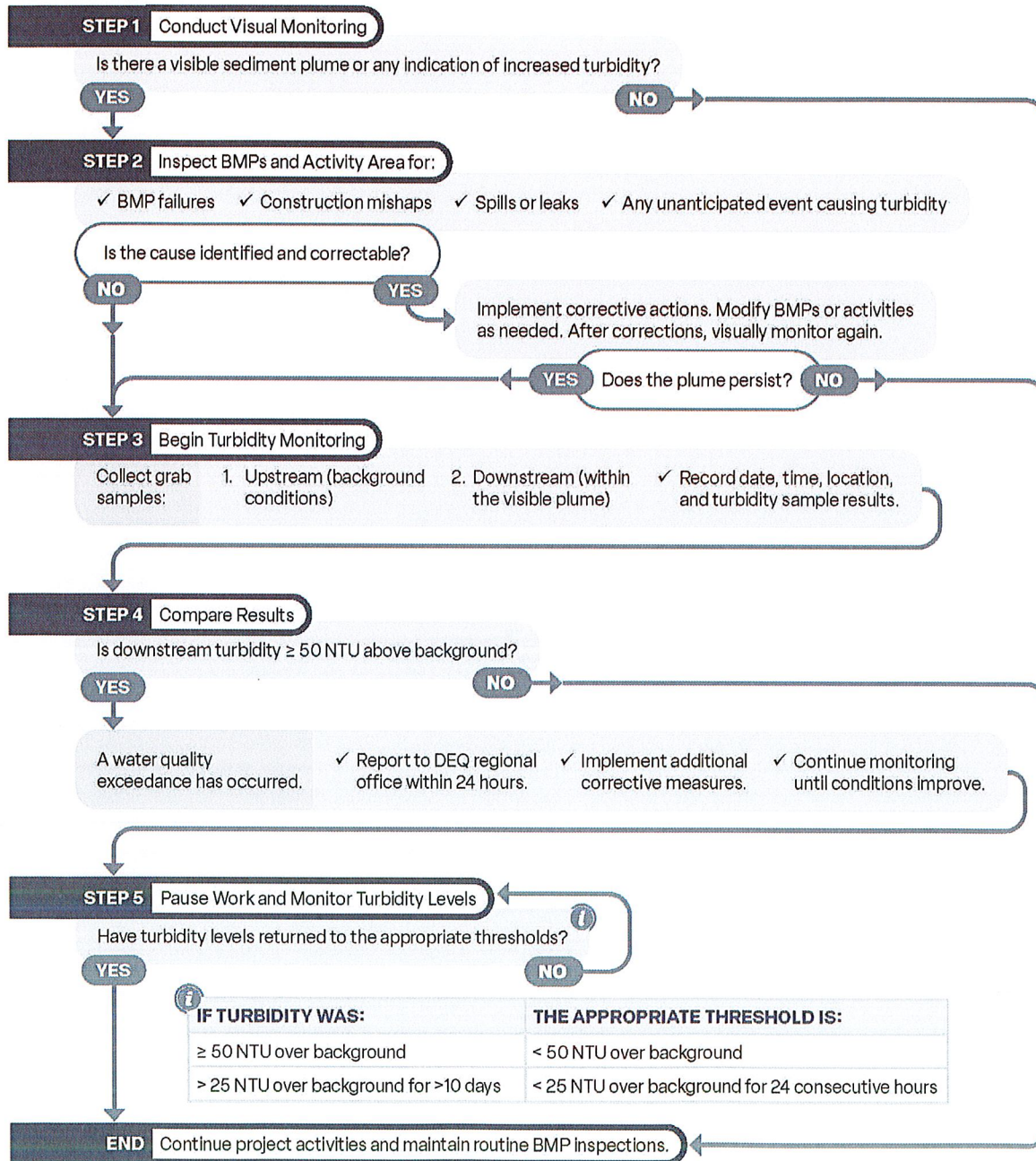
References


- DEQ (Idaho Department of Environmental Quality). 2020. *Idaho Catalog of Storm Water Best Management Practices*. Boise, ID. <https://www.deq.idaho.gov/water-quality/wastewater/storm-water/>
- DEQ (Idaho Department of Environmental Quality). 2024. *Idaho Department of Environmental Quality 2024 Integrated Report*. Boise, ID. <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/23740>
- DEQ (Idaho Department of Environmental Quality). 2005. *Camas Creek Subbasin Assessment and Total Maximum Daily Load*. Boise, ID. <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/11766>
- EPA (US Environmental Protection Agency). 2000. *National Menu of Best Management Practices (BMPs) for Stormwater*. <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater>
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- RSET (Northwest Regional Sediment Evaluation Team). 2018. *Sediment Evaluation Framework for the Pacific Northwest*. Prepared by the RSET Agencies. <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2548>

Appendix A. Turbidity Monitoring Overview

TURBIDITY MONITORING DECISION TREE

PROJECT ACTIVITIES OCCURRING IN OR NEAR WATER



 An official website of the United States government



MENU

National Pollutant Discharge Elimination System (NPDES)

CONTACT US

SHARE   

Rainfall Erosivity Factor Calculator for Small Construction

Introduction

EPA's stormwater regulations allow NPDES permitting authorities to waive NPDES permitting requirements for stormwater discharges from small construction sites if:

- the construction site disturbs less than five acres, and
- the rainfall erosivity factor ("R" in the revised universal soil loss equation, or RUSLE) value is less than five during the period of construction activity.

If your small construction project is located in an area where EPA is the permitting authority and your R factor is less than five, you qualify for a low erosivity waiver (LEW) from NPDES stormwater permitting. If your small construction project does not qualify for a waiver, then NPDES stormwater permit coverage is required. Follow the steps below to calculate your R-Factor.

LEW certifications are submitted through the NPDES eReporting Tool or "CGP-NeT". Several states that are authorized to implement the NPDES permitting program also accept LEWs. Check with your state NPDES permitting authority for more information.

- Submit your LEW through EPA's eReporting Tool <<https://www.epa.gov/npdes/submitted-notice-intent-noi-notice-termination-not-or-low-erosivity-waiver-lew-under>>



- List of states, Indian country, and territories where EPA is the permitting authority (pdf) <<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit-cover.pdf>>
- Construction Rainfall Erosivity Waiver Fact Sheet <<https://www.epa.gov/npdes/construction-rainfall-erosivity-waiver-fact-sheet>>
- Small Construction Waivers and Instructions (pdf) <<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-c-waivers.pdf>>

The R-factor calculation can also be integrated directly into custom applications using the R-Factor web service <<https://epa.gov/api-docs/>>.

Steps to Calculate an R Factor for your Small Construction Project

- 1 Select the estimated start and end dates of construction by clicking the calendar icons below and using the dropdown calendar. The period of construction activity begins at initial earth disturbance and ends with final stabilization.

Start Date:

End Date:

- 2 Locate your small construction project by entering the address in the search box or by clicking on the map.

Location:

Search





3 Click the "Calculate R Factor" button below.

Calculate R Factor

Facility Information

| | |
|-------------------------------|-----------------------------|
| Start Date: 07/27/2026 | Latitude: 43.3141 |
| End Date: 01/31/2027 | Longitude: -114.6572 |

Calculation Results

Rainfall erosivity factor (R Factor) = 3.84

A rainfall erosivity factor of less than 5.0 has been calculated for your site and period of construction. If you are located in an area where EPA is the permitting authority (pdf) <<https://www.epa.gov/system/files/documents/2022-01/2022-cgp-final-appendix-b-areas-of-permit-cover.pdf>>, you can submit a LEW through EPA's NPDES eReporting Tool (NeT) <<https://www.epa.gov/npdes/submitted-notice-intent-noi-notice-termination-not-or-low-erosivity-waiver-lew-under>>. Otherwise, contact your state permitting authority to

determine if you are eligible for a waiver from NPDES permitting requirements.

If you submitted a LEW through EPA's NeT and your construction activity ultimately extends past the project completion date you specified above, you must recalculate the R factor using the original start date and a new project completion date. If the recalculated R factor is still less than 5.0, you must submit a modification to your LEW through NeT before the end of the original construction period. If the new R factor is 5.0 or greater, you must submit a Notice of Intent (NOI) instead to be covered by the Construction General Permit (CGP) before the original project completion date.

For questions or comments, email EPA's CGP staff at cgp@epa.gov.



Discover

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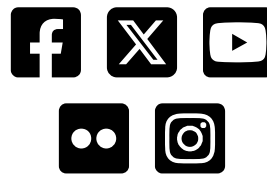
White House

 <<https://www.whitehouse.gov/>>

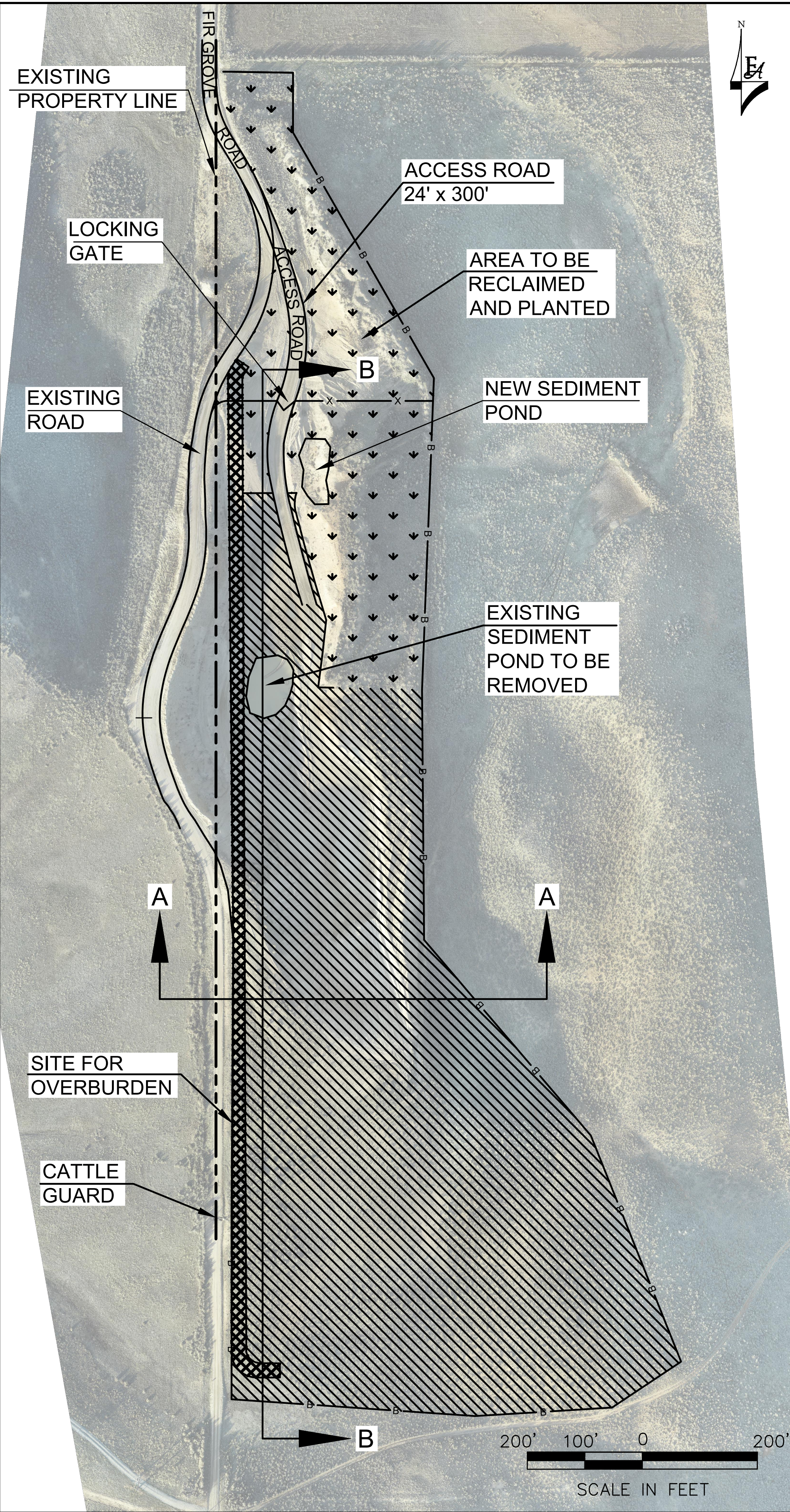
Frequent Questions

<<https://www.epa.gov/aboutepa/frequent-questions-specific-epa-programtopics>>

Follow.



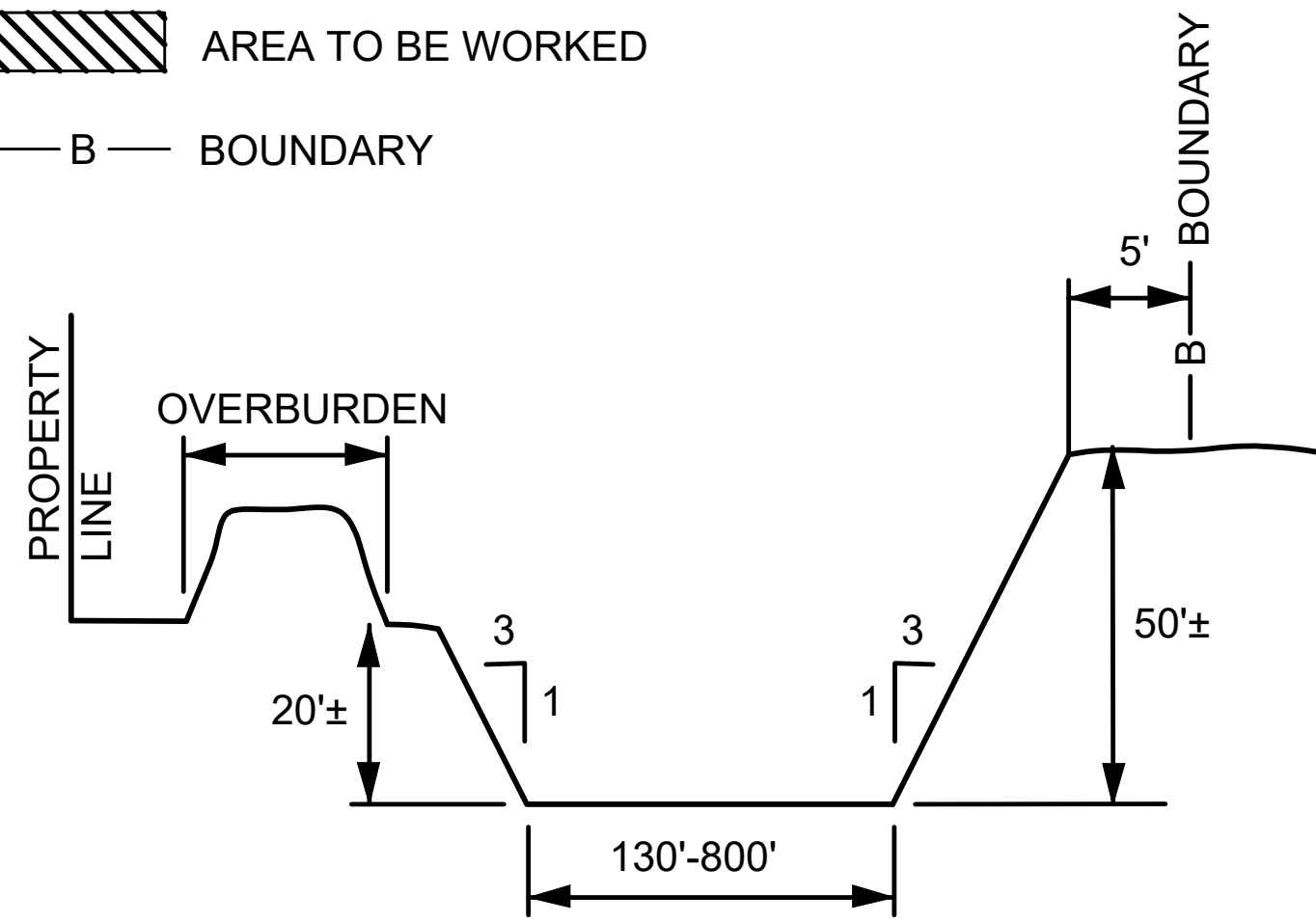
P:\210015 - Camas County Engineering Services\CADD\Cutter Pit\218095-Mining and Reclamation_Update.dwg - 4/15/2022 12:23 PM



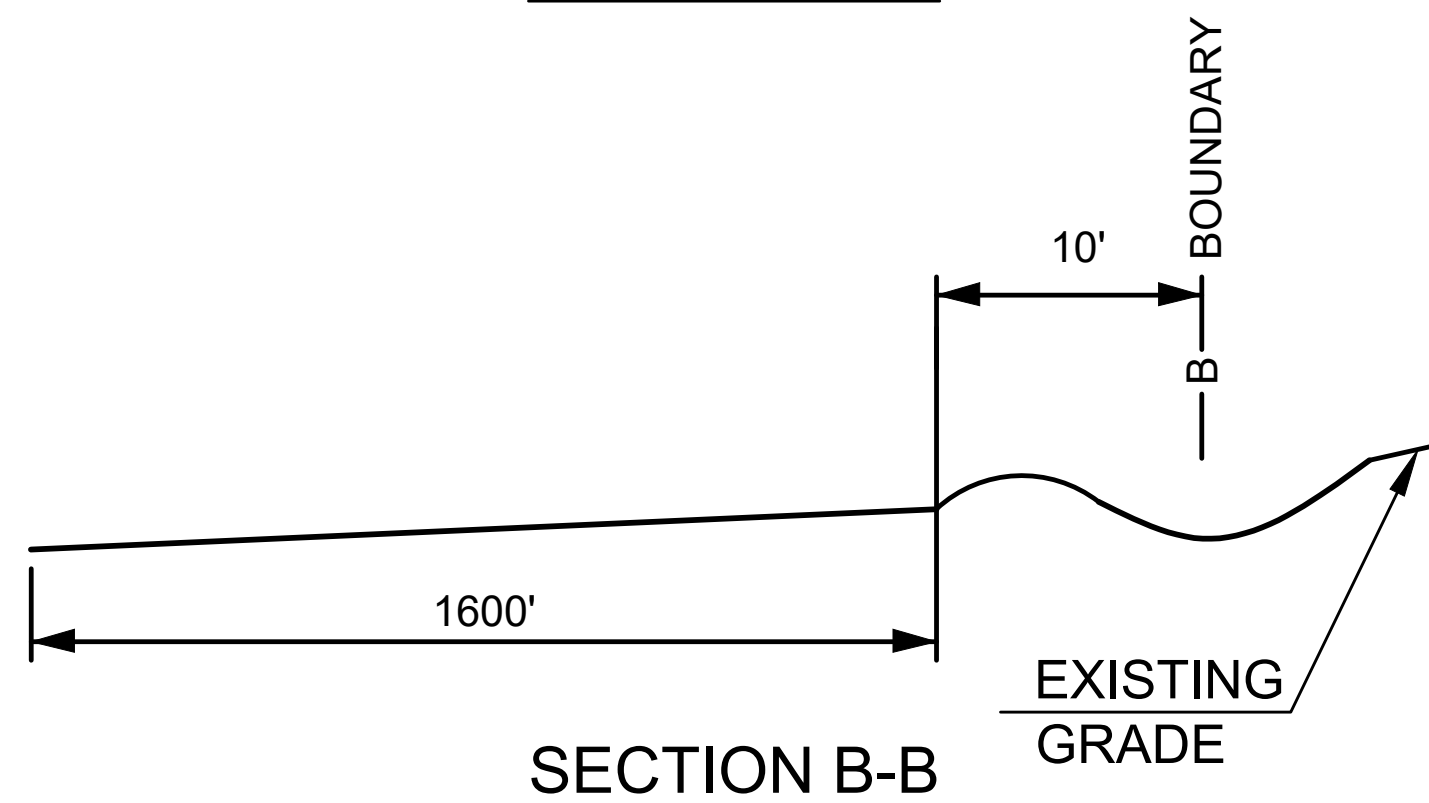
RECLAMATION LAYOUT

LEGEND

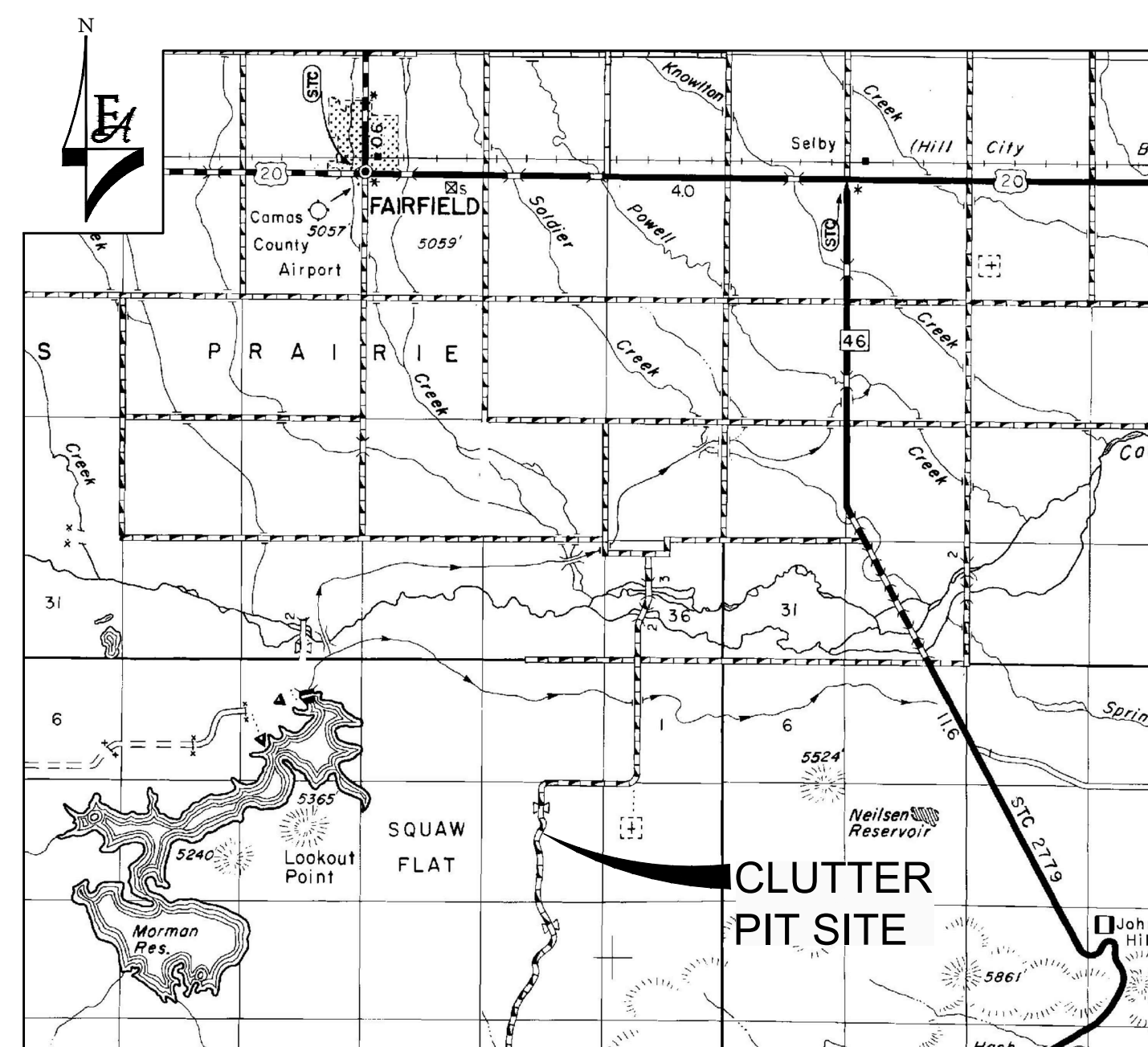
- AREA TO BE RECLAIMED AND PLANTED
- SITE FOR OVERBURDEN AND VEHICLE BARRIER
- TEST HOLE
- AREA TO BE WORKED
- B — BOUNDARY



SECTION A-A



SECTION B-B



LOCATION MAP

OPERATION OF SOURCE

EXCAVATION TO START A PIT FACE AND WORK TO THE SOUTH. MAINTAIN BOUNDARY FENCES DURING SOURCE OPERATIONS.

TOPSOIL AND OVERBURDEN WILL BE STOCKPILED AS SHOWN ON THE PLAT FOR REDISTRIBUTION OVER EXCAVATED AREAS.

FINAL EXCAVATION OF SLOPES SHALL BE NO STEEPER THAN 3:1. SLOPE CRESTS WILL BE ROUNDED ONCE EXCAVATION CEASES IN ANY AREA.

UNLESS OTHERWISE DETERMINED BY AUTHORIZED OFFICER, ALL DISTURBED AREAS WILL BE RESEEDED AFTER SLOPING AND GRADING.

NO DUMPING IS PERMITTED AT THE SITE. REMOVAL OF DEBRIS GENERATED BY MINING OPERATIONS IS REQUIRED AT THE END OF EACH PROJECT.

CONTROL NOXIOUS WEEDS IN THE OPERATIONS AREA DURING THE PERMIT PERIOD AND FOR TWO YEARS FOLLOWING THE COMPLETION OF RECLAMATION.

BLM IS TO BE NOTIFIED IF CULTURAL OR PALEONTOLOGICAL RESOURCES ARE UNCOVERED DURING OPERATIONS. A CULTURAL RESOURCES INVENTORY WILL BE COMPLETED BY BLM PRIOR TO GROUND DISTURBING ACTIVITY.

FUGITIVE DUST SHALL BE CONTROLLED IF OPERATIONS TAKE PLACE DURING DRY CONDITIONS.

ACCESS ROUTE AND CONSTRUCTION DESIGN SHALL BE ARRANGED BY CAMAS COUNTY IN COORDINATION WITH LANDOWNERS INVOLVED.

FINAL RECLAMATION PLAN

THE FINAL EXCAVATION DESIGN SHALL BE TAKEN NO CLOSER THAN SHOWN ON THE SKETCH.

THE SLOPES SHALL BE 3:1 AND PIT WALLS AND FLOOR SHALL BE LEFT IN A REASONABLY SMOOTH CONDITION.

WHEN EXCAVATION HAS BEEN COMPLETED OR IN STAGES, THE PIT WILL BE RECLAIMED BY SPREADING 1 FOOT OF OVERBURDEN UNIFORMLY OVER THE FLOOR AND SLOPES AND SEEDED AS FOLLOWS.

GRASSES
SMOOTH BROME INTERMEDIATE WHEAT GRASS ALFALFA MIX
OR SAWTOOTH MIX

SEEDING PERIOD SEPTEMBER 1 TO DECEMBER 15.

SOURCE NO. _____
 ACREAGE ____ AC.
 OWNERSHIP CAMAS COUNTY
 Date Purchased _____ From _____
 Deed Recorded _____ Instrument No. _____
 in Book _____ of Deeds on page _____
 _____ County Records
 Leaser _____ Dated _____
 Lease Permit No. _____
 Expires _____
 Reclamation Approval _____
 Archeological _____

| NO. | REVISIONS | BY | DATE |
|-----|-----------|----|------|
| | | | |

FORSGREN Associates Inc.
 1109 WEST MYRTLE ST., SUITE 300, BOISE, ID 83702
 PH: 208.342.3144 FAX: 208.383.0819



| | |
|-------------|--------|
| PROJECT NO. | 210015 |
| DRAWN | HR |
| DESIGNED | SR |
| APPROVED | SR |
| DATE | DAOC |

CAMAS COUNTY
IDAHO

CLUTTER PIT
RECLAMATION PLAN

EXAMPLE MINING & RECLAMATION PLAN FOR MINERAL MATERIAL DISPOSALS

NAME or ORGANIZATION :: Camas County DATE :: 10/05/2022
MAILING ADDRESS :: P.O. BOX 430 (address)
Fairfield, ID 83327 (city/state/zip)
TELEPHONE :: (208) 764-2271
POINT OF CONTACT AND TITLE :: Ted Strickler

*****NOTICE TO APPLICANT*****

PLEASE PRINT CLEARLY; ANSWER EACH QUESTION THOROUGHLY; AND PROVIDE A DETAILED, ACCURATE, AND LABELLED SITE MAP. FAILURE TO ACCURATELY AND FULLY COMPLETE THIS FORM MAY RESULT IN PROCESSING DELAYS AND/OR A REJECTED APPLICATION.

- 1) LOCATION :: SW1/4 of NE1/4 TOWNSHIP 2S RANGE 14E SECTION 11 PARTS _____
USGS QUAD :: _____ GPS COORDINATES (UTM) 43.2628715, -114.7623215
LOCAL SITE NAME :: Clutter Pit
- 2) SPECIES OF MINERAL MATERIAL :: Decomposed granite
- 3) ESTIMATED ANNUAL PRODUCTION (CUBIC YARDS OR TONS) :: 10,000 CY
ESTIMATED LIFETIME PRODUCTION OF PERMIT (CUBIC YARDS OR TONS) :: 668,000 CY
- 4) FREQUENCY OF MINING/USE :: STEADY _____ or INTERMITTENT X
- 5) HOW WILL THE EXTRACTED MATERIAL BE UTILIZED :: Placed to build roads and resurface gravel roads within Camas County.
- 6) WHERE WILL THE MATERIAL BE USED :: Camas County roads
- 7) IS THE EXTRACTION SITE ADJACENT TO OR NEAR A BODY OF WATER :: No.
- 8) LIST THE NUMBERS AND TYPE OF ALL EQUIPMENT EXPECTED TO BE UTILIZED DURING MINING OPERATIONS TO INCLUDE (BUT NOT LIMITED TO) LOADERS, BACKHOES, DOZERS, TRUCKS, CRUSHERS, CLASSIFIERS, OR OTHER EQUIPMENT :: 1 Loader, 1 backhoe, 1 dozer, and up to 5 trucks either end dumps or belly dumps.
- 9) DESCRIBE THE SPECIFICS OF THE MINING OPERATION (I.E. THE EXTRACTION PROCESS FROM BEGINNING TO HAUL) :: Clean/scrape top soil and organics. Doze material into stock piles maintaining 3:1 slopes.

10) WILL HAZARDOUS MATERIALS OR WASTES BE TRANSPORTED TO, USED, OR STORED ON-SITE? IF YES, EXPLAIN HOW THEY WILL BE USED AND STORED AND DESCRIBE THE MEASURES THAT WILL BE TAKEN TO PREVENT EXPOSURE TO THE PUBLIC AND ENVIRONMENT INCLUDING ANY MEASURES TO CONTAIN SPILLS (IF APPLICABLE) :: No hazardous materials or waste will be transported to, used, or stored on-site.

11) WILL MINING RESULT IN AN OPEN PIT? IF YES, DESCRIBE THE DIMENSIONS OF THE PIT, INCLUDING LENGTH, WIDTH, DEPTH, AND WALL SLOPE, DURING AND AT THE CONCLUSION OF MINING :: The mining will result in an open pit. The pit is estimated to be 1,500 ft long ranging from 100 to 800 ft wide by approximately 25 ft deep with 3H to 1V side slopes.

12) WHAT MEASURES WILL BE TAKEN TO PREVENT UNAUTHORIZED USE OF THE SITE AND/OR UNAUTHORIZED REMOVAL OF MINERAL MATERIALS (NOTE: IF YOU DISCOVER UNAUTHORIZED REMOVAL, YOU MUST CONTACT BLM) :: A gate will be used to prevent unauthorized use of the site, and a berm will be placed along Fir Grove Road.

13) HAVE YOU OBSERVED MINING CLAIM MARKERS ON OR ADJACENT TO YOUR PROPOSED REMOVAL SITE? IF YES, PLEASE EXPLAIN IN DETAIL :: No.

14) YOU WILL BE REQUIRED TO TRACK AND DOCUMENT THE AMOUNT OF MATERIAL SEVERED FROM THE SITE IN THE FORM OF PRODUCTION RECORDS. THE QUANTITY OF MATERIAL PRODUCED IS REPORTABLE TO THE BLM AT LEAST ANNUALLY. PLEASE DESCRIBE THE METHOD YOU INTEND TO EMPLOY TO MEET THIS REQUIREMENT (I.E. WEIGHT TICKETS, TRUCK COUNTS, SURVEY, ETC.) :: Camas County Road and Bridge tracks the loads hauled and from which pit on their time sheets.

15) DESCRIBE, IN DETAIL, THE RECLAMATION MEASURES THAT YOU INTEND TO EMPLOY IN THE REHABILITATION OF YOUR MATERIAL SITE AT THE CONCLUSION OF THE PERMIT. ITEMS TO BE INCLUDED (LIST IS NOT ALL INCLUSIVE) : ALL SLOPES AND PITS SHOULD BE RE-SLOPED TO NATURAL CONTOURS, STOCKPILED TOP SOIL SHOULD BE RETURNED AND RE-SEEDED WITH AN APPROVED SEED

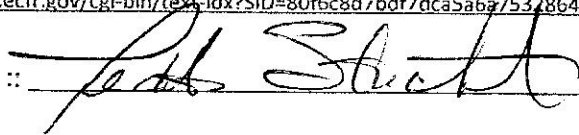
MIX, REDUCE OR REMOVE VERTICAL SLOPES (HIGHWALLS) AND ALL OVERHANGS, AND SCARIFY AND RE-SEED ALL CONSTRUCTED ACCESS ROADS :: At the conclusion of the permit Camas County Road and Bridge will ensure that all slopes and pits will be re-sloped to natural contours and will reduce or remove vertical slopes (highwalls) and overhangs. The access roads will be scarified, stockpiled top soil will be returned and all will be re-seeded with an approved seed mix.
As Camas County Road and Bridge moves south sections that have been mined will be reclaimed to avoid a large open pit.

- 16) PROVIDE A DETAILED SITE MAP THAT INCLUDES, AT A MINIMUM, THE ITEMS BELOW ALONG WITH ANY ADDITIONAL PERTINENT INFORMATION. YOU ARE ENCOURAGED TO PROVIDE DRAWINGS, PHOTOGRAPHS, CROSS SECTIONS, OR ANY OTHER ILLUSTRATION THAT WILL ASSIST YOU TO CLEARLY DESCRIBE YOUR PROPOSED OPERATION.
- a. NORTH ARROW
 - b. MAP SCALE (E.G. 3cm = 500' OR A BAR SCALE)
 - c. LENGTH, WIDTH, AND LOCATION(S) OF PROPOSED NEW ACCESS ROADS
 - d. LOCATION(S) OF PRE-EXISTING ACCESS ROADS
 - e. LOCATION(S), DIMENSIONS, AND OUTLINE OF THE PLANNED EXTRACTION AREA
 - f. LOCATION(S) OF STOCKPILED TOP SOIL (TO BE USED DURING RECLAMATION)
 - g. LOCATION(S) OF ANY STATIONARY EQUIPMENT AND/OR STORAGE AREAS
 - h. LOCATION(S) OF ANY HAZARDOUS MATERIALS OR HAZMAT STORAGE AREAS
 - i. LOCATION(S) OF IMPORTANT TOPOGRAPHIC FEATURES INCLUDING STREAMS, CANYONS, HILL TOPS, ETC.

I UNDERSTAND THAT THIS DOCUMENT IS NOT INTENDED TO BE ALL INCLUSIVE AND SHOULD ONLY BE USED AS A GUIDE TO SUPPLEMENT MY APPLICATION AND MINING PLAN. IT IS MY RESPONSIBILITY TO ENSURE THAT I AM ABIDING BY THE LAWS AND REGULATIONS OUTLINED IN 43 CFR 3601, MINERAL MATERIALS DISPOSAL LOCATED ON THE INTERNET AT:

(<https://www.ecfr.gov/cgi-bin/text-idx?SID=80f6c8d7bdf7dca5a6a7532864e36ad2&mc=true&node=pt43.2.3600&rgn=div5>).

SIGNATURE ::



DATE ::

10/14/22