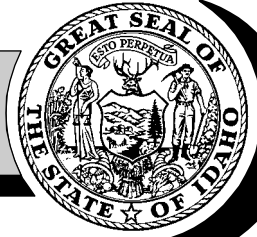


STATE OF IDAHO
TRANSPORTATION DEPARTMENT
BOISE

CONTRACT NO. 8708



PROJECT A022(431), A022(597), A022(598) & A022(599)

KEY 22431, 22597, 22598 & 22599

WORK AUTH T206660

LOCATION S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE,
IDAHO FALLS

HIGHWAY OFF SYS

COUNTY BONNEVILLE, BANNOCK & BEAR LAKE

CONTRACTOR CANNON BUILDERS, INC.
725 AIRPORT RD.
BLACKFOOT, ID 83221



NOTICE OF LETTING

Idaho Federal Aid Project No. A022(431), A022(597), A022(598) & A022(599) in Bonneville, Bannock & Bear Lake County, Key No. 22431, 22597, 22598 & 22599; for the work of replace four local bridges which include: 1) S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls; 2) W Carson St; Portneuf River Bridge, Pocatello; 3) St Charles Creek Bridge, Bear Lake County; And 4) E 121st S, Idaho Canal Bridge.

Sealed proposals will be received only at the office of the IDAHO TRANSPORTATION DEPARTMENT, 3311 WEST STATE STREET, BOISE, IDAHO 83703, ATTN: **ADVERTISEMENT AND AWARD**. Bids may also be submitted electronically through Bid Express (www.bidx.com). All bids must be received by two o'clock p.m., on November 23, 2021.

ADDITIONAL INFORMATION CONTACT: RESIDENT ENGINEER **JAYME COONCE** at (208) 334-0565 for any design related questions.

Digital copies of the Plans, Proposals, and Specifications must be downloaded for a fee of \$15.00. Bidders must appear on the plan holders list for their proposal to be accepted by the Department. Please contact QuestCDN.com at 952-233-1632 or info@questcdninfo.com for assistance in downloading and working with this digital project information.

General Bidding information and Specifications may be obtained from the Idaho Transportation Department website at <http://itd.idaho.gov/business/>

In an effort to achieve ITD's DBE Annual Participation Goal (APG) of 10.0% utilization, ITD requires responder to utilize certified subcontractors and suppliers listed on its DBE Directory located at: <https://itd.dbesystem.com/>. For this project, it has been determined that there is a DBE availability of 3% or more. For more information regarding ITD's DBE Program please go to <https://apps.itd.idaho.gov/apps/ocr/ocrDBEPROGRAM.aspx>

This contract requires full compliance with Title VI of the Civil Rights Act of 1964, which protects persons from being denied the benefits of or excluded from participation in programs or activities; or subjected to discrimination based on race, color, national origin, sex, age, disability, Limited English Proficiency or economic status. The Contractor is encouraged to utilize the goods and services of disadvantaged firms in accomplishing the tasks or providing the services of this agreement, and to provide equal opportunity to all sub-bidders and suppliers.

IDAHO TRANSPORTATION DEPARTMENT

COMMUNICATION PROTOCOL DURING CONSTRUCTION BIDDING

Communication between the Contractor/ Bidder and the Department

During the advertisement period, prospective Contractors/Bidders will address all questions to the Design Construction (Resident) Engineer shown on the Notice of Letting.

After Bid Opening and through Contract Award, all communications between the Department and the Contractor/Bidder, and any unsuccessful bidders, will be through the Contracting Services Engineer at 208.334.8502. The Department will be unable to share any information, other than as described under the Notification Protocol (see below), related to bid submittals or pending Department decisions during this time.

After Contract Award, all communications between the Department and the Contractor will be through the Design Construction (Resident) Engineer.

Contractor Information

The Department will not provide any proprietary bidding information until after Contract Award.

Notification Protocol

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

- After the opening of bids, the bid summary results will be posted along with a notification of “Pending Board Decision”, if applicable.
- After analysis of the bids, regularities and irregularities will be posted to the website. The apparent low bidder will also be notified of irregularity via email, if applicable.
- Once the Intent to 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, the Engineer’s Estimate and the Contract Award Date will be posted to the website.

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into, in duplicate, this 20 day of December, 2021, by and between the State of Idaho, hereinafter called the State, by the Idaho Transportation Board of said State, party of the first part, and CANNON BUILDERS, INC., hereinafter called the Contractor, party of the second part.

WITNESSETH: That the contractor, in consideration of the sum to be paid to him by said State, in the matter and at the time hereinafter provided, and of other covenants and agreements herein contained, hereby agrees for himself, their heirs, administrators, successors and assigns to furnish the material and perform the work of:

replace four local bridges which include: 1) S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls; 2) W Carson St; Portneuf River Bridge, Pocatello; 3) St Charles Creek Bridge, Bear Lake County; And 4) E 121st S, Idaho Canal Bridge; in Bonneville, Bannock & Bear Lake County, designated as Idaho Federal Aid Project No. A022(431), A022(597), A022(598) & A022(599)

To furnish all necessary machinery, tools, apparatus, materials and labor to complete the work in the most substantial and workmanlike manner according to the plans and specifications therefore on file in the office of the Idaho Transportation Department of said State, and such modifications of the same and other directions that may be made by the State Highway Administrator as provided herein: Provided, however, that the proposed work covered by this contract does not include that portion or portions of the work to be done in right of way to which title is being contested in any court having jurisdiction, until a specific award has been made by the court in each instance and in good and sufficient title to such portion of right of way in dispute has been assured.

CONTRACT DOCUMENTS:

It is further agreed that the said plans and specifications and the schedule of rates and prices set forth in the proposal and the general and special provisions appended to this contract agreement are hereby specifically referred to and made a part of this contract, and shall have the same force and effect as though all of same were fully inserted herein.

PAYMENTS:

For the faithful performance of the work herein embraced, as set forth in the contract agreement, general and special provisions, notice to contractors, instructions to bidders, proposals, general and detailed specifications and plans, which are a part hereof, in accordance with the directions of the State Highway Administrator and to his satisfaction, the State agrees to pay said Contractor the amount earned, computed from the actual quantities of the work performed as shown by the estimates of the Administrator and unit prices named in such proposal, and to make such payments in the manner and at the time provided in such proposal, and to make such payments in the manner and at the time provided in the general provisions thereto appended. Payments shall be made by the State Treasurer of said State, upon warrants of the State Auditor of said State, issued upon vouchers of said State Highway Administrator, which have been approved by the Idaho Transportation Board out of monies legally available for that purpose.

IN WITNESS WHEREOF, The said State of Idaho, by the Idaho Transportation Board, executes this contract and the said CANNON BUILDERS, INC., does sign and seal the same, the day and year in this contract first above written.

Attest (The State):

STATE OF IDAHO
Idaho Transportation Board

I hereby attest that all contract documentation has been checked and included in this final contract, as appropriate.

By:

David B Kunitz

District Engineer/ HQ Division Administrator
Party of the First Part

Dave Dietz, CONTRACTS ENGINEER

Name & Title

CONTRACTOR

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.

Curtis

Signature

Curtis M Cannon

Print Name

Owner

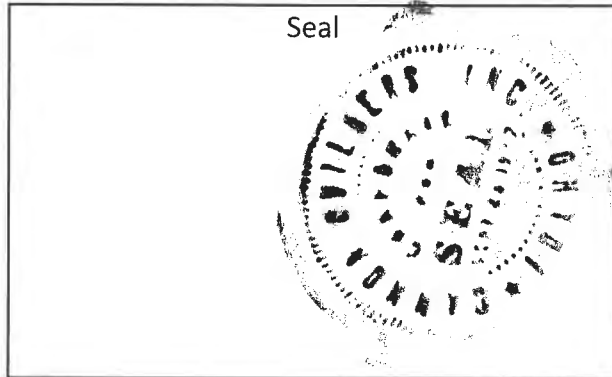
Title

Party of the Second Part

12-13-21

Date

Seal



Bond No. 9374229

Revised 09-09-2021

SURETY

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That we CANNON BUILDERS, INC., as Principal, and

Fidelity and Deposit Company of Maryland

as Surety are held and firmly bound unto the State of Idaho in the penal sum of

FOUR MILLION SIX HUNDRED THIRTY-THREE THOUSAND FORTY-NINE DOLLARS AND THIRTY CENTS

(\$4,633,049.30) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each one of us bind ourselves, our heir, executors, administrators and assigns, jointly and severally, firmly by these presents.

The condition of the instrument is such, that whereas the Principal has entered into a certain agreement, hereto attached, with the State of Idaho, dated December 20, 2021, for the work of replace four

ITD TO DATE UPON AWARD

local bridges which include: 1) S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls; 2) W Carson St; Portneuf River Bridge, Pocatello; 3) St Charles Creek Bridge, Bear Lake County; And 4) E 121st S, Idaho Canal Bridge; S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS; known as IDAHO FEDERAL AID Key No. 22431, 22597, 22598 & 22599 Contract No. 8708, in Bonneville, Bannock & Bear Lake County.

NOW, THEREFORE, If the said Principal shall pay all claimants supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said contract, and any and all authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived and shall pay all taxes when due, as required by Title 63, Chapter 15, Idaho Code, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, However, that this bond is executed pursuant to the provisions of the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

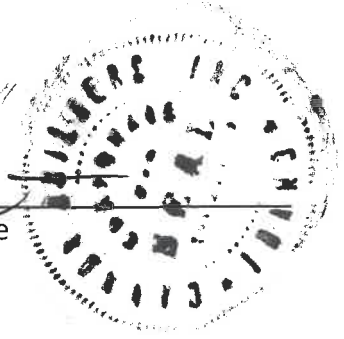
IN WITNESS WHEREOF, the Principal and Surety have executed this instrument to become effective on the date of the contract agreement as set forth above.

CONTRACTOR:

By:

Curtis M. Cannon

Signature



Curtis M. Cannon

Print Name

CEO

Title

CORPORATE SURETY:

By:

Fidelity and Deposit Company of Maryland

Surety Company Name

Monica E. Nelson

Signature

Monica E. Nelson

Print Name

Attorney-in-Fact

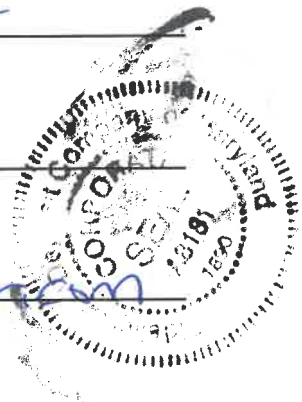
Title

208.523.9100

Phone Number

mnelson@buckner.com

Email Address



SURETY

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we CANNON BUILDERS, INC., as Principal, and

Fidelity and Deposit Company of Maryland

as Surety are held and firmly bound unto the State of Idaho in the penal sum of

FOUR MILLION SIX HUNDRED THIRTY-THREE THOUSAND FORTY-NINE DOLLARS AND THIRTY CENTS

(\$4,633,049.30) lawful money of the United States, which sum is agreed to be the maximum liability hereunder, well and truly to be paid, and for the payment of which we and each one of us bind ourselves, our heir, executors, administrators and assigns, jointly and severally, firmly by

The condition of the instrument is such, that whereas the Principal has entered into a certain agreement, hereto attached, with the State of Idaho, dated December 20, 2021, ITD TO DATE UPON AWARD for the work of replace four

local bridges which include: 1) S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls; 2) W Carson St; Portneuf River Bridge, Pocatello; 3) St Charles Creek Bridge, Bear Lake County; And 4) E 121st S, Idaho Canal Bridge; S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS; known as IDAHO FEDERAL AID Key No. 22431, 22597, 22598 & 22599 Contract No. 8708, in Bonneville, Bannock & Bear Lake County.

NOW, THEREFORE, If the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract and any extensions thereof that may be granted by the State, with or without notice to the Surety and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then this obligation to be null and void, otherwise to remain in full force and effect.

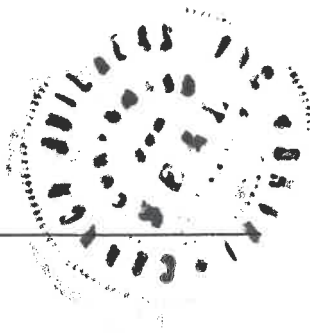
PROVIDED, However, that this bond is executed pursuant to the provisions of the Public Contracts Bond Act, and all liabilities on this bond shall be determined in accordance with said provisions to the same extent as if set forth in full herein.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument to become effective on the date of the contract agreement as set forth above.

CONTRACTOR:

By:

Curtis M. Cannon
Signature



Curtis M. Cannon
Print Name

CEO
Title

CORPORATE SURETY:

By:

Fidelity and Deposit Company of Maryland
Surety Company Name

Monica E. Nelson
Signature

Monica E. Nelson
Print Name

Attorney-in-Fact
Title

208.523.9100
Phone Number

mnelson@buck
Email Address



**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Terry H. BUCKNER, Andrew RENDON, J. Michele BURRASTON, Aubrey PIXTON, Chris LUND, Douglas G. BALL, Vickie NELSON, Monica E. NELSON, Bradley K. NIELSON of Salt Lake City, Utah, EACH**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 14th day of January, A.D. 2021.



ATTEST:
**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**

By: *Robert D. Murray*
Vice President

By: *Dawn E. Brown*
Secretary

**State of Maryland
County of Baltimore**

On this 14th day of January, A.D. 2021, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2023

STATE OF IDAHO
TRANSPORTATION DEPARTMENT
BOISE, IDAHO

DATE: November 10, 2021

ADDENDUM NO. **1**

Idaho Federal Aid Project No. [A022\(431\)](#), [A022\(597\)](#), [A022\(598\)](#) & [A022\(599\)](#)
S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS
Bonneville, Bannock & Bear Lake County, Key No. [22431](#), [22597](#), [22598](#) & [22599](#)

NOTICE TO PLANHOLDERS:

Enclosed are Revised Sheets 1 of 47 of the Special Provisions.

This letter must be attached to the inside back cover of the bidding proposal or provide acceptable acknowledgement if submitting a hard copy bid. If submitting bid electronically, bidder must acknowledge this addenda, by inclusion of the amendment, in the electronic bid.

FAILURE TO ACKNOWLEDGE INCLUSION OF THIS ADDENDUM SHALL RENDER THE BID PROPOSAL IRREGULAR AND THE BID WILL BE REJECTED.

Sincerely,



DANA DIETZ, P.E.
Contracts Engineer

Proposal

In compliance with your bid package to be received for this letting, the undersigned certifies to have examined the location of work and/or materials sites, 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. The undersigned hereby proposes to furnish the material and perform the work as described in the Notice of Letting in accordance with the Proposal/Plans purchased through QuestCDN for this project.

On the acceptance of this proposal for said work, the undersigned will execute Contract Forms CA in accordance with the bid as accepted, and furnish the Contract Performance and Payment Bonds on Forms CB with approved and sufficient surety within 15 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 Special Provisions, after authority to proceed 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.

Accompanying this proposal is a Certified Check or a Cashier's Check drawn on an Idaho bank in the amount of five percent of the total amount bid, made payable to the Idaho Transportation Department, or a Bidder's Bond in the amount of five percent of the total amount bid.

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

The contractor/consultant warrants and takes the steps to verify that it does not knowingly hire or engage persons not authorized to work in the United States; and that any misrepresentation in this regard or any employment of person not authorized to work in the United States constitutes a material breach and shall be cause for the imposition of monetary penalties up to five percent (5%) of the contract price, per violation, and/or termination of its contract.

By signature on this proposal, the bidder declares under penalty of perjury under the laws of the United States, that the firm, association, or corporation has not by or through any of its officers, partners, owners, or any other person associated therewith, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this highway project, and is not financially interested in or otherwise affiliated in a business way with any other bidder on this project.

Contract ID: 22431211012
Letting Date: 11/23/2021
Bidder: C0029 - Cannon Builders, Inc
Date: 10/21/2021

Project(s): A022(431) A022(597) A022(598) A022(599)
Call: 2
Description: S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS
Revised: 11/10/2021 12:00:00 AM

Legal Company Name: Cannon Builders, Inc.

Company Business Address: 725 Airport Rd, Blackfoot ID, 83221

Mailing (Shipping) Address, if different: 725 Airport Rd, Blackfoot ID, 83221

Company organized under the state of: Idaho

Legal Name and Title of Highest Officer in Company: Curtis M. Cannon - CEO/
Owner

Contact Name and Title: Curtis M. Cannon - CEO/Owner

Phone No: 208-785-6281 Email: curtis@cannonbuildersinc.com

Idaho Public Works License No.: PWC-C-11540-U-123 Exp. Date: 07-31-2022

Submittal, signature, acceptance, authorization and certifications are hereby
made by signing this internet bid with a Digital ID. ***

State of Idaho
 Idaho Transportation Department
 Schedule of Items

| LINE NUMBER | ITEM NUMBER | QUANTITY | UNIT | UNIT PRICE | EXTENSION PRICE |
|----------------------------------------|------------------------------------------------------------------|-----------|------|----------------|-----------------|
| SECTION 0001 | | | | | |
| S Higbee Drive, Butte Arm Canal Bridge | | | | | |
| 0005 | 107-019A | 5000.000 | CA | \$1.00000 | \$5,000.00 |
| | MONUMENT PRESERVATION KN22431 | | | | |
| 0010 | 107-019A | 2000.000 | CA | \$1.00000 | \$2,000.00 |
| | MONUMENT PRESERVATION KN22597 | | | | |
| 0015 | 107-019A | 1000.000 | CA | \$1.00000 | \$1,000.00 |
| | MONUMENT PRESERVATION KN22598 | | | | |
| 0020 | 107-019A | 1000.000 | CA | \$1.00000 | \$1,000.00 |
| | MONUMENT PRESERVATION KN22599 | | | | |
| 0025 | 110-005A | 300.000 | HR | \$0.80000 | \$240.00 |
| | TRAINING KN22431 | | | | |
| 0030 | 201-010A | 1.000 | LS | \$2,000.00000 | \$2,000.00 |
| | CLEARING & GRUBBING KN22597 | | | | |
| 0035 | 202-005A | 17.000 | EACH | \$600.00000 | \$10,200.00 |
| | SELECTIVE REM OF TREES INCLUDING STUMPS INCLUDING STUMPS KN22431 | | | | |
| 0040 | 203-005A | 1.000 | LS | \$6,500.00000 | \$6,500.00 |
| | REM OF OBSTRUCTIONS KN22431 | | | | |
| 0045 | 203-015A | 1618.000 | SY | \$6.00000 | \$9,708.00 |
| | REM OF BITUMINOUS SURF KN22431 | | | | |
| 0050 | 203-015A | 713.000 | SY | \$6.50000 | \$4,634.50 |
| | REM OF BITUMINOUS SURF KN22597 | | | | |
| 0055 | 203-020A | 1.000 | EACH | \$26,000.00000 | \$26,000.00 |
| | REM OF BRIDGE KN22431 | | | | |
| 0060 | 203-020A | 1.000 | EACH | \$26,000.00000 | \$26,000.00 |
| | REM OF BRIDGE KN22597 | | | | |
| 0065 | 203-020A | 1.000 | EACH | \$50,000.00000 | \$50,000.00 |
| | REM OF BRIDGE KN22598 | | | | |
| 0070 | 203-020A | 1.000 | EACH | \$22,000.00000 | \$22,000.00 |
| | REM OF BRIDGE KN22599 | | | | |
| 0075 | 203-025A | 2.000 | EACH | \$350.00000 | \$700.00 |
| | REM OF CATCH BASIN KN22597 | | | | |
| 0080 | 203-050A | 2.000 | EACH | \$600.00000 | \$1,200.00 |
| | REM OF CONC HEADWALL KN22599 | | | | |
| 0085 | 203-050B | 10000.000 | CA | \$1.00000 | \$10,000.00 |
| | HAZARDOUS MATERIAL TESTING, REMOVAL, AND DISPOSAL KN22431 | | | | |
| 0090 | 203-055A | 119.200 | SY | \$15.00000 | \$1,788.00 |
| | REM OF CONC PAV KN22431 | | | | |
| 0095 | 203-060A | 520.900 | SY | \$20.00000 | \$10,418.00 |
| | REM OF CONC SIDEWALK KN22431 | | | | |
| 0100 | 203-060A | 189.000 | SY | \$22.00000 | \$4,158.00 |
| | REM OF CONC SIDEWALK KN22597 | | | | |
| 0105 | 203-070A | 772.100 | FT | \$4.00000 | \$3,088.40 |

| | | | | | |
|------|----------|-----------------------------------------------------|--|---------------|-------------|
| | | REM OF CURB & GUTTER KN22431 | | | |
| 0110 | 203-070A | 264.000 FT | | \$6.00000 | \$1,584.00 |
| | | REM OF CURB & GUTTER KN22597 | | | |
| 0115 | 203-075A | 14.000 FT | | \$23.00000 | \$322.00 |
| | | REM OF FENCE KN22599 | | | |
| 0120 | 203-125A | 1.000 LS | | \$1,000.00000 | \$1,000.00 |
| | | REM OF MISCELLANEOUS ITEMS CONC PIPE KN22599 | | | |
| 0125 | 203-125C | 45.500 FT | | \$22.00000 | \$1,001.00 |
| | | REM OF MISCELLANEOUS ITEMS IRR PIPE KN22599 | | | |
| 0130 | 203-125C | 81.000 FT | | \$15.00000 | \$1,215.00 |
| | | REM OF MISCELLANEOUS ITEMS STORM SEWER PIPE KN22597 | | | |
| 0135 | 203-135A | 5.000 EACH | | \$160.00000 | \$800.00 |
| | | REMOVAL OF SIGN KN22431 | | | |
| 0140 | 203-135A | 5.000 EACH | | \$275.00000 | \$1,375.00 |
| | | REMOVAL OF SIGN KN22597 | | | |
| 0145 | 203-135A | 5.000 EACH | | \$390.00000 | \$1,950.00 |
| | | REMOVAL OF SIGN KN22598 | | | |
| 0150 | 203-135A | 6.000 EACH | | \$115.00000 | \$690.00 |
| | | REMOVAL OF SIGN KN22599 | | | |
| 0155 | 205-005A | 1430.000 CY | | \$16.00000 | \$22,880.00 |
| | | EXCAVATION KN22431 | | | |
| 0160 | 205-005A | 280.000 CY | | \$26.00000 | \$7,280.00 |
| | | EXCAVATION KN22597 | | | |
| 0165 | 205-005A | 123.000 CY | | \$40.00000 | \$4,920.00 |
| | | EXCAVATION KN22598 | | | |
| 0170 | 205-005A | 1150.000 CY | | \$16.00000 | \$18,400.00 |
| | | EXCAVATION KN22599 | | | |
| 0175 | 205-040A | 187.000 CY | | \$30.00000 | \$5,610.00 |
| | | GRANULAR BORROW KN22597 | | | |
| 0180 | 205-040A | 200.000 CY | | \$75.00000 | \$15,000.00 |
| | | GRANULAR BORROW KN22598 | | | |
| 0185 | 205-040A | 400.000 CY | | \$36.00000 | \$14,400.00 |
| | | GRANULAR BORROW KN22599 | | | |
| 0190 | 205-060A | 72.000 MG | | \$15.00000 | \$1,080.00 |
| | | WATER FOR DUST ABATEMENT KN22431 | | | |
| 0195 | 205-060A | 15.000 MG | | \$10.00000 | \$150.00 |
| | | WATER FOR DUST ABATEMENT KN22597 | | | |
| 0200 | 205-060A | 12.000 MG | | \$10.00000 | \$120.00 |
| | | WATER FOR DUST ABATEMENT KN22598 | | | |
| 0205 | 205-060A | 55.000 MG | | \$10.00000 | \$550.00 |
| | | WATER FOR DUST ABATEMENT KN22599 | | | |
| 0210 | 205-071A | 60.000 CY | | \$50.00000 | \$3,000.00 |
| | | EXCAVATION AND REPAIR OF SOFT SPOTS KN22431 | | | |
| 0215 | 205-071A | 100.000 CY | | \$50.00000 | \$5,000.00 |
| | | EXCAVATION AND REPAIR OF SOFT SPOTS KN22597 | | | |
| 0220 | 205-071A | 60.000 CY | | \$50.00000 | \$3,000.00 |
| | | EXCAVATION AND REPAIR OF SOFT SPOTS KN22598 | | | |
| 0225 | 205-071A | 60.000 CY | | \$50.00000 | \$3,000.00 |

| EXCAVATION AND REPAIR OF SOFT SPOTS KN22599 | | | | |
|---------------------------------------------|----------|----------|------|---------------------------------------------|
| 0230 | 210-005A | 100.000 | CY | \$40.00000 \$4,000.00 |
| | | | | STR EXCAVATION SCH NO. 1 KN22431 |
| 0235 | 210-005A | 275.000 | CY | \$35.00000 \$9,625.00 |
| | | | | STR EXCAVATION SCH NO. 1 KN22597 |
| 0240 | 210-005A | 320.000 | CY | \$35.00000 \$11,200.00 |
| | | | | STR EXCAVATION SCH NO. 1 KN22598 |
| 0245 | 210-005A | 129.000 | CY | \$40.00000 \$5,160.00 |
| | | | | STR EXCAVATION SCH NO. 1 KN22599 |
| 0250 | 210-015A | 187.000 | CY | \$26.00000 \$4,862.00 |
| | | | | COMPACTING BACKFILL KN22597 |
| 0255 | 210-015A | 160.000 | CY | \$26.00000 \$4,160.00 |
| | | | | COMPACTING BACKFILL KN22598 |
| 0260 | 210-015A | 80.000 | CY | \$18.00000 \$1,440.00 |
| | | | | COMPACTING BACKFILL KN22599 |
| 0265 | 212-011A | 45.000 | FT | \$12.00000 \$540.00 |
| | | | | FIBER WATTLE KN22431 |
| 0270 | 212-011A | 385.000 | FT | \$5.50000 \$2,117.50 |
| | | | | FIBER WATTLE KN22598 |
| 0275 | 212-011A | 790.000 | FT | \$5.50000 \$4,345.00 |
| | | | | FIBER WATTLE KN22599 |
| 0280 | 212-020A | 282.000 | FT | \$9.00000 \$2,538.00 |
| | | | | SILT FENCE KN22597 |
| 0285 | 212-060A | 2.000 | EACH | \$1,000.00000 \$2,000.00 |
| | | | | STABILIZED CONST ENTRANCE KN22597 |
| 0290 | 212-060A | 2.000 | EACH | \$1,000.00000 \$2,000.00 |
| | | | | STABILIZED CONST ENTRANCE KN22599 |
| 0295 | 212-095A | 6.000 | EACH | \$180.00000 \$1,080.00 |
| | | | | INLET PROTECTION KN22431 |
| 0300 | 212-095A | 2.000 | EACH | \$180.00000 \$360.00 |
| | | | | INLET PROTECTION KN22597 |
| 0305 | 212-105A | 5000.000 | CA | \$1.00000 \$5,000.00 |
| | | | | WATER POLLUTION AND EROSION CONTROL KN22431 |
| 0310 | 212-105A | 5000.000 | CA | \$1.00000 \$5,000.00 |
| | | | | WATER POLLUTION AND EROSION CONTROL KN22597 |
| 0315 | 212-105A | 2000.000 | CA | \$1.00000 \$2,000.00 |
| | | | | WATER POLLUTION AND EROSION CONTROL KN22598 |
| 0320 | 212-105A | 2000.000 | CA | \$1.00000 \$2,000.00 |
| | | | | WATER POLLUTION AND EROSION CONTROL KN22599 |
| 0325 | 213-005A | 83.300 | CY | \$35.00000 \$2,915.50 |
| | | | | TOPSOIL KN22431 |
| 0330 | 251-005A | 5000.000 | CA | \$1.00000 \$5,000.00 |
| | | | | MIGRATORY BIRD COMPLIANCE KN22431 |
| 0335 | 251-005A | 5000.000 | CA | \$1.00000 \$5,000.00 |
| | | | | MIGRATORY BIRD COMPLIANCE KN22597 |
| 0340 | 251-005A | 5000.000 | CA | \$1.00000 \$5,000.00 |
| | | | | MIGRATORY BIRD COMPLIANCE KN22598 |
| 0345 | 251-005A | 5000.000 | CA | \$1.00000 \$5,000.00 |

| MIGRATORY BIRD COMPLIANCE KN22599 | | | | |
|-----------------------------------|-------------------------------------------------|--------------|---------------|--------------|
| 0350 | 301-005A | 630.000 TON | \$36.00000 | \$22,680.00 |
| | GRANULAR SUBBASE KN22431 | | | |
| 0355 | 301-005A | 300.000 TON | \$35.00000 | \$10,500.00 |
| | GRANULAR SUBBASE KN22597 | | | |
| 0360 | 301-005A | 1600.000 TON | \$32.00000 | \$51,200.00 |
| | GRANULAR SUBBASE KN22599 | | | |
| 0365 | 303-022A | 1330.000 TON | \$36.00000 | \$47,880.00 |
| | 3/4" AGGR TY B FOR BASE KN22431 | | | |
| 0370 | 303-022A | 390.000 TON | \$35.00000 | \$13,650.00 |
| | 3/4" AGGR TY B FOR BASE KN22597 | | | |
| 0375 | 303-022A | 35.000 TON | \$180.00000 | \$6,300.00 |
| | 3/4" AGGR TY B FOR BASE KN22598 | | | |
| 0380 | 303-022A | 485.000 TON | \$36.00000 | \$17,460.00 |
| | 3/4" AGGR TY B FOR BASE KN22599 | | | |
| 0385 | 307-005A | 6.000 CY | \$150.00000 | \$900.00 |
| | OPEN-GRADED BASE CLASS I KN22598 | | | |
| 0390 | 401-020A | 170.000 GAL | \$0.01000 | \$1.70 |
| | CSS-1 DIL EMUL ASPH FOR TACK COAT H KN22431 | | | |
| 0395 | 401-020A | 35.000 GAL | \$0.01000 | \$0.35 |
| | CSS-1 DIL EMUL ASPH FOR TACK COAT KN22597 | | | |
| 0400 | 401-020A | 200.000 GAL | \$0.01000 | \$2.00 |
| | CSS-1 DIL EMUL ASPH FOR TACK COAT KN22599 | | | |
| 0405 | 405-245A | 2.000 EACH | \$4,200.00000 | \$8,400.00 |
| | APPROACH KN22431 | | | |
| 0410 | 405-245A | 4.000 EACH | \$4,200.00000 | \$16,800.00 |
| | APPROACH PRIVATE KN22599 | | | |
| 0415 | 405-425A | 410.000 TON | \$158.00000 | \$64,780.00 |
| | SUPERPAVE HMA PAV INCL ASPH&ADD CL SP-2 KN22431 | | | |
| 0420 | 405-425A | 180.000 TON | \$200.00000 | \$36,000.00 |
| | SUPERPAVE HMA PAV INCL ASPH&ADD CL SP-2 KN22597 | | | |
| 0425 | 405-425A | 370.000 TON | \$158.00000 | \$58,460.00 |
| | SUPERPAVE HMA PAV INCL ASPH&ADD CL SP-2 KN22599 | | | |
| 0430 | 502-140A | 73.000 CY | \$1,000.00000 | \$73,000.00 |
| | CONC CL 40-A SCH NO. 1 KN22597 | | | |
| 0435 | 502-140A | 70.000 CY | \$1,100.00000 | \$77,000.00 |
| | CONC CL 40-A SCH NO. 1 KN22598 | | | |
| 0440 | 502-310A | 19.000 CY | \$1,100.00000 | \$20,900.00 |
| | CONC CL 40 AF SCH NO. 2 KN22431 | | | |
| 0445 | 502-310A | 34.000 CY | \$1,000.00000 | \$34,000.00 |
| | CONC CL 40 AF SCH NO. 2 KN22597 | | | |
| 0450 | 502-465A | 240.000 FT | \$650.00000 | \$156,000.00 |
| | PRESTR SLAB (1'-3") KN22598 | | | |
| 0455 | 502-465A | 400.000 FT | \$550.00000 | \$220,000.00 |
| | PRESTR SLAB (1'-3") KN22599 | | | |
| 0460 | 502-465A | 980.000 FT | \$500.00000 | \$490,000.00 |
| | PRESTR SLAB (2'-2") KN22597 | | | |
| 0465 | 502-465A | 546.000 FT | \$550.00000 | \$300,300.00 |

| PRESTR SLAB 48" WIDTH X 15" DEPTH KN22431 | | | | | |
|-------------------------------------------|----------|-----------------------------------------------------|--|---------------|--------------|
| 0470 | 503-010A | 7203.000 LB | | \$1.60000 | \$11,524.80 |
| | | METAL REINF SCH NO. 1 KN22597 | | | |
| 0475 | 503-010A | 6522.000 LB | | \$1.55000 | \$10,109.10 |
| | | METAL REINF SCH NO. 1 KN22598 | | | |
| 0480 | 503-020A | 1493.000 LB | | \$2.80000 | \$4,180.40 |
| | | EPOXY COATED METAL REINF KN22431 | | | |
| 0485 | 503-020A | 1339.000 LB | | \$2.25000 | \$3,012.75 |
| | | EPOXY COATED METAL REINF KN22597 | | | |
| 0490 | 504-015A | 555.000 LB | | \$9.00000 | \$4,995.00 |
| | | STRUCTURAL STL KN22597 | | | |
| 0495 | 504-040A | 83.000 FT | | \$220.00000 | \$18,260.00 |
| | | COMB PED/BICYCLE & TRAF RAILING KN22431 | | | |
| 0500 | 504-040A | 140.000 FT | | \$275.00000 | \$38,500.00 |
| | | COMB PED/BICYCLE & TRAF RAILING KN22597 | | | |
| 0505 | 505-045A | 1240.000 FT | | \$135.00000 | \$167,400.00 |
| | | PROV&DRIV STEEL H PILE (14 X 117) KN22597 | | | |
| 0510 | 505-045A | 282.000 FT | | \$175.00000 | \$49,350.00 |
| | | PROV&DRIV STEEL H PILE (14 X 117) KN22598 | | | |
| 0515 | 505-197A | 186.000 FT | | \$155.00000 | \$28,830.00 |
| | | PROV&DRIV TEST PILE (HP-14 x 117) KN22597 | | | |
| 0520 | 505-197A | 142.000 FT | | \$155.00000 | \$22,010.00 |
| | | PROV&DRIV TEST PILE (HP-14 x 117) KN22598 | | | |
| 0525 | 505-205A | 22.000 EACH | | \$270.00000 | \$5,940.00 |
| | | PROV&INST 14" DIA PILE SHOES OR TIPS KN22597 | | | |
| 0530 | 505-205A | 8.000 EACH | | \$270.00000 | \$2,160.00 |
| | | PROV&INST 14" DIA PILE SHOES OR TIPS KN22598 | | | |
| 0535 | 505-215B | 44.000 EACH | | \$1.00000 | \$44.00 |
| | | SPLICE STEEL PILE DURING DRIVING KN22597 | | | |
| 0540 | 507-005A | 28.000 EA | | \$1,000.00000 | \$28,000.00 |
| | | BRIDGE BEARINGS PLAIN (Size__) (Size 1/2") KN22597 | | | |
| 0545 | 509-005A | 12.500 CY | | \$250.00000 | \$3,125.00 |
| | | NON-STRUCTURAL CONC CLASS 30 KN22431 | | | |
| 0550 | 511-005A | 24.000 SY | | \$55.00000 | \$1,320.00 |
| | | CONC WATERPROOF SYS KN22598 | | | |
| 0555 | 511-005A | 65.000 SY | | \$35.00000 | \$2,275.00 |
| | | CONC WATERPROOF SYS TYPE D KN22597 | | | |
| 0560 | 511-005A | 173.000 SY | | \$120.00000 | \$20,760.00 |
| | | CONC WATERPROOF SYS TYPE E KN22431 | | | |
| 0565 | 511-005A | 174.000 SY | | \$120.00000 | \$20,880.00 |
| | | CONC WATERPROOF SYS TYPE E KN22599 | | | |
| 0570 | 511-005B | 323.000 SY | | \$120.00000 | \$38,760.00 |
| | | CONC WATERPROOF SYS TYPE E KN22597 | | | |
| 0575 | 520-005A | 268.000 FT | | \$345.00000 | \$92,460.00 |
| | | PREDRILLING FOR PILING IN SOIL KN22597 | | | |
| 0580 | 520-005A | 120.000 FT | | \$400.00000 | \$48,000.00 |
| | | PREDRILLING FOR PILING IN SOIL KN22598 | | | |
| 0585 | 521-005A | 2.000 EA | | \$2,850.00000 | \$5,700.00 |

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|------------------------------------------------|----------|---------|------|--|----------------|-------------|
| DYNAMIC PILE TESTING KN22597 | | | | | | |
| 0590 | 521-005A | 2.000 | EA | | \$2,850.00000 | \$5,700.00 |
| DYNAMIC PILE TESTING KN22598 | | | | | | |
| 0595 | 521-010A | 4.000 | EA | | \$500.00000 | \$2,000.00 |
| CAPWAP ANALYSIS KN22597 | | | | | | |
| 0600 | 521-010A | 4.000 | EA | | \$500.00000 | \$2,000.00 |
| CAPWAP ANALYSIS KN22598 | | | | | | |
| 0605 | 551-005A | 102.000 | SY | | \$60.00000 | \$6,120.00 |
| PREPARED & PLACED PPC OVERLAY KN22598 | | | | | | |
| 0610 | 551-010A | 3.000 | CY | | \$10,000.00000 | \$30,000.00 |
| PPC OVERLAY MATERIAL KN22598 | | | | | | |
| 0615 | 560-005A | 1.000 | LS | | \$35,000.00000 | \$35,000.00 |
| DEWATERING FOUNDATION KN22598 | | | | | | |
| 0620 | 575-005A | 29.000 | SY | | \$150.00000 | \$4,350.00 |
| TEXTURED CONCRETE SURFACE KN22431 | | | | | | |
| 0625 | 584-005A | 1.000 | LS | | \$45,000.00000 | \$45,000.00 |
| TEMPORARY SHORING KN22431 | | | | | | |
| 0630 | 586-005A | 1.000 | LS | | \$1,500.00000 | \$1,500.00 |
| UTILITY CONDUIT KN22431 | | | | | | |
| 0635 | 586-005A | 1.000 | LS | | \$2,400.00000 | \$2,400.00 |
| UTILITY CONDUIT KN22597 | | | | | | |
| 0640 | 602-065A | 67.000 | FT | | \$125.00000 | \$8,375.00 |
| 36" PIPE CULV KN22599 | | | | | | |
| 0645 | 604-030A | 141.500 | FT | | \$70.00000 | \$9,905.00 |
| 15" IRR PIPE KN22599 | | | | | | |
| 0650 | 605-025A | 88.000 | FT | | \$78.00000 | \$6,864.00 |
| 12" STORM SEWER PIPE KN22597 | | | | | | |
| 0655 | 605-470A | 1.000 | EACH | | \$10,000.00000 | \$10,000.00 |
| SEDIMENT & OIL TRAP MANHOLE (1500 GAL) KN22597 | | | | | | |
| 0660 | 605-505A | 2.000 | EACH | | \$1,800.00000 | \$3,600.00 |
| CATCH BASIN TY 1A KN22597 | | | | | | |
| 0665 | 605-635A | 1.000 | EACH | | \$850.00000 | \$850.00 |
| ADJUST MANHOLE COVERS KN22431 | | | | | | |
| 0670 | 608-065A | 2.000 | EACH | | \$800.00000 | \$1,600.00 |
| 36" APRON FOR PIPE KN22599 | | | | | | |
| 0675 | 609-025A | 1.000 | EACH | | \$3,800.00000 | \$3,800.00 |
| MINOR STR IRRIGATION CONC HEADWALL KN22599 | | | | | | |
| 0680 | 609-025A | 1.000 | EACH | | \$7,600.00000 | \$7,600.00 |
| MINOR STR KN22431 | | | | | | |
| 0685 | 610-100A | 1.000 | EACH | | \$1,350.00000 | \$1,350.00 |
| GATE TY 1 KN22598 | | | | | | |
| 0690 | 610-101A | 1.000 | EACH | | \$1,350.00000 | \$1,350.00 |
| GATE TY 1A KN22599 | | | | | | |
| 0695 | 614-015A | 431.300 | SY | | \$58.00000 | \$25,015.40 |
| SIDEWALK KN22431 | | | | | | |
| 0700 | 614-015A | 117.000 | SY | | \$65.00000 | \$7,605.00 |
| SIDEWALK KN22597 | | | | | | |
| 0705 | 614-020A | 105.900 | SY | | \$70.00000 | \$7,413.00 |

| DRIVEWAY KN22431 | | | | | | |
|-------------------------------------------------|----------|---------|------|--|---------------|-------------|
| 0710 | 614-025A | 49.000 | SY | | \$190.00000 | \$9,310.00 |
| CURB RAMP KN22431 | | | | | | |
| 0715 | 614-025A | 34.000 | SY | | \$190.00000 | \$6,460.00 |
| CURB RAMP KN22597 | | | | | | |
| 0720 | 615-490A | 754.300 | FT | | \$39.00000 | \$29,417.70 |
| CURB & GUTTER KN22431 | | | | | | |
| 0725 | 615-492A | 235.000 | FT | | \$45.00000 | \$10,575.00 |
| CURB & GUTTER TYPE 2 KN22597 | | | | | | |
| 0730 | 616-010A | 31.100 | SF | | \$55.00000 | \$1,710.50 |
| SIGNS TY B KN22431 | | | | | | |
| 0735 | 616-010A | 16.000 | SF | | \$55.00000 | \$880.00 |
| SIGNS TY B KN22597 | | | | | | |
| 0740 | 616-010A | 12.000 | SF | | \$55.00000 | \$660.00 |
| SIGNS TY B KN22598 | | | | | | |
| 0745 | 616-010A | 12.000 | SF | | \$55.00000 | \$660.00 |
| SIGNS TY B KN22599 | | | | | | |
| 0750 | 616-050A | 78.000 | LB | | \$10.00000 | \$780.00 |
| BRKAWY STL SIGN POST TY E (E-1) KN22598 | | | | | | |
| 0755 | 616-050A | 78.000 | LB | | \$10.00000 | \$780.00 |
| BRKAWY STL SIGN POST TY E (E-1) KN22599 | | | | | | |
| 0760 | 616-050A | 132.300 | LB | | \$10.00000 | \$1,323.00 |
| BRKAWY STL SIGN POST TY E KN22431 | | | | | | |
| 0765 | 616-050A | 128.000 | LB | | \$10.00000 | \$1,280.00 |
| BRKAWY STL SIGN POST TY E KN22597 | | | | | | |
| 0770 | 616-070A | 4.000 | EACH | | \$760.00000 | \$3,040.00 |
| BRKAWY STL SIGN POST INST TY E (E-1) KN22598 | | | | | | |
| 0775 | 616-070A | 4.000 | EACH | | \$385.00000 | \$1,540.00 |
| BRKAWY STL SIGN POST INST TY E (E-1) KN22599 | | | | | | |
| 0780 | 616-070A | 3.000 | EACH | | \$385.00000 | \$1,155.00 |
| BRKAWY STL SIGN POST INST TY E KN22431 | | | | | | |
| 0785 | 616-070A | 5.000 | EACH | | \$460.00000 | \$2,300.00 |
| BRKAWY STL SIGN POST INST TY E KN22597 | | | | | | |
| 0790 | 616-080A | 2.000 | EACH | | \$330.00000 | \$660.00 |
| REINSTALL SIGNS KN22597 | | | | | | |
| 0795 | 620-020A | 10.000 | EACH | | \$380.00000 | \$3,800.00 |
| PLANTING TREE (SEEDLING or CONTAINER) KN22431 | | | | | | |
| 0800 | 620-025A | 8.000 | EACH | | \$220.00000 | \$1,760.00 |
| PLANTING SHRUB (BARE-ROOT or CONTAINER) KN22597 | | | | | | |
| 0805 | 621-005A | 0.080 | ACRE | | \$3,800.00000 | \$304.00 |
| SEED BED PREPARATION KN22598 | | | | | | |
| 0810 | 621-005A | 0.150 | ACRE | | \$3,800.00000 | \$570.00 |
| SEED BED PREPARATION KN22599 | | | | | | |
| 0815 | 621-010A | 0.080 | ACRE | | \$1,850.00000 | \$148.00 |
| SEEDING KN22598 | | | | | | |
| 0820 | 621-010A | 0.150 | ACRE | | \$1,850.00000 | \$277.50 |
| SEEDING KN22599 | | | | | | |
| 0825 | 621-015A | 0.080 | ACRE | | \$5,500.00000 | \$440.00 |

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|------------------------------------------|----------|----------|------|---------------|------------|
| MULCHING KN22598 | | | | | |
| 0830 | 621-015A | 0.150 | ACRE | \$5,500.00000 | \$825.00 |
| MULCHING KN22599 | | | | | |
| 0835 | 621-025A | 0.080 | ACRE | \$2,700.00000 | \$216.00 |
| MULCH ANCHORING (TACKIFIER) KN22598 | | | | | |
| 0840 | 621-025A | 0.150 | ACRE | \$2,800.00000 | \$420.00 |
| MULCH ANCHORING (TACKIFIER) KN22599 | | | | | |
| 0845 | 621-025B | 0.080 | ACRE | \$2,750.00000 | \$220.00 |
| MULCH ANCHORING (TACKIFIER) TEMP KN22598 | | | | | |
| 0850 | 621-025B | 0.150 | ACRE | \$2,700.00000 | \$405.00 |
| MULCH ANCHORING (TACKIFIER) TEMP KN22599 | | | | | |
| 0855 | 624-005A | 86.000 | CY | \$80.00000 | \$6,880.00 |
| LOOSE RIPRAP KN22431 | | | | | |
| 0860 | 624-005A | 42.000 | CY | \$105.00000 | \$4,410.00 |
| LOOSE RIPRAP KN22598 | | | | | |
| 0865 | 624-005A | 63.000 | CY | \$80.00000 | \$5,040.00 |
| LOOSE RIPRAP KN22599 | | | | | |
| 0870 | 626-010A | 462.000 | SF | \$6.00000 | \$2,772.00 |
| TEMPORARY TRAFFIC CONTROL SIGNS KN22431 | | | | | |
| 0875 | 626-010A | 290.000 | SF | \$9.00000 | \$2,610.00 |
| TEMPORARY TRAFFIC CONTROL SIGNS KN22597 | | | | | |
| 0880 | 626-010A | 259.000 | SF | \$13.50000 | \$3,496.50 |
| TEMPORARY TRAFFIC CONTROL SIGNS KN22598 | | | | | |
| 0885 | 626-010A | 275.000 | SF | \$6.25000 | \$1,718.75 |
| TEMPORARY TRAFFIC CONTROL SIGNS KN22599 | | | | | |
| 0890 | 626-035A | 12.000 | EACH | \$100.00000 | \$1,200.00 |
| BARRICADE TY 2 KN22431 | | | | | |
| 0895 | 626-035A | 13.000 | EACH | \$100.00000 | \$1,300.00 |
| BARRICADE TY 2 KN22597 | | | | | |
| 0900 | 626-040A | 9.000 | EACH | \$165.00000 | \$1,485.00 |
| BARRICADE TY 3 KN22431 | | | | | |
| 0905 | 626-040A | 4.000 | EACH | \$165.00000 | \$660.00 |
| BARRICADE TY 3 KN22597 | | | | | |
| 0910 | 626-040A | 6.000 | EACH | \$165.00000 | \$990.00 |
| BARRICADE TY 3 KN22598 | | | | | |
| 0915 | 626-040A | 6.000 | EACH | \$165.00000 | \$990.00 |
| BARRICADE TY 3 KN22599 | | | | | |
| 0920 | 626-050A | 20.000 | EACH | \$43.00000 | \$860.00 |
| DRUMS KN22431 | | | | | |
| 0925 | 626-100B | 1000.000 | CA | \$1.00000 | \$1,000.00 |
| MISC TEMPORARY TRAF CONT ITEMS KN22597 | | | | | |
| 0930 | 626-100B | 1000.000 | CA | \$1.00000 | \$1,000.00 |
| MISC TEMPORARY TRAF CONT ITEMS KN22598 | | | | | |
| 0935 | 626-100B | 1000.000 | CA | \$1.00000 | \$1,000.00 |
| MISC TEMPORARY TRAF CONT ITEMS KN22599 | | | | | |
| 0940 | 626-105A | 178.000 | HR | \$1.00000 | \$178.00 |
| TRAF CNTL MAINTENANCE KN22431 | | | | | |
| 0945 | 626-105A | 160.000 | HR | \$1.00000 | \$160.00 |

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|------|----------|-------------------------------------------------|----------------|-------------|--|
| | | TRAF CNTL MAINTENANCE KN22597 | | | |
| 0950 | 626-105A | 160.000 HR | \$1.00000 | \$160.00 | |
| | | TRAF CNTL MAINTENANCE KN22598 | | | |
| 0955 | 626-105A | 160.000 HR | \$1.00000 | \$160.00 | |
| | | TRAF CNTL MAINTENANCE KN22599 | | | |
| 0960 | 630-020B | 168.000 SF | \$13.00000 | \$2,184.00 | |
| | | PAV MKG - PREFORMED THERMOPLASTIC KN22431 | | | |
| 0965 | 630-020B | 128.000 SF | \$17.00000 | \$2,176.00 | |
| | | PAV MKG - PREFORMED THERMOPLASTIC KN22597 | | | |
| 0970 | 630-025A | 360.000 FT | \$5.00000 | \$1,800.00 | |
| | | LONGITUDINAL PAV MKG- WATERBORNE KN22597 | | | |
| 0975 | 630-025A | 880.000 FT | \$3.00000 | \$2,640.00 | |
| | | LONGITUDINAL PAV MKG- WATERBORNE KN22599 | | | |
| 0980 | 640-010A | 1078.000 SY | \$2.25000 | \$2,425.50 | |
| | | RIPRAP/EROSION CONT GEOTEXTILE KN22431 | | | |
| 0985 | 640-010A | 126.000 SY | \$3.00000 | \$378.00 | |
| | | RIPRAP/EROSION CONT GEOTEXTILE TYPE II KN22598 | | | |
| 0990 | 640-010A | 188.000 SY | \$3.00000 | \$564.00 | |
| | | RIPRAP/EROSION CONT GEOTEXTILE TYPE II KN22599 | | | |
| 0995 | 640-015A | 1881.000 SY | \$2.50000 | \$4,702.50 | |
| | | SUBGRADE SEPARATION GEOTEXTILE KN22431 | | | |
| 1000 | 640-015A | 496.000 SY | \$2.50000 | \$1,240.00 | |
| | | SUBGRADE SEPARATION GEOTEXTILE TYPE III KN22599 | | | |
| 1005 | 651-010A | 4466.500 SF | \$8.50000 | \$37,965.25 | |
| | | LAWN CONST (SODDED) KN22431 | | | |
| 1010 | 651-010A | 367.000 SF | \$9.00000 | \$3,303.00 | |
| | | LAWN CONST (SODDED) KN22597 | | | |
| 1015 | 675-005A | 1.000 LS | \$22,500.00000 | \$22,500.00 | |
| | | SURVEY KN22431 | | | |
| 1020 | 675-005A | 1.000 LS | \$25,000.00000 | \$25,000.00 | |
| | | SURVEY KN22597 | | | |
| 1025 | 675-005A | 1.000 LS | \$23,500.00000 | \$23,500.00 | |
| | | SURVEY KN22598 | | | |
| 1030 | 675-005A | 1.000 LS | \$35,000.00000 | \$35,000.00 | |
| | | SURVEY KN22599 | | | |
| 1035 | 675-010A | 5000.000 CA | \$1.00000 | \$5,000.00 | |
| | | DIRECTED SURVEYING OFFICE COMPUTATIONS KN22431 | | | |
| 1040 | 675-010A | 1000.000 CA | \$1.00000 | \$1,000.00 | |
| | | DIRECTED SURVEYING OFFICE COMPUTATIONS KN22597 | | | |
| 1045 | 675-010A | 1000.000 CA | \$1.00000 | \$1,000.00 | |
| | | DIRECTED SURVEYING OFFICE COMPUTATIONS KN22598 | | | |
| 1050 | 675-010A | 1000.000 CA | \$1.00000 | \$1,000.00 | |
| | | DIRECTED SURVEYING OFFICE COMPUTATIONS KN22599 | | | |
| 1055 | 675-015A | 10000.000 CA | \$1.00000 | \$10,000.00 | |
| | | DIRECTED SURVEYING CREW KN22431 | | | |
| 1060 | 675-015A | 1000.000 CA | \$1.00000 | \$1,000.00 | |
| | | DIRECTED SURVEYING CREW KN22597 | | | |
| 1065 | 675-015A | 1000.000 CA | \$1.00000 | \$1,000.00 | |

Contract ID: 22431211012
 Letting Date: 11/23/2021
 Bidder: C0029 - Cannon Builders, Inc
 Date: 10/21/2021

Project(s): A022(431) A022(597) A022(598) A022(599)

Call: 2

Description: S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS

Revised: 11/10/2021 12:00:00 AM

| | | | | | |
|------|----------|---------------------------------------------------------|--|-----------------|--------------|
| | | DIRECTED SURVEYING CREW KN22598 | | | |
| 1070 | 675-015A | 1000.000 CA | | \$1.00000 | \$1,000.00 |
| | | DIRECTED SURVEYING CREW KN22599 | | | |
| 1075 | 677-005A | 1.000 LS | | \$1,200.00000 | \$1,200.00 |
| | | RECORD DRAWINGS KN22431 | | | |
| 1080 | 677-005A | 1.000 LS | | \$1,200.00000 | \$1,200.00 |
| | | RECORD DRAWINGS KN22597 | | | |
| 1085 | 677-005A | 1.000 LS | | \$1,200.00000 | \$1,200.00 |
| | | RECORD DRAWINGS KN22598 | | | |
| 1090 | 677-005A | 1.000 LS | | \$1,200.00000 | \$1,200.00 |
| | | RECORD DRAWINGS KN22599 | | | |
| 1095 | S501-16A | 378.000 CF | | \$38.00000 | \$14,364.00 |
| | | RETAINING WALL GABION BASKET KN22598 | | | |
| 1100 | S501-25A | 1.000 LS | | \$120,000.00000 | \$120,000.00 |
| | | SP BRIDGE GRS ABUTMENTS WITH CMU FACING & RSF KN22431 | | | |
| 1105 | S501-25A | 1.000 LS | | \$135,000.00000 | \$135,000.00 |
| | | SP BRIDGE GRS ABUTMENTS WITH CMU FACING AND RSF KN22599 | | | |
| 1110 | S501-30A | 80.000 FT | | \$245.00000 | \$19,600.00 |
| | | SP BRIDGE THRIE BEAM RAIL KN22598 | | | |
| 1115 | S501-30A | 80.000 FT | | \$255.00000 | \$20,400.00 |
| | | SP BRIDGE THRIE BEAM RAIL KN22599 | | | |
| 1120 | S501-51A | 681.000 SF | | \$3.50000 | \$2,383.50 |
| | | SP BRIDGE ANTI-GRAFFITI COATING KN22431 | | | |
| 1125 | S501-95A | 186.000 CY | | \$59.00000 | \$10,974.00 |
| | | GEOSYNTHETIC REINFORCED ABUT BACKFILL KN22597 | | | |
| 1130 | S600-20A | 1.000 EACH | | \$6,600.00000 | \$6,600.00 |
| | | FIRE HYDRANT ASSEMBLY KN22431 | | | |
| 1135 | S600-45A | 48.800 FT | | \$174.00000 | \$8,491.20 |
| | | WATER LINE 6" KN22431 | | | |
| 1140 | S600-45B | 430.800 FT | | \$180.00000 | \$77,544.00 |
| | | WATER LINE 8" KN22431 | | | |
| 1145 | S604-05A | 1.000 LS | | \$2,300.00000 | \$2,300.00 |
| | | REM & RESET IRR KN22431 | | | |
| 1150 | S604-05A | 1.000 LS | | \$2,900.00000 | \$2,900.00 |
| | | REM & RESET IRR KN22597 | | | |
| 1155 | S610-05A | 71.000 FT | | \$55.00000 | \$3,905.00 |
| | | REM & RESET FENCE KN22431 | | | |
| 1160 | S610-05A | 40.000 FT | | \$55.00000 | \$2,200.00 |
| | | REM & RESET FENCE KN22597 | | | |
| 1165 | S610-05A | 82.000 FT | | \$55.00000 | \$4,510.00 |
| | | REM & RESET FENCE KN22598 | | | |
| 1170 | S610-10A | 4.000 EACH | | \$625.00000 | \$2,500.00 |
| | | SPECIAL GATE ABUTMENT ACCESS GATE KN22597 | | | |
| 1175 | S619-05A | 4.000 EACH | | \$1,200.00000 | \$4,800.00 |
| | | JUNCTION BOX KN22431 | | | |
| 1180 | S900-50A | 5000.000 CA | | \$1.00000 | \$5,000.00 |
| | | CONTINGENCY AMOUNT - MISC WORK KN22431 | | | |
| 1185 | S900-50A | 5000.000 CA | | \$1.00000 | \$5,000.00 |

Contract ID: 22431211012
 Letting Date: 11/23/2021
 Bidder: C0029 - Cannon Builders, Inc
 Date: 10/21/2021

Project(s): A022(431) A022(597) A022(598) A022(599)

Call: 2

Description: S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS

Revised: 11/10/2021 12:00:00 AM

| CONTINGENCY AMOUNT MISC WORK KN22597 | | | | | |
|-------------------------------------------|----------|----------|------|-----------------|----------------|
| 1190 | S900-50A | 5000.000 | CA | \$1.00000 | \$5,000.00 |
| CONTINGENCY AMOUNT MISC WORK KN22598 | | | | | |
| 1195 | S900-50A | 5000.000 | CA | \$1.00000 | \$5,000.00 |
| CONTINGENCY AMOUNT MISC WORK KN22599 | | | | | |
| 1200 | S901-05A | 1.000 | EACH | \$2,000.00000 | \$2,000.00 |
| SP REM AND RESET IRRIGATION BOX KN22599 | | | | | |
| 1205 | S901-05B | 2.000 | EACH | \$2,100.00000 | \$4,200.00 |
| SP 15" IRRIGATION GATE KN22599 | | | | | |
| 1210 | S901-05C | 1.000 | EACH | \$2,400.00000 | \$2,400.00 |
| SP 6" WATER GATE VALVE KN22431 | | | | | |
| 1215 | S901-05D | 3.000 | EACH | \$2,800.00000 | \$8,400.00 |
| SP 8" WATER GATE VALVE KN22431 | | | | | |
| 1220 | S901-05E | 2.000 | EACH | \$8,400.00000 | \$16,800.00 |
| SP 2" WATER SERVICE CONNECTION KN22431 | | | | | |
| 1225 | S901-05F | 1.000 | EACH | \$5,300.00000 | \$5,300.00 |
| SP ACCESS STRUCTURE KN22431 | | | | | |
| 1230 | S902-05A | 66.000 | HR | \$50.00000 | \$3,300.00 |
| SP BROOMING KN22431 | | | | | |
| 1235 | S904-05A | 1.000 | LS | \$55,000.00000 | \$55,000.00 |
| SP 8" WATERLINE AND APPURTENANCES KN22597 | | | | | |
| 1240 | S904-05B | 1.000 | LS | \$3,000.00000 | \$3,000.00 |
| SP ADJUST SEEPAGE PIPE KN22598 | | | | | |
| 1245 | S911-05A | 50.000 | FT | \$470.00000 | \$23,500.00 |
| SP 18" STEEL CASING KN22431 | | | | | |
| 1250 | S914-05A | 200.000 | TON | \$85.00000 | \$17,000.00 |
| SP AGGREGATE SURFACING KN22598 | | | | | |
| 1255 | Z629-05A | 1.000 | LS | \$175,000.00000 | \$175,000.00 |
| MOBILIZATION KN22431 | | | | | |
| 1260 | Z629-05A | 1.000 | LS | \$175,000.00000 | \$175,000.00 |
| MOBILIZATION KN22597 | | | | | |
| 1265 | Z629-05A | 1.000 | LS | \$200,000.00000 | \$200,000.00 |
| MOBILIZATION KN22598 | | | | | |
| 1270 | Z629-05A | 1.000 | LS | \$185,000.00000 | \$185,000.00 |
| MOBILIZATION KN22599 | | | | | |
| Section 0001 Total | | | | | \$4,633,049.30 |
| Item Total | | | | | \$4,633,049.30 |

Contract ID: 22431211012
Letting Date: 11/23/2021
Bidder: C0029 - Cannon Builders, Inc
Date: 10/21/2021

Project(s): A022(431) A022(597) A022(598) A022(599)
Call: 2
Description: S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS
Revised: 11/10/2021 12:00:00 AM

Failure to complete this form as required shall render the bid unresponsive and void.

LICENSE REQUIREMENTS FOR PLUMBING, ELECTRICAL AND HVAC WORK

The Contractor must comply with Idaho Code Section 67-2310. The bidder shall provide the name, address, Division of Building Safety License Number, and Public Works Contractors License Number of the firm(s) who shall, in the event the Contractor secures the contract, complete the plumbing, electrical, or HVAC work under the contract.

For Federal Aid Projects, securing an Idaho Public Works Contractors License may not be required until award, as stated in Subsection 107.03 - Licensing of Contractors.

No bidder shall name any subcontractor or sub-subcontractor in the bid unless the bidder has received communication from the subcontractor or sub-subcontractor.

If plumbing, electrical or HVAC work is to be self-performed, provide bidder's information. If work is to be performed by Subcontractor(s) or Sub-Subcontractor(s), their information shall be provided or explain here why a Specialty Contractor is not required: (N/A or "Not Applicable" will not be considered a sufficient explanation)

A. Plumbing work by:

residing at

, whose Idaho Public Works Contractors License No. is

Plumbing Amount: \$.

and whose Plumbing Contractors License No. is

B. Electrical work by:

Mountain West Electric Inc.

residing at

586 West Hwy 26, Blackfoot, Idaho 83221

, whose Idaho Public Works Contractors License No. is

PWC-C-12193-U-4

Electrical Amount: \$3000.00

and whose Electrical Contractors License No. is

C-3802.

C. HVAC work by:

residing at

, whose Idaho Public Works Contractors License No. is

HVAC Amount: \$.

and whose HVAC Contractors License No. is

.

*** Form Completed? Yes ***



DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENTS

This form must be submitted by all primes (Non-DBE and DBE Primes). This form is part of the DBE Submittal Package and must be accompanied by a quote or ITD-2399, along with any documentation relating to good faith efforts. Award of the contract is contingent on good faith efforts to provide opportunity for DBE participation in this project. Failure to complete items will result in an irregular bid. All documentation must either be emailed to

DBESubmittal@itd.idaho.gov or delivered to ITD Headquarters at 3311 W. State St., Boise, ID 83703 by 5:00 pm MT on bid opening day.

Bid Date: 11/23/2021 Bid Amount: \$ 4,633,049.30

| Key Number | Project Number | Project Name | Prime Contractor |
|------------|----------------|-----------------------------------------------------|-------------------------------|
| 22,431 | A022(431) | S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls | Prime Contractor EEO Officer |
| | | | EEO Officer Phone # |
| | | | Quincie Tominaga |
| | | | 208-785-6281 |
| | | | Date |
| | | | 11/23/2021 |
| | | | Prime Contractor Phone Number |
| | | | 208-785-6281 |

Prime Contractor's Signature (must be handwritten or digitally certified)

Assigned goal for DBE subcontractors and suppliers for this project: 3 %

Section 1 - Summary of DBE Goal Commitment (items below must match commitment amount in Section 3.)

1. One hundred percent (100%) of total amount to be performed by DBE firms, other than those listed in Item 2 through 5.
2. One hundred percent (100%) of total amount to be paid DBE Equipment leasers
3. One hundred percent (100%) of total amount to be paid to DBE Manufacturers (e.g., asphalt emulsions, cutback asphalts, fabricated signs, or delivery companies)
4. Sixty percent (60%) of total amount to be paid to DBE regular dealers/ suppliers
5. Net fee of DBE brokers or bonding agents

| | Commitment |
|-------|---------------|
| 1) \$ | \$ 137,205.97 |
| 2) \$ | |
| 3) \$ | |
| 4) \$ | \$ 7,366.29 |
| 5) \$ | |

| Amount Quoted by Supplier | |
|---------------------------|--------------|
| 4) \$ | \$ 12,277.15 |
| | x60% = \$ |

Total lines 1 through 5
\$ 144,572.26

3.12% %

(Enter the overall total and DBE% above. The approved percentage of commitment is contractual.)

| | | | |
|-----------------------------------|---|---------------------------------------|--|
| <input type="checkbox"/> Approved | % | <input type="checkbox"/> Not Approved | |
| By: _____ | | Idaho Transportation Department | |
| | | Date | |

Section 2 -DBE Submittal Package Instructions

All documentation must be emailed DBESubmittal@itd.idaho.gov or delivered to ITD Headquarters at 3311 W. State St., Boise, ID 83703 by 5:00 pm MT on bid opening day.

DBE Submittal Package includes the ITD-2396, and the DBE quote or ITD-2399 with all of the following information:

- 1) Commitment Statement: a written statement that the DBE is committed to performing the work quoted, if selected.
- 2) Date
- 3) Prime Contractor (Can be shown as "To Prime Contractor" or "To All Prime Contractors"; Cannot be shown as "To All Bidders")
- 4) Project identifier (project name and/or key number)
- 5) DBE work items
- 6) DBE firm total (Must match the ITD-2396 form)
- 7) DBE Signature which can be in one of the following forms:
 - a) Handwritten signature or initials;
 - b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®);
 - c) Other acceptable forms of confirming the commitment include:
 - 1) Email with the DBE email return address, project name and key number in the subject line and place the committed dollar amount in body of the email with typed first and last name and title of sender.
 - 2) DBE Firm Letterhead with the project name, key number and the committed dollar amount in body of the letter with typed or signed first and last name and title.

Any changes to the original DBE Commitment must be accompanied by written acknowledgement from the DBE subcontractor, as noted above.

Section 3 - Explanation of DBE Commitments

Note: Use 'Alt'+Enter' to start a new line within a row if completing electronically.

| | Name of DBE Firm Being Committed to the Prime for this Project (include person who submitted the quote and contact information, to include phone number and address) | Items Quoted for DBE Credit (List by Contract Item Numbers (not Line Item Number) and Brief Work or Material Description) | For Materials Only: Supplied (S) Leased (L) Manufactured (M) | Total Amount Quoted by DBE for DBE Credit |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------|
| 1) | Snake River Reclamation 123 South 725 West Blackfoot ID 83221 - Contact Jennifer Adams 208-681-7442 | see attached 2399 | | \$ 78,795.00 |
| 2) | Idaho Traffic Safety Inc 3400 East Sunnyside Rd Idaho Falls ID 83406 - Contact Dave Bracket 208-522-4470 | see attached 2399 | S | \$ 58,410.97 |
| 3) | Underground Support 7907 Roundrock Rd Dallas Tx 75248 - Stephanie Teetes 972-791-0875 | see attached 2399 | | \$ 7,366.29 |
| 4) | | | | |
| 5) | | | | |
| 6) | | | | |
| 7) | | | | |
| 8) | | | | |
| 9) | | | | |

Use additional sheets if necessary.

Section 4 - Summary of DBE Good Faith Effort

If the DBE participation goal for this project has not been met you MUST complete Section 4 and Section 5. In addition, submit the following: copies of correspondence, email, telephone logs, or other documentation supporting good faith efforts made. Email all documentation to DBESubmittal@itd.idaho.gov or deliver to ITD Headquarters at 3311 W. State St., Boise, ID 83703 on bid opening day by 5:00pm MT.

| Name of DBE Firm (Include person who submitted a quote and contact information with phone number and address) | Date of Contact | Items Quoted (List by Contract Item Numbers and briefly describe proposed work item or materials.) | Amount Quoted by DBE | Describe why DBE Firm was not selected | Non-DBE Firm chosen for this work item | Amount Quoted by Non-DBE |
|------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------|----------------------|----------------------------------------|----------------------------------------|--------------------------|
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Use additional sheets if necessary.

Section 5 - Explanation of DBE Good Faith Efforts

If the DBE participation goal for this project has not been met, the Contractor is required to answer the following questions in order to describe efforts to obtain DBE participation. Each following effort will require a detailed explanation.

What efforts has the Contractor made to conduct outreach/advertise to ITD-certified DBEs? Describe efforts, and attach copies of screenshots, published advertisements or proofs of publication if applicable.

Has the Contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited in sufficient time to allow the DBEs to participate effectively? Describe efforts. Submit a copy of all correspondence (including emails) soliciting bids from DBEs.

Has the Contractor followed up initial solicitation of interest by contacting DBEs to determine with certainty whether the DBEs were interested? Submit telephone logs, letters, emails, etc., to document follow-up activity.

Has the Contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal, including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation? Describe efforts.

Has the Contractor provided interested DBEs with adequate information about the plans, specifications, and requirements of the contract? Describe what action was taken.

Has the Contractor negotiated in good faith with interested DBEs, not rejecting DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities? Describe efforts.

Describe any other efforts not covered by Numbers 1 through 6 above that may demonstrate the Contractor's good faith efforts to obtain DBE participation on this project.

DBE Submittal Package Checklist

This form is provided for the convenience of the Prime and/or DBE firm. It is not contractual, therefore, it is not required to be submitted with your DBE Submittal Package. You may use multiple sheets for multiple DBE firms.

Completed ITD-2396

DBE Quote or ITD-2399

DBE Quote must contain:

Commitment Statement: a written statement that the DBE is committed to performing the work, if selected.

Date

Prime Contractor (Can be shown as "To Prime Contractor" or "To All Prime Contractors"; Cannot be shown as "To All Bidders")

Project identifier (project name and/ or key number)

DBE work items

DBE firm total (Must match the ITD-2396 form)

DBE Signature, as identified in Section 2

Any changes to the original quote provided by the DBE are acknowledged via signature by the DBE firm, as noted in Section 2.



DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENT STATEMENT TEMPLATE

This template includes all of the necessary information for the DBE Commitment Statement. It suffices as a DBE Commitment Statement to include in your DBE Submittal Package, but use of this spreadsheet is optional. When using this spreadsheet, it supersedes the quote and must be included with the DBE Submittal Package, which must be submitted by 5 pm MT on bid opening day. This is a locked document; thus, if you need additional rows simply attach second copy with the additional information.

| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | S Higbee, W Carson, St Charles, E121st - Bridges / |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Idaho Traffic Safety |
| DBE Address: | 3400 E Sunnyside Rd Idaho Falls, ID 83406 |
| DBE Contact Name/ Phone Number: | Jennifer Lindstrom / (208) 522-4470 |
| DBE Firm Total: | \$ 9,222.30 |

TOTAL = \$58,410

| DBE WORK ITEMS | | |
|------------------------------|------------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 203-135A | Removal of Sign KN22431 | \$ 750.00 |
| 203-135A | Removal of Sign KN22597 | \$ 1,250.00 |
| 203-135A | Removal of Sign KN22598 | \$ 1,750.00 |
| 203-135A | Removal of Sign KN22599 | \$ 600.00 |
| 616-010A | Signs Ty B KN22431 | \$ 1,523.90 |
| 616-010A | Signs Ty B KN22597 | \$ 784.00 |
| 616-010A | Signs Ty B KN22598 | \$ 588.00 |
| 616-010A | Signs Ty B KN22599 | \$ 588.00 |
| 616-050A | Brkawy Stil Sign Post Ty E (E-1) KN22598 | \$ 694.20 |
| 616-050A | Brkawy Stil Sign Post Ty E (E-1) KN22599 | \$ 694.20 |
| ** Continued on next page ** | | |

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items.

DBE Authorized Representative _____
Jennifer Lindstrom

Page 1 = \$9,222.30
 2 = \$18,268.17
 3 = \$10,292.50
 4 = \$20,628
 \$58,410.97



**DISADVANTAGED BUSINESS ENTERPRISE (DBE)
COMMITMENT STATEMENT TEMPLATE**

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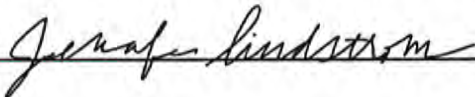
| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | S Higbee, W Carson, St Charles, E121st - Bridges / |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Idaho Traffic Safety |
| DBE Address: | 3400 E Sunnyside Rd Idaho Falls, ID 83406 |
| DBE Contact Name/ Phone Number: | Jennifer Lindstrom / (208) 522-4470 |
| DBE Firm Total: | |
| | \$ 18,268.17 |

| DBE WORK ITEMS | | |
|------------------------------|-----------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 616-050A | Brkawy Stl Sign Post Ty E KN22431 | \$ 1,177.47 |
| 616-050A | Brkawy Stl Sign Post TY E KN22597 | \$ 1,139.20 |
| 616-070A | Brkawy Stl Sign Post Inst Ty E KN22598 | \$ 2,760.00 |
| 616-070A | Brkawy Stl Sign Post Inst Ty E KN22599 | \$ 1,400.00 |
| 616-070A | Brkawy Stl Sign Post Inst Ty E KN22431 | \$ 1,050.00 |
| 616-070A | Brkawy Stl Sign Post Inst Ty E KN22597 | \$ 2,100.00 |
| 616-080A | Reinstall Signs KN22597 | \$ 600.00 |
| 626-010A | Temporary Traffic Control Signs KN22431 | \$ 2,541.00 |
| 626-010A | Temporary Traffic Control Signs KN22597 | \$ 2,392.50 |
| 626-010A | Temporary Traffic Control Signs KN22598 | \$ 3,108.00 |
| ** Continued on next page ** | | |

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items.

DBE Authorized Representative





**DISADVANTAGED BUSINESS ENTERPRISE (DBE)
COMMITMENT STATEMENT TEMPLATE**

This template includes all of the necessary information for the DBE Commitment Statement. It suffices as a DBE Commitment Statement to include in your DBE Submittal Package, but use of this spreadsheet is optional. When using this spreadsheet, it supersedes the quote and must be included with the DBE Submittal Package, which must be submitted by 5 pm MT on bid opening day. This is a locked document; thus, if you need additional rows simply attach second copy with the additional information.


| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | S Higbee, W Carson, St Charles, E121st - Bridges / |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Idaho Traffic Safety |
| DBE Address: | 3400 E Sunnyside Rd Idaho Falls, ID 83406 |
| DBE Contact Name/ Phone Number: | Jennifer Lindstrom / (208) 522-4470 |
| DBE Firm Total: | |
| | \$ 10,292.50 |

| DBE WORK ITEMS | | |
|----------------|----------------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 626-010A | Temporary Traffic Control Signs KN22599 | \$ 1,512.50 |
| 626-035A | Barricade Ty 2 KN22431 | \$ 1,080.00 |
| 626-035A | Barricade Ty 2 KN22597 | \$ 1,170.00 |
| 626-040A | Barricade Ty 3 KN22431 | \$ 1,350.00 |
| 626-040A | Barricade Ty 3 KN22597 | \$ 600.00 |
| 626-040A | Barricade Ty 3 KN22598 | \$ 900.00 |
| 626-040A | Barricade Ty 3 KN22599 | \$ 900.00 |
| 626-050A | Drums KN22431 | \$ 780.00 |
| 626-100B | Misc Temporary Traffic Control Items KN22597 | \$ 1,000.00 |
| 626-100B | Misc Temporary Traffic Control Items KN22598 | \$ 1,000.00 |
| | ** Continued on next page ** | |

DBE Commitment Statement

As the authorized representative of the DBE, I confirm that my firm has been contacted by the Prime Contractor/Bidder with regard to the above referenced project and work items. If the Prime Contractor is awarded the contract, we will enter into an agreement with them to perform the above referenced bid items.

DBE Authorized Representative





**DISADVANTAGED BUSINESS ENTERPRISE (DBE)
COMMITMENT STATEMENT TEMPLATE**

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| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | S Higbee, W Carson, St Charles, E121st - Bridges / |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Idaho Traffic Safety |
| DBE Address: | 3400 E Sunnyside Rd Idaho Falls, ID 83406 |
| DBE Contact Name/ Phone Number: | Jennifer Lindstrom / (208) 522-4470 |
| DBE Firm Total: | |
| | \$ 20,628.00 |

| DBE WORK ITEMS | | |
|----------------|----------------------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 626-100B | Misc Temporary Traffic Control Items KN22599 | \$ 1,000.00 |
| 630-020B | Pav Mkg - Preformed Thermoplastic KN22431 | \$ 1,974.00 |
| 630-020B | Pav Mkg - Preformed Thermoplastic KN22597 | \$ 1,984.00 |
| 630-025A | Longitudinal Pavement Marking - Waterborne KN22597 | \$ 1,620.00 |
| 630-025A | Longitudinal Pavement Marking - Waterborne KN22599 | \$ 2,200.00 |
| Z629-05A | Mobilization (Traffic Control) KN22431 | \$ 1,000.00 |
| Z629-05A | Mobilization (Traffic Control) KN22597 | \$ 4,700.00 |
| Z629-05A | Mobilization (Traffic Control) KN22598 | \$ 4,900.00 |
| Z629-05A | Mobilization (Traffic Control) KN22599 | \$ 1,250.00 |
| | | |
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DBE Authorized Representative

Jennifer Lindstrom



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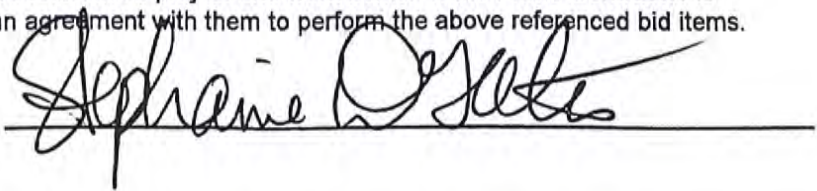
| | |
|---------------------------------|---------------------------------------|
| Date: | November 21, 2021 |
| Project Name and/or Key Number: | S Higbee Drive/Butte Arm Canal Bridge |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Underground Support Services, LLC |
| DBE Address: | 7907 Roundrock Rd Dallas, TX 75248 |
| DBE Contact Name/ Phone Number: | Stephanie Teetes (972) 971-0875 |
| DBE Firm Total: \$ 12,277.15 | |

| DBE WORK ITEMS | | |
|----------------|-------------------------------------|--------------|
| Item Number | Item Name | Item Quote |
| 551-010A | PPC Overlay | \$ 12,277.15 |
| | *Supplied material and freight only | |
| | | |
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DBE Commitment Statement

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| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | Key #22431, S Higbee Drive, Butte Arm Canal Bridge |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Snake River Reclamation LLC |
| DBE Address: | 123 S 725 W Blackfoot Idaho 83221 |
| DBE Contact Name/ Phone Number: | 208-681-8940 / 208-681-7442 |
| DBE Firm Total: \$ 17,236.00 | |

TOTAL
= \$78,795

| DBE WORK ITEMS | | |
|----------------|-----------------------------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 115 | 203-075A Rem of Fence KN22599 | \$ 350.00 |
| 265 | 212-011A Fiber wattle KN 22431 | \$ 450.00 |
| 270 | 212-011A Fiber wattle KN 22598 | \$ 1,925.00 |
| 275 | 212-011A Fiber wattle KN 22599 | \$ 3,950.00 |
| 280 | 212-020A Silt Fence KN 22597 | \$ 2,256.00 |
| 685 | 610-100A Gate TY 1KN22598 | \$ 1,200.00 |
| 690 | 610-100A Gate TY 1 KN22599 | \$ 1,200.00 |
| 795 | 620-020A Planting Tree (seeding or container) KN22567 | \$ 3,500.00 |
| 800 | 620-025A Planting Shrub (Bare-Root or Container) KN 22567 | \$ 1,600.00 |
| 805 | 621-005A Seed Bed Prep KN22598 | \$ 280.00 |
| 810 | 621-005A Seed Bed Prep KN22599 | \$ 525.00 |

DBE Commitment Statement

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DBE Authorized Representative

Jennifer Adams

Page 1 = \$17,236
 2 = \$45,459
 3 = \$16,100
\$78,795



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| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | Key #22431, S Higbee Drive, Butte Arm Canal Bridge |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Snake River Reclamation LLC |
| DBE Address: | 123 S 725 W Blackfoot Idaho 83221 |
| DBE Contact Name/ Phone Number: | 208-681-8940 / 208-681-7442 |
| DBE Firm Total: \$ 45,459.00 | |

| DBE WORK ITEMS | | |
|----------------|----------------------------------------------|--------------|
| Item Number | Item Name | Item Quote |
| 815 | 621-010A Seeding KN22598 | \$ 136.00 |
| 820 | 621-010A Seeding KN22599 | \$ 255.00 |
| 825 | 621-015A Mulching KN22598 | \$ 400.00 |
| 830 | 621-015A Mulching KN22599 | \$ 750.00 |
| 835 | 621-025A Mulch Anchoring (Tach) KN22598 | \$ 200.00 |
| 840 | 621-025A Mulch Anchoring (Tach) KN22599 | \$ 375.00 |
| 845 | 621-025B Mulch Anchoring(Tach) Temp KN22598 | \$ 750.00 |
| 850 | 621-025B Mulch Anchoring (Tach) Temp KN22599 | \$ 375.00 |
| 1005 | 651-010A Lawn Const (Sodded) KN22431 | \$ 35,732.00 |
| 1010 | 651-010 A Lawn Const (Sodded) KN 22597 | \$ 2,936.00 |
| 1155 | s610-05A Rem & Reset Fence KN22431 | \$ 3,550.00 |

DBE Commitment Statement

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DBE Authorized Representative

A Jennifer Adams



**DISADVANTAGED BUSINESS ENTERPRISE (DBE)
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| | |
|---------------------------------|----------------------------------------------------|
| Date: | November 23, 2021 |
| Project Name and/or Key Number: | Key #22431, S Higbee Drive, Butte Arm Canal Bridge |
| Prime Contractor Name: | Cannon Builders |
| DBE Firm Name: | Snake River Reclamation LLC |
| DBE Address: | 123 S 725 W Blackfoot Idaho 83221 |
| DBE Contact Name/ Phone Number: | 208-681-8940 / 208-681-7442 |
| DBE Firm Total: \$ 16,100.00 | |

| DBE WORK ITEMS | | |
|----------------|------------------------------------|-------------|
| Item Number | Item Name | Item Quote |
| 1160 | S610-05A Rem & Reset Fence KN22597 | \$ 2,000.00 |
| 1165 | S610-05A Rem & Reset Fence KN22598 | \$ 4,100.00 |
| 1255 | Z629-05A Mobilization KN22431 | \$ 2,500.00 |
| 1260 | Z629-05A Mobilization KN22597 | \$ 2,500.00 |
| 1265 | Z629-05A Mobilization KN22598 | \$ 2,500.00 |
| 1270 | Z629-05A MobilizationKN22599 | \$ 2,500.00 |
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DBE Commitment Statement

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DBE Authorized Representative

Jennifer Adams

DAVIS-BACON WAGE

GENERAL WAGE DECISION ID210087

PUBLICATION DATE 09/17/2021 ID87

GENERAL WAGE DECISION ID210091

PUBLICATION DATE 04/09/2021 ID91

GENERAL WAGE DECISION ID210093

PUBLICATION DATE 04/09/2021 ID93

The above referenced wage rates can be

obtained at

<http://www.beta.sam.gov>

DAVIS BACON WAGE RATES

Idaho Federal Aid Project No. [A022\(431\)](#), [A022\(597\)](#),
[A022\(598\)](#) & [A022\(599\)](#)

[S HIGBEE DRIVE, BUTTE ARM CANAL BRIDGE, IDAHO FALLS](#)
[Bonneville, Bannock & Bear Lake County,](#)
[Key No. 22431, 22597, 22598 & 22599](#)

The following Davis Bacon Wage Rates shall be posted by the Contractor using Poster WH-1321 and shall be placed prominently in a location where it will be noticeable and accessible to all workers at the site of the work on each Federal Aid Project.

Should these papers tear or become illegible, they shall be replaced as long as work continues. Posters and additional copies of this form are available from the Engineer.

"General Decision Number: ID20210087 09/17/2021

Superseded General Decision Number: ID20200087

State: Idaho

Construction Type: Highway

Counties: Bear Lake, Caribou, Clark, Fremont, Lemhi, Madison, Oneida and Teton Counties in Idaho.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 01/01/2021 |
| 1 | 09/17/2021 |

* PLAS0072-001 06/01/2021

ZONE 1:

| | Rates | Fringes |
|-----------------------------------|----------|---------|
| CEMENT MASON/CONCRETE FINISHER... | \$ 32.44 | 19.56 |

Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00

BASE POINTS: Spokane, Pasco, Lewiston, Wenatchee

Zone 1: 0-45 radius miles from the main post office

Zone 2: Over 45 radius miles from the main post office

SUID2013-015 06/17/2013

| Rates | Fringes |
|-------|---------|
|-------|---------|

| | | |
|-----------------------------------------------------------------------------------------|----------|-------|
| CARPENTER (Form Work Only)..... | \$ 26.57 | 8.10 |
| ELECTRICIAN..... | \$ 25.00 | 10.93 |
| HIGHWAY/PARKING LOT STRIPING: Painter..... | \$ 24.80 | 6.91 |
| LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor..... | \$ 23.37 | 10.50 |
| LABORER: Common or General..... | \$ 22.68 | 10.90 |
| LABORER: Concrete Saw (Hand Held/Walk Behind)..... | \$ 23.98 | 11.05 |
| LABORER: Grade Checker..... | \$ 23.52 | 11.05 |
| LABORER: Mason Tender - Cement/Concrete..... | \$ 23.42 | 10.90 |
| OPERATOR: Backhoe/Excavator/Trackhoe..... | \$ 25.74 | 10.07 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader..... | \$ 25.35 | 11.55 |
| OPERATOR: Broom/Sweeper..... | \$ 24.95 | 10.18 |
| OPERATOR: Bulldozer..... | \$ 26.19 | 9.60 |
| OPERATOR: Crane..... | \$ 26.22 | 10.00 |
| OPERATOR: Crusher..... | \$ 25.06 | 9.23 |
| OPERATOR: Grader/Blade..... | \$ 25.96 | 10.00 |
| OPERATOR: Hydroseeder..... | \$ 24.76 | 11.51 |
| OPERATOR: Loader..... | \$ 26.22 | 9.98 |
| OPERATOR: Mechanic..... | \$ 26.91 | 10.22 |
| OPERATOR: Oiler..... | \$ 25.66 | 9.23 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete)..... | \$ 26.13 | 10.40 |
| OPERATOR: Roller (Subgrade)..... | \$ 22.24 | 8.57 |
| OPERATOR: Roller..... | \$ 25.54 | 10.62 |
| OPERATOR: Rotomill..... | \$ 25.84 | 10.63 |
| OPERATOR: Screed..... | \$ 25.42 | 9.93 |
| TRAFFIC CONTROL: Flagger..... | \$ 22.68 | 10.90 |
| TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper..... | \$ 22.66 | 10.90 |
| TRUCK DRIVER: Distributor | | |

| | | |
|------------------------------------------|----------|-------|
| Truck..... | \$ 21.66 | 13.04 |
| TRUCK DRIVER: Dump Truck..... | \$ 21.86 | 13.18 |
| TRUCK DRIVER: Lowboy Truck..... | \$ 21.53 | 12.96 |
| TRUCK DRIVER: Oil Distributor Truck..... | \$ 22.54 | 12.35 |
| TRUCK DRIVER: Water Truck..... | \$ 21.35 | 13.33 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial

contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====
END OF GENERAL DECISION"

"General Decision Number: ID20210091 04/09/2021

Superseded General Decision Number: ID20200091

State: Idaho

Construction Type: Highway

County: Bannock County in Idaho.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 01/01/2021 |
| 1 | 04/09/2021 |

* ENGI0370-043 01/01/2021

| | Rates | Fringes |
|---------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|
| POWER EQUIPMENT OPERATOR: | | |
| Blade Operator, Backhoe/Trackhoe/Excavator (3/4 yds- 3 1/2 yds, Front End Loader (over 4 yds to and including 7yds) | GROUP 6.....\$ 30.67 | 14.08 |
| Bulldozer | GROUP 8.....\$ 31.27 | 14.08 |
| Elevating Grader Operator, Backhoe/Trackhoe/Excavator (under 3/4 yds) | GROUP 5.....\$ 30.50 | 14.08 |
| Front End Loader (up to 4yd) | GROUP 4.....\$ 30.33 | 14.08 |
| Grader (Fine), Front End Loader (over 7 yds), Heavy | | |

| | | |
|---------------|----------|-------|
| Duty Mechanic | | |
| GROUP 7..... | \$ 31.04 | 14.08 |
| Roller | | |
| GROUP 3..... | \$ 30.02 | 14.08 |

ZONE PAY:

- Zone 1 0 - 30 miles: Free
- Zone 2 30 - 60 miles: \$30.00/per day
- Zone 3 More than 60 miles: \$35.00/per day

If a project is located in more than one zone the lower zone rate shall apply

ZONES SHALL BE MEASURED FROM THE THE FOLLOWING U.S. POST OFFICES:

- BOISE: 304 N. 8TH STREET
- TWIN FALLS: 253 2ND AVE. WEST
- POCATELLO: CLARK STREET
- IDAHO FALLS: 875 NORTH CAPITAL AVE.

- BOOM PAY: All Cranes and Concrete Pump Boom Trucks
- 100 ft to 150 ft \$.15 over scale
- 150 ft to 200 ft \$.30 over scale
- Over 200 ft \$.45 over scale

LAB00238-035 06/01/2019

| | Rates | Fringes |
|-------------------------|----------|---------|
| LABORER: Pipelayer..... | \$ 28.48 | 13.00 |

Zone Differential (Add to Zone 1 rates): Zone 2 - \$2.00

BASE POINTS: Pasco

- Zone 1: 0-45 radius miles from the main post office.
- Zone 2: 45 radius miles and over from the main post office

SUID2013-019 06/17/2013

| | Rates | Fringes |
|---------------------------------------------------------------------------|----------|---------|
| CARPENTER (Form Work Only)..... | \$ 26.24 | 9.48 |
| CARPENTER, Excludes Form Work.... | \$ 23.92 | 9.84 |
| CEMENT MASON/CONCRETE FINISHER... | \$ 22.90 | 11.99 |
| ELECTRICIAN..... | \$ 26.33 | 11.45 |
| HIGHWAY/PARKING LOT STRIPING: | | |
| Painter..... | \$ 25.47 | 9.52 |
| LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor..... | \$ 19.38 | 7.63 |
| LABORER: Common or General..... | \$ 19.18 | 7.65 |
| LABORER: Grade Checker..... | \$ 20.64 | 7.37 |

| | | |
|-----------------------------------------------------------------------------------------|----------|-------|
| LABORER: Mason Tender - Cement/Concrete..... | \$ 22.34 | 10.90 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader..... | \$ 21.15 | 8.20 |
| OPERATOR: Broom/Sweeper..... | \$ 24.34 | 8.04 |
| OPERATOR: Crane..... | \$ 23.34 | 9.45 |
| OPERATOR: Forklift..... | \$ 23.13 | 9.17 |
| OPERATOR: Oiler..... | \$ 22.25 | 6.52 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete)..... | \$ 24.37 | 7.11 |
| OPERATOR: Roller (Subgrade)..... | \$ 19.99 | 7.99 |
| OPERATOR: Screed..... | \$ 22.30 | 7.22 |
| TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper..... | \$ 17.69 | 4.66 |
| TRUCK DRIVER: Dump Truck..... | \$ 21.59 | 10.93 |
| TRUCK DRIVER: Lowboy Truck..... | \$ 26.61 | 13.21 |
| TRUCK DRIVER: Oil Distributor Truck..... | \$ 23.93 | 11.27 |
| TRUCK DRIVER: Water Truck..... | \$ 21.54 | 12.19 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of

each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

"General Decision Number: ID20210093 04/09/2021

Superseded General Decision Number: ID20200093

State: Idaho

Construction Type: Highway

County: Bonneville County in Idaho.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 01/01/2021 |
| 1 | 04/09/2021 |

* ENGI0370-014 01/01/2021

| | Rates | Fringes |
|---------------------------|----------|---------|
| POWER EQUIPMENT OPERATOR: | | |
| Bulldozer | | |
| GROUP 8..... | \$ 31.27 | 14.08 |

LABO0238-035 06/01/2019

| | Rates | Fringes |
|-------------------------|----------|---------|
| LABORER: Pipelayer..... | \$ 28.48 | 13.00 |

Zone Differential (Add to Zone 1 rates): Zone 2 - \$2.00

BASE POINTS: Pasco

Zone 1: 0-45 radius miles from the main post office.
Zone 2: 45 radius miles and over from the main post office

SUID2013-021 06/17/2013

| | Rates | Fringes |
|-----------------------------------------------------------------------------------------|----------|---------|
| CARPENTER (Form Work Only)..... | \$ 26.24 | 9.48 |
| CARPENTER, Excludes Form Work.... | \$ 25.21 | 9.32 |
| CEMENT MASON/CONCRETE FINISHER... | \$ 22.90 | 11.99 |
| ELECTRICIAN..... | \$ 26.33 | 11.45 |
| HIGHWAY/PARKING LOT STRIPING: Painter..... | \$ 25.47 | 9.52 |
| LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor..... | \$ 19.38 | 7.86 |
| LABORER: Common or General..... | \$ 22.84 | 10.83 |
| LABORER: Grade Checker..... | \$ 20.64 | 7.37 |
| LABORER: Mason Tender - Cement/Concrete..... | \$ 22.34 | 10.90 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader..... | \$ 21.15 | 8.20 |
| OPERATOR: Broom/Sweeper..... | \$ 24.10 | 8.66 |
| OPERATOR: Crane..... | \$ 23.34 | 9.45 |
| OPERATOR: Forklift..... | \$ 23.13 | 9.17 |
| OPERATOR: Grader/Blade..... | \$ 25.85 | 9.60 |
| OPERATOR: Loader..... | \$ 24.94 | 8.95 |
| OPERATOR: Mechanic..... | \$ 25.82 | 9.75 |
| OPERATOR: Oiler..... | \$ 22.25 | 6.52 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete)..... | \$ 24.61 | 8.23 |
| OPERATOR: Roller (Subgrade)..... | \$ 19.99 | 7.99 |
| OPERATOR: Roller..... | \$ 24.59 | 8.95 |
| OPERATOR: Rotomill..... | \$ 25.42 | 10.25 |
| OPERATOR: Screed..... | \$ 22.30 | 7.22 |
| TRAFFIC CONTROL: Flagger..... | \$ 22.68 | 10.48 |
| TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper..... | \$ 17.69 | 4.66 |
| TRUCK DRIVER: Dump Truck..... | \$ 21.17 | 12.10 |
| TRUCK DRIVER: Lowboy Truck..... | \$ 26.61 | 13.21 |

| | | |
|--------------------------------|----------|-------|
| TRUCK DRIVER: Oil | | |
| Distributor Truck..... | \$ 23.93 | 11.27 |
| ----- | | |
| TRUCK DRIVER: Water Truck..... | \$ 21.35 | 13.05 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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this classification and rate.

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1.) Has there been an initial decision in the matter? This can be:

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4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

SPECIAL PROVISIONS

IDAHO FEDERAL AID PROJECT NOs. A022(431), A022(597), A022(598), A022(599)

| | |
|----------------------------------------------------------------------|-------------------|
| S Higbee Dr, Butte Arm Canal Br, Idaho Falls (Key No. 22431) | Bonneville County |
| W Carson St, Portneuf River Br, Pocatello (Key No. 22597) | Bannock County |
| St Charles Creek Br, Bear Lake Co (Key No. 22598) | Bear Lake County |
| E 121 st S; Idaho Canal Br, Bonneville Co (Key No. 22599) | Bonneville County |

For the work to replace four local bridges which include: 1) S Higbee Drive, Butte Arm Canal Bridge, Idaho Falls; 2) W Carson St; Portneuf River Bridge, Pocatello; 3) St Charles Creek Bridge, Bear Lake County; And 4) E 121st S, Idaho Canal Bridge, Bonneville County

The following special provisions and all addenda issued supplement or modify the 2018 Idaho Transportation Department Standard Specifications for Highway Construction: 2021 Supplementals for the Idaho Transportation Department 2018 Standard Specifications for Highway Construction, 2020 Quality Assurance Manual, 2020 Quality Assurance Special Provision for State Acceptance (10/21/2019), 2021 Special Provision for 405 Superpave Hot Mix Asphalt (07/02/2021), April 2021 Standard Drawings, Title VI Special Provisions, FHWA-1273 Federal-Aid Required Contract Provisions with supplement, General Wage Decision ID210093, ID210091, and ID210087, and Training Special Provisions.

Federal-aid dollars were used during design and will be used for construction; therefore, Buy America is in effect for these projects.

SOURCE IDENTIFICATION

Designated source(s): Designated source(s) are not identified for this contract/project.

Contractor provided sources. Provide an approved source(s) for all materials to be embanked or processed for placement. Department owned or controlled sources will not be allowed for this contract.

Cost. Assume all costs incurred in obtaining approvals for use of source(s).

CONTRACT TIME AND LIQUIDATED DAMAGES

*

S Higbee Dr, Butte Arm Canal Br, Idaho Falls; KN 22431: Work will not start earlier than December 15, 2021 or later than January 1, 2023 and must be completed within 112 working days.

W Carson St, Portneuf River Br, Pocatello; KN 22597: Work will not start earlier than December 15, 2021 or later than December 15, 2022 and must be completed within 90 working days.

St. Charles Creek Br, Bear Lake Co; KN 22598: Work will not start earlier than July 18, 2022 or later * than August 8, 2022 and must be completed within 70 working days.

E 121st S; Idaho Canal Br, Bonneville Co; KN 22599: Work will not start earlier than December 15, 2021 or later than January 1, 2023 and must be completed within 80 working days.

All in-water work associated with the S Higbee Dr, Butte Arm Canal Bridge and E 121st S; Idaho Canal Bridge construction will be completed after October 15 and before April 1. Any fines levied by the Idaho Irrigation District for in-water work performed outside the in-water work window are the Contractor's responsibility.

Once started, work must continuously progress until completion except for paving. Coordinate with the Engineer to schedule paving operations when weather will be amenable. Working days will not be charged while waiting for paving.

Calculation of liquidated damages for failure to complete work on time will be as follows:

- Liquidated damages will be assessed for failure to complete work on each bridge within the working days specified.
 - Basis will be on the Contractor's total bid amount for all contract items required to construct that bridge and assessed per Table 108.08-1 – Schedule of liquidated Damages.
- The maximum daily amount of liquidated damages is the cumulative sum of the liquidated damages for each bridge.

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

GENERAL CONTRACTOR NOTES

Apply to all bridge locations unless noted otherwise.

DBE PROGRAM REQUIREMENTS

10/21

For bidding purposes, the Contractor must comply with the DBE program requirement of **3.0%**. Upon award, the approved percentage on the ITD-2396 DBE Commitments form becomes contractual and failure to comply is a breach of contract. Any change to this contractual commitment during the administration of the contract must be coordinated through the Office of Civil Rights.

Whenever the Engineer determines, after investigating and obtaining evidence the Contractor has not complied with the DBE program requirement, the Engineer will take corrective action. Refer to the Department's Standard Specifications for Highway Construction, Section 110, Civil Rights.

The Contractor, sub recipient, or subcontractor will not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor will carry out applicable requirements of [49 CFR Part 26](#) in the award and administration of USDOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate (e.g., withholding monthly progress payments, assessing sanctions, liquidated damages, disqualifying the Contractor from future bidding as non-responsible).

For additional DBE Program information see the Department's DBE program requirements located at: <https://apps.itd.idaho.gov/apps/ocr/ocrDBEPROGRAM.aspx>

CONSTRUCTION OF CONCRETE BEARINGS

Ensure the concrete bearing pad, if required, is situated at the required set-back from the face of the abutment, as shown on the plans. Construct the concrete bearing footer to the elevations, lines, and cross slope(s), as shown on the plans.

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 Department. 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

Before initiating work at or below the ordinary high-water mark, submit a dewatering plan to be reviewed and approved by the Engineer and USACE. Allow four weeks for review. The plan will detail dewatering Best Management Practices to be employed and implemented during construction. The plan should also detail how collected water removed from the project area via dewatering must meet State of Idaho Water Quality standards before discharging.

ELECTRICAL WORK

01/18

This contract contains work for which the Department believes a licensed electrical firm will be required. Complete the sheet provided for compliance with 67-2310 Idaho Code, or provide an explanation as to why an electrical license is not required. “N/A” is not an appropriate explanation.

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 – POLLUTION PREVENTION PLAN INSPECTION FREQUENCY

Stormwater Inspection Frequency Requirements

Perform stormwater compliance Inspections, and inspect the Construction Site and applicable

Construction Support Activities as follows:

| PPP | CGP SWPPP |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Inspect and maintain all control measures, pollution prevention measures, solid and liquid waste storage and disposal areas, and material storage and staging areas for functionality at least every 7 calendar days. • Conduct inspections by a person who is knowledgeable in erosion and sediment control and pollution prevention practices. This includes professional accreditation such as certification through ITD’s Water Pollution Control Manager training, Certified | <ul style="list-style-type: none"> • A minimum of once every 7 calendar days during Construction Activities and Pollutant-Generating Activities, but more often if required to maintain full compliance with the CGP. • Within 24 hours of a Storm Event producing 0.25 inches or |

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Professional in Erosion Control (CPESC) or Certified Erosion, Sediment and Stormwater Inspector (CESSWI) certifications, or other applicable site management or project management experience which can be documented and provided to the Engineer.</p> <ul style="list-style-type: none"> • Document the inspections using either the ITD-2802 form (Stormwater Compliance Inspection Form) or the ITD-2786 form (Construction Site Inspection Report), available on the Department’s website or upon request from the Engineer. • Correct deficiencies as soon as practicable, but no later than 7 calendar days following the inspection. • Sign the inspection reports to certify BMP maintenance or corrective actions have been satisfactorily completed and to certify project compliance with all environmental requirements. • Maintain a current PPP, including completed and certified inspection reports on site. Within 24 hours of completion, insert the certified inspections into the PPP recordkeeping section. • The Contractor’s inspection frequency may be reduced by the Engineer in writing. • At the Engineer’s request, submit a copy of the Contractor’s certified inspection form within 24 hours. • At the Engineer’s request, submit the final and most current version of the PPP and all completed and certified inspections, in electronic format, upon completion of the work. | <p>greater, even if the storm event is still continuing.</p> <ul style="list-style-type: none"> • Within 24 hours of the end of a storm event where consecutive 24 hour periods produced 0.25 inches or greater. • During the SWPPP specified normal Work Days. Modify the SWPPP when significant changes are made to the normal Work Day schedule. • If a Storm Event producing 0.5 inches or greater within 24 hours occurs outside the project’s normal Work Days, complete an inspection within 24 hours to verify and document project compliance with the CGP. • WPCM inspection frequency may be reduced by the Engineer in writing in accordance with the CGP. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Pollution Prevention Plan (PPP) Requirements

Disturbance

The estimated project area of impact is less than 1.0 acres, in order to utilize the project PPP, disturbance including all project activities is limited to less than 1.0 acre. Should Contractor operations including but not limited to staging, waste, or material source disturbances increase the disturbed area to one acre or more, a Stormwater Pollution Prevention Plan and associated EPA Notice of intent will be required. All monetary and time impacts required to establish a project Stormwater Pollution Prevention Plan will be borne by the Contractor. A draft Storm Water Pollution Plan must be submitted to LHTAC for approval before filing the EPA Notice of Intent.

With the approval of the engineer a PPP may also be used if total project disturbance exceeds 1.0 acre but is less than 5.0 acres and the Rainfall Erosivity R factor is less than 5.0. If approved, obtain a Low Erosivity Waiver (LEW). Include all LEW documentation in the PPP.

For R value calculations see:

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

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.

EPA NOTIFICATION REQUIREMENT FOR DEMOLITION

Complete a survey to determine the presence of Asbestos Containing Material (ACM) in the structures by a National Emissions Standards for Hazardous Air Pollution (NESHAP) or Asbestos Hazard Emergency Response Act (AHERA) certified person and submit a copy of the inspection report to the Engineer before the start of any demolition activities.

Complete and submit the U.S. EPA Notification of Demolition form in writing to the EPA at least 10 days before the start of demolition operation, as defined in 40 CFR Section 61. Notify the Engineer when this form has been submitted.

http://www.epa.gov/region10/pdf/asbestos/demolition-renovation-notification-form_fillable.pdf

Mail to:

Asbestos NESHAP Coordinator
U.S. Environmental Protection Agency
Region 10 Office of Compliance and Enforcement (OCE-127)
1200 Sixth Ave, Ste 900
Seattle, WA 98101

Completing the EPA notification form and submittal and the NESHAP survey are considered incidental to 203-020A Rem of Bridge, and no other payment will be made.

If asbestos is present, comply with all NESHAP and AHERA regulations and OSHA standards. This work is paid for under 203-050B REM AND DISPOSE ASBESTOS.

ESTIMATING BASIS

The unit weights in the estimating basis were determined from area history and past project experience. This information is provided to assist the designer in developing reasonable project quantities. The actual quantities will vary dependent on contractor-furnished source, crushing operations, and mix designs. The Contractor is responsible for determining actual unit weights based on the material produced and providing adequate materials for the project, plus any losses to stockpile operations or other wastes.

EXCESS MATERIAL SITES

Excess material sites will conform to the requirements of *ITD Standard Specifications* Subsection 205.03.A, General. All excess or unsuitable material removed from the project becomes the property of the Contractor.

GENERAL WAGE DECISION

Once awarded, the Contractor will work with the Project Manager to prepare and submit a SF-1444 for the above classification. If the DOL approved wage rate differs from the determination provided above, the contract will be adjusted accordingly for the hours of the labor utilized for work conforming to this classification.

GUARDRAIL POSTS AT ABUTMENT WINGWALLS

Drive steel posts with blunt ends within the abutment reinforced zone through the established geotextile pre-cut block outs.

Alternatively, steel guardrail posts having pointed ends may be driven through the reinforcement geotextile without the need for geotextile cutouts.

Ensure that guardrail posts are at least 36 inches clear from the back face of the CMU Facing block.

IBS COMPONENTS

Components of the IBS will be paid separately from GRS Abutments. Such IBS components include:

- Concrete bearing pads for beams or girders, if specified.
- Untreated Aggregate Base, Type A (703.04) for the integrated approach.
- Riprap/Erosion Control Geotextile, Type II (718.06) for the integrated approach.
- Asphalt coating of bridge beams, if specified.
- Bridge beams or girders.
- Waterproof membrane for the deck.
- Hot mix asphalt for the approach and across the deck.
- Steel guardrail posts and appurtenant items.

IDAHO IMPLEMENTATION OF AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE, 2ND EDITION (2016)

The following safety hardware must meet AASHTO 2016 MASH criteria, ITD's Standard Drawings, and if the hardware is a proprietary product it must be approved on ITD's Qualified Product List (QPL) for new permanent installations and full replacements:

- W-beam
- Cast-in-place concrete barriers
- W-beam tangent terminals and buried-in-backslope terminals
- W-beam flared terminals and terminals installed on a flare
- Crash cushions
- Transitions
- Permanently installed portable barriers
- Bridge rails
- Cable barriers
- Cable barrier terminals

The following safety hardware may be MASH 2009/2016 or NCHRP 350 compliant for new permanent installations and full replacements:

- Double-sided or median terminals
- Sign supports
- All other breakaway hardware

For projects utilizing December 2018 Standard Drawings release or earlier, replace the 612 series sheets with the 612 series from the latest Standard Drawings release.

Temporary work zone devices (including portable barriers, truck- and trailer-mounted attenuators, portable changeable message signs (PCMS), temporary traffic signals, and camera trailers) manufactured after December 31, 2019, must have been successfully tested to the 2016 edition of MASH. Such devices manufactured on or before this date, and successfully tested to NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.

INCIDENTALS

Dewatering, if needed for bridge replacement and irrigation structure installation, is considered incidental and the cost included in the respective pay items unless a dewatering foundation item has been added to

the bid schedule. Hot Mix Asphalt pavement for the temporary asphalt sidewalk (Carson Street Bridge) will be paid under 405-425A Superpave HMA Pav Incl Asph & Add Cl SP-2 but the additional labor is considered incidental, and the cost included in the 405-425A item. All pavement sawcutting is incidental to item 205-005A Excavation or other associated removal items.

INTEGRATED APPROACH

The integrated approach limits are shown on the plans. Within these limits, the aggregate base layer(s) will be Aggregate for Untreated Base, ¾-inch, Type B (703.04). Interlayers of Riprap/Erosion Control Geotextile, Type II (718.06) will be spaced at 8 inches maximum vertical beginning at the subgrade. Do not place geotextile within 8 inches of the hot mix asphalt layer. Place geotextile in accordance with 640, without wrinkles and overlapped 2 feet at joints.

Within the limits of the integrated approach, compact each layer of Aggregate for Untreated Base to at least 100 percent of the maximum dry density as determined by AASHTO T-99 method C or D at optimum water content (+/- 2%) using a vibratory roller of sufficient operating weight. Ensure the water content is equally distributed throughout the lift.

Document acceptable density testing for each aggregate lift. Do not place HMA without complete and satisfactory documentation of acceptable density.

Aggregate and geotextile materials placement, compaction, and testing are incidental. The Subgrade Separation Geotextile Type III, non-woven, will be paid for under 640-015A. The Aggregate for Untreated Base, ¾-inch, Type B, will be paid for under 303-022A.

MIGRATORY BIRD PROTECTION ACT COMPLIANCE

Work Window Restriction:

No clearing, grubbing, removal of vegetation and trees, or removal of bridges is allowed between April 1st and August 1st unless work is approved by the Engineer. To request approval, submit a survey that verifies the absence of migratory birds and bats. The survey will be:

- a. Conducted by a qualified biologist,
- b. Completed immediately before ground disturbing or tree removal activities,
- c. Large enough to cover an area or work activity including a 50 foot buffer.

PAVEMENT SURFACE SMOOTHNESS

Hot mix asphalt smoothness will be measured using a 10-foot straight edge per Subsection 405.03. No incentive payment will be made for smoothness.

PLANT CONTROL CHARTS

As noted in ITD Standard Specification Section 405.03, plant control charts will be a required submittal. These submittals must include mix design inputs, and actual aggregate and additive weights as recorded by automated or staff recorded logs.

PROPERTY USE AGREEMENT BOUNDARY

Property Use Agreements (PUA) have been obtained for each project and certain parcels as shown on the plans. Do not stockpile materials or store equipment within these boundaries. All staging and material stockpiling will take place within previously disturbed areas outside of the PUA limits. Coordinate items of work affecting adjacent property owners, including temporary fencing, landscape removal and replacement, driveway approach construction, sprinklers, irrigation facilities, fencing, sod care, and trees,

etc. The property owner will be given 21 (twenty-one) days' notice, in writing, before commencing work. If the ground is disturbed within the PUA area, it will be restored to match pre-existing conditions. Upon completion of all work, the Contractor will clean the entire PUA area and final clean up will consist of removal of all construction debris, trash, remaining construction stakes, construction signs, etc. from PUA area. PUA restoration will be considered incidental to the project and no separate payment will be made. This includes all labor, equipment, and material necessary for all coordination/restoration necessary outside of the right-of-way limits.

PROTOCOLS FOR THE INADVERTENT DISCOVERY OF HUMAN REMAINS AND/OR CULTURAL RESOURCES ON LOCAL HIGHWAY TECHNICAL ASSISTANCE COUNCIL PROJECTS

The Inadvertent Discovery Protocol (IDP) should be followed if cultural resources (older than 50 years old) and/or human remains are encountered during construction of Local Highway Technical Assistance Council (LHTAC) projects. In addition, please refer to the most recent edition of the Idaho Transportation Department (ITD) Standard Specifications for Highway Construction manual.

All 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 Idaho Transportation Department, State Highway Archaeologist (ITD SHA).

The LHTAC Resident Engineer will be notified by the Contractor that potential cultural resources have been identified during project construction activities. The Engineer will then immediately notify the ITD SHA of any cultural resources and/or human remains or items that could potentially be cultural resources and/or human remains that have been identified.

In the event cultural resources or human remains are discovered within the project area, the Contractor will implement the appropriate protocol outlined below:

CULTURAL RESOURCES

1. In the event that cultural resources are discovered within the project area, 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 or ITD construction crews will secure the area.
2. The Contractor will immediately notify the associated LHTAC Engineer who will then contact the ITD SHA.

| | | |
|------------------------------|----------------|--------------------|
| LHTAC Resident Engineer | Matt Koster | work: 208-344-0565 |
| LHTAC Environmental Engineer | Karissa Nelson | work: 208-344-0565 |
3. ITD SHA will notify the State Historic Preservation Office and Native American Tribes (as appropriate).
4. All appropriate laws and policies will be followed to the best of the Contractor's or LHTAC staff abilities.

HUMAN REMAINS

1. In the event that human remains with or without associated cultural resources are discovered within the project area, at locations associated with the project, or at locations planned for use on the project; work within 150 feet of the human remains will cease and the area will be cleared of all personnel other than one (1) or two (2) Contractor or LHTAC staff member(s) who will stay with the human remains until the ITD SHA is notified. The Contractor will secure the area and immediately notify the associated LHTAC Engineer who will then contact the ITD SHA who will

contact the appropriate law enforcement personnel (if necessary).

2. ITD SHA will notify the State Historic Preservation Office and any Native American Tribes (as appropriate).
3. No photography of human remains is allowed. This applies to cameras, cell phones, or any other device(s) having photo capabilities.
4. The human remains will be completely covered with a tarp or plain piece of cloth such as a rug, towel, or blanket. No new ground disturbance should occur if at all avoidable.
5. The human remains will not be touched, moved, or in any way caused to change position from that noted upon discovery.
6. All information related to the discovery will be held in strictest confidence.
7. All information related to the discovery known to the Contractor or staff will be provided to the
8. ITD SHA, and/or law enforcement.
9. All appropriate laws and policies will be followed to the best of the Contractor's or LHTAC's staff abilities.

In either case, the Contractor will keep all information strictly confidential. If information is shared with the Contractor or its subcontractor(s), that person will be fully informed about the confidentiality requirements and will agree to keep the information confidential. The ITD SHA will consult with appropriate parties to determine an appropriate course of action.

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 ITD SHA and locations made available to the Project Manager and appropriate contractor personnel. Additional cultural resources investigations may be required.

REFERENCE FILES

2/2021

Pursuant to Subsection 102.03, the Department has provided reference files for this project under the project notification on the ITD Notice to Contractor's page located at the following link:

<https://apps.itd.idaho.gov/apps/contractors/ntc.htm>

These reference files are only available during the advertisement period and will be removed after the bid opening. If additional reference files are provided after advertisement, but before bid opening, the bidder will be notified through QuestCDN. These will be posted to the location listed above.

SCOUR AND EROSION COUNTERMEASURES

Scour and erosion countermeasures consist of Riprap (711.04) and Riprap/Erosion Geotextile, Type II (718.06) as shown on the plans.

Subgrade Separation Geotextile, Type III (718.07) (non-woven) may be substituted for Riprap/Erosion Geotextile, Type II (718.06) when used as a filter layer underneath riprap.

Riprap will be angular basalt or other approved quarry rock.

SOFT SUBGRADE SOILS

The Contractor should anticipate soft and moisture-sensitive subgrade soils, which could occur throughout the projects. These soils will be prone to rutting or pumping under construction equipment, especially if they become wetter than optimum moisture content at the time of construction.

The Contractor is to protect these soils during construction activities, and the Contractor determines how best to achieve this requirement. No separate measurement of payment will be made for any excavation or replacement of excavated material below subgrade elevation made necessary from construction activities.

TACK COAT

Substitution of CSS-1H for CSS-1 Tack Coat will be allowed.

TEMPORARY TRAFFIC CONTROL PLANS

All Temporary Traffic Control Plans and implementation requirements and considerations must be made for all roadway users. This includes, but is not limited to any vehicular, pedestrian, bicycle, and/or equestrian traffic. Implemented pedestrian traffic control features will be compensated through the project.

UTILITY COORDINATOR PROVIDED BY THE CONTRACTOR

01/18

Provide an individual whose primary responsibility is to coordinate the work with each utility company (including Irrigation District) and the railroad company that will or may affect the utility company's or railroad company'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 railroad company.

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

Ensure this individual is responsible for the following activities and makes documents generated by these activities available to the Contractor, utility company, railroad company, 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, railroad company, and the Engineer.
2. Notifying the Contractor and its subcontractors (including lower-tier subcontractors), each utility company, railroad company, and the Engineer of a method, including telephone number, to contact the utility coordination individual. An alternate contact person with telephone number will be provided for situations when the utility coordination individual is not available.
3. Maintaining and documenting in writing all instructions, general discussions, or meetings notes that involve work on each utility company's or railroad company property or facilities or work which has or may affect the utility or railroad operations.
4. Maintaining and documenting in written or printed format the proposed and actual time schedules of work on utility or railroad property or facilities. Time schedules are to show the Contractor and its subcontractor (including lower-tier subcontractors), and each utility company or railroad company activities.
5. Maintaining and documenting in writing a diary of work each day that involve utility or railroad property and facilities, and any work that has or may affect the utility or railroad operations.
6. Coordinating with each utility company and the Engineer to resolve utility conflict and for any needed change orders to address utility conflicts.

WORK HOURS

The Contractor may only perform work on the project between the hours of 7:00 AM and 7:00 PM without prior approval of the Engineer. Work week will be Monday thru Friday. Weekend or holiday work will only be allowed when prior approval is granted by the Engineer. Requests will be made seven days in advance.

ON PAGE 20, SUBSECTION 101.04 – DEFINITIONS/HOLIDAY

06/21

Add Juneteenth to the list of legal holidays in between Memorial Day and Independence Day.

ON PAGE 25, SUBSECTION 101.04, DEFINITIONS

Delete the following under Working Day.:

4. Days during December, January, and February.

ON PAGE 80, SECTION 107.20, WEED CONTROL

Add the following:

Inspect fill material and locations before transporting and using on the project. The origin of the material and surrounding soils of the source will be included in the inspection documentation. The State of Idaho Department of Agriculture Seed Laboratory, Boise, Idaho (208) 332-8630, may test source locations at the request of the Engineer.

ON PAGE 123 SUBSECTION 203.03, 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 148 SUBSECTION 212.03 CONSTRUCTION REQUIREMENTS

Add to the 3rd paragraph of Part A:

No more than 5 acres of disturbed soil may be unstabilized on a project at any given time, unless otherwise approved by the Engineer.

ON PAGE 151, SUBSECTION 213.02, MATERIALS

Add the following:

Do not place fine-grained subsurface soils from unsuitable excavation in infiltration basins, retention/detention basins, or within roadside ditches.

ON PAGE 421, SUBSECTION 618.03, CONSTRUCTION REQUIREMENTS

Add the following:

Submit the survey caps to the local jurisdiction/sponsor for approval before installing on bridge in accordance with bridge plans.

ON PAGE 427-428, SUBSECTION 620.03.B – CONSTRUCTION REQUIREMENTS

Remove the following from Part B Backfilling and Finishing:

“Ensure planting establishment by watering, cultivating, replacing plants or mulch, and other work necessary to maintain the plants in a healthy condition, throughout the 1-year plant establishment period.”

“The Department will require a plant establishment period of 1 year for replacement plants. Ensure the establishment of the new plantings as specified.”

Add the following to Part B Backfilling and Finishing:

Ensure planting establishment by watering, cultivating, replacing plants or mulch, and other work necessary to maintain the plants in a healthy condition until accepted by the Engineer.

ON PAGE 429, SUBSECTION 621.01, DESCRIPTION

Add the following:

Apply seed, including seedbed preparation, fertilizing, seeding, mulching, mulch anchoring (mechanical or tackifiers), and watering in the areas.

The Department may require seeding operations in conjunction with Section 212.

| | Higbee Br | W. Carson St. Br | St. Charles Cr Br | E 121 st S Idaho Canal Br |
|---------------------------------------------|-----------|------------------|-------------------|--------------------------------------|
| 621-005A Seed Bed Preparation – | - | - | 0.1 Acre | 0.15 Acre |
| 621-010A Seeding – | - | - | 0.1 Acre | 0.15 Acre |
| 621-015A Mulching – | - | - | 0.1 Acre | 0.15 Acre |
| 621-025A Mulch Anchoring (Tackifier) – | - | - | 0.1 Acre | 0.15 Acre |
| 621-025B Mulch Anchoring (Tackifier) Temp – | - | - | 0.1 Acre | 0.15 Acre |

ON PAGE 429, SUBSECTION 621.03, CONSTRUCTION REQUIREMENTS

Delete fourth paragraph of Part B. Seedbed Preparation and replace with the following:

Roughen and serrate or cross-rip slopes in a horizontal direction for slopes 3:1 or flatter that include topsoil application before placement of the topsoil. After spreading topsoil, cultivate areas to be broadcast seeded or hydroseeded by raking or mechanically roughening the soil at least 2 inches deep and leave in a rough condition similar to that obtained by walking a cleated-crawler tractor up and down the slopes, immediately before applying seed, mulch, or soil amendments.

Add the following:

Have Engineer preapprove all topsoil material within the project area before moving and placing the topsoil in areas to be seeded.

Topsoil material must conform to Subsection 107.20 and Section 213 before placement.

ON PAGE 431, SUBSECTION 621.03, CONSTRUCTION REQUIREMENTS

Delete the first and second sentences of Part D. Seeding and replace with the following:

Furnish seed according to Subsection 711.05.

Delete first sentence of paragraph 3.

Add the following to the third paragraph:

Agitation of seed in hydro-seeder will not exceed 30 minutes. Do not allow trucks or equipment on the area after seed is in place.

Add the following to the fourth paragraph:

Apply seed directly to the soil surface after seedbed preparation. Seed disturbed areas as stated above with the following seed mix and rates.

Seed mix for permanent erosion control (flat areas), mechanical seeding 3:1 or flatter slopes:

| <u>GRASS</u> | <u>Pure Live Seed (PLS) Pounds per acre</u> | <u>Sample Size</u> |
|-----------------------------------|---------------------------------------------|--------------------|
| Bluebunch Wheatgrass (PSSPS) | 8 | 100 g |
| Idaho Fescue (FEID) | 6 | 60 g |
| Native Slender Wheatgrass (ELTR7) | 7 | 100 g |
| Canada Bluegrass (POCO) | 3 | 60 g |
| Hard Fescue (FEOUO) | 4 | 60 g |
| Total | 28 | |

Include these forbs/wildflowers if steep slopes or probable erosion.

| | | |
|-------------------------------------|----|------|
| Western Yarrow (ACMIL) | 2 | 60 g |
| Prairie Coneflower (RACO3) | 5 | 60 g |
| Sulfur/Taperleaf Penstemon (PEATA2) | 5 | 60 g |
| Total | 12 | |

ON PAGE 431, SUBSECTION 621.03, CONSTRUCTION REQUIREMENTS

Delete the 2nd sentence of Part D. Seeding. Subpart 1.a. and replace with the following:

Ensure drill spacing does not exceed 6 inches.

ON PAGE 432, SUBSECTION 621.03, CONSTRUCTION REQUIREMENTS

Add the following to Part E. Mulch, Mulch Anchoring, and Hydraulically Applied Erosion Control Products. Subpart 1:

Apply soil amendments at manufacturer’s recommended rate according to the slope gradient and soil conditions. Submit manufacture’s recommended rates for each product to be used before application and a copy of the purchase invoices after approval.

ON PAGE 433, SUBSECTION 621.03, CONSTRUCTION REQUIREMENTS

Add the following to Part E. Mulch, Mulch Anchoring, and Hydraulically Applied Erosion Control Products. Subpart 2.b:

Provide a qualified mulch anchoring at manufacturer’s recommended rate according to the slope gradient and soil conditions. Submit manufacture’s recommended rates for each product to be used before application and a copy of the purchase invoices after approval. Apply mulch anchoring over seeded area after seed has been applied.

ON PAGE 434 SUBSECTION 621.03 CONSTRUCTION REQUIREMENTS

Remove the following from Part H Performance Standards and Acceptance:

“1 year following seeding completion. The Contractor will request the inspection at least 10 calendar days in advance”

Add the following:

Seed all disturbed areas on the project site as shown on the plans.

ON PAGE 438, SUBSECTION 624.02, MATERIALS

01/18

Add the following:

Meet the riprap size requirement as follows:

| <u>Sieve Size (Inches)</u> | <u>Percent Passing</u> |
|----------------------------|------------------------|
| 12 | 100 |
| 6 | 50 |

(Alternative to sieves: Maximum size not exceeding placement depth with 50% larger than 6”)

The Engineer will accept size by visual inspection.

ON PAGE 438, SUBSECTION 624.03, CONSTRUCTION REQUIREMENTS

Add the following:

Place materials along the abutments as shown in the bridge and roadway plans.

ON PAGE 481, SUBSECTION 654.03, CONSTRUCTION REQUIREMENTS

05/18

Add the following:

Do not deliver material to the project site until test results have been submitted and accepted in writing.

When composted ungulate manure is used for temporary stabilization in place of a tackifier and also used for permanent stabilization before seed bed preparation and seeding, distribute the first application of composted ungulate manure evenly to all disturbed areas at the rate of 110 to 140 cubic yards per acre.

Before seed bed preparation and seeding, distribute a second application at the same rate.

When composted ungulate manure is used for the permanent stabilization only, distribute composted ungulate manure evenly to all areas to be seeded at the rate of 220 to 280 cubic yards per acre before seed bed preparation and seeding.

For slopes steeper than 3H:1V, distribute composted ungulate manure at the rate of 220 to 280 cubic yards per acre using a pneumatic blower with a calibrated seed and tackifier injection system.

Any site with erosion problems, especially due to wind may require additional applications as directed.

ON PAGE 486, SUBSECTION 675.01, DESCRIPTION

Delete “area,” and “, and linear measurement.” from the first sentence.

ON SHEET 10 OF 23 OF THE 2021 SPECIAL PROVISIONS FOR 405 SUPERPAVE HOT MIX ASPHALT (07/02/2021) INSERT

Delete second sentence of 405.03.I and replace with the following:

The Department does not require acceptance test strips on small quantity pavement (e.g., less than 2250 tons), nonstructural pavement, or temporary pavement.

ON SHEET 15 OF 24 OF THE 2021 SPECIAL PROVISIONS FOR 405 SUPERPAVE HOT MIX ASPHALT (07/02/2021) INSERT

Insert the following as the fourth paragraph of 405.03.O:

When an acceptance test strip is not required as per 405.03.I, the Department will base acceptance for pavement density on the density of cores taken from the finished pavement for quantity less than 750 Ton. The Engineer reserves the right to test additional properties for compliance with contract requirements. For quantity above 750 Tons and below 2250 Tons, will be tested in accordance with the QA manual 405-6. Obtain 5 randomly located core samples in accordance with the FOP for AASHTO R 67 from the compacted Superpave HMA in the Engineer’s presence. The Engineer will determine the random core locations. Immediately submit the cores for testing. The Department will determine the density of the cores the FOP for AASHTO T 166 Method A or AASHTO T 331. In addition, obtain 3 randomly located mix samples during HMA placement, in the Engineer’s presence, and immediately submit samples for testing. Obtain the samples in accordance with the AASHTO R 97 (see the QASP Table 106.03-1 Note 1.c.). The Engineer will randomly locate the mix samples and the Department will test the mix samples to determine the G_{mm} value in accordance with the FOP for AASHTO T 209 or ASTM D6857, Asphalt Content in accordance with the FOP for AASHTO T308, and Gradation in accordance with the FOP for AASHTO T 30. The Department will use the average of the 3 G_{mm} values to compute in-place density of the cores taken for density acceptance. Following table will be used for specification limits to determine pass/fail. If paving will be performed in different construction seasons (e.g., bridge approaches), obtain 5 additional cores from the compacted

Superpave HMA and 3 additional mix samples for density acceptance when paving resumes. The Contractor is responsible for quality control testing.

Production Paving Specification Limits

| Mix Characteristic | Limits |
|-------------------------------------|------------------------------------|
| SP 2, SP3 and SP5 Mixture | |
| No. 4 sieve and larger sieves, % | JMF value \pm 5.0 ^(a) |
| No. 8 to No. 30 sieves, % | JMF value \pm 4.0 ^(a) |
| No. 50 to No. 100 sieves, % | JMF value \pm 3.0 ^(a) |
| No. 200 sieve and smaller sieves, % | JMF value \pm 1.5 ^(a) |
| Asphalt Binder Content, % | JMF value - 0.3 / +0.4 |
| Roadway Characteristic | Limits |
| Density, % Compaction | 92.0 – 100.0 |

^(a) The upper and lower specification limits are never allowed to be outside the control points specified in 703.05.

S501-25A SP BRIDGE - GRS ABUTMENTS WITH CMU FACING & RSF (KN 22431 S Higbee Dr, Butte Arm Canal Br, Idaho Falls; KN 22599 E 121st S Idaho Canal Br, Bonneville Co.)

Description. Provide all materials, labor, and equipment to construct both Geosynthetic Reinforced Soil (GRS) Abutments with Concrete Masonry Unit (CMU) Facing to the lines and grades shown on the plans or as directed.

Provide all materials, labor, and equipment to construct both the Reinforced Soil Foundations (RSF) to the lines and grades shown on the plans or as directed.

Abbreviations and Definitions.

1. GRS Abutment: Geosynthetic Reinforced Soil (GRS) Abutment which consists of improvements placed below the bridge beams to the Reinforced Soil Foundation.
2. RSF: Reinforced Soil Foundation (RSF) which consists of foundation improvements below the GRS Abutment.
3. CMU Facing: Concrete Masonry Unit (CMU) blocks are the face of the GRS Abutment.
4. Beam Seat: Top area of the GRS Abutment immediately below the bridge beams.
5. Integrated Approach: Roadway materials placed behind the bridge beams.
6. MD: Machine Direction (MD) of geosynthetic reinforcement which is parallel to the direction of the geosynthetic roll-out.
7. CD: Cross Machine Direction (CD) of geosynthetic reinforcement which is perpendicular to the direction of the geosynthetic roll-out.

Submittals. Submit for approval all product information on materials to be incorporated into the Work plan as defined in Construction Requirements and the Reinforcement Geotextile Layout Plan.

Materials.

Reinforcement Geotextile for RSF and GRS Abutment. Woven polypropylene geotextiles for the RSF and GRS Abutment conform to the following requirements. (Note: Basis of design was TenCate - Mirafi HP570.)

| Property | Test Method | Minimum Average Roll Value in both directions (MD/CD) |
|--------------------------------------------|--------------------|--------------------------------------------------------------|
| Wide Width Tensile Strength (at ultimate) | ASTM D4595 | 4800 lb/ft |
| Wide Width Tensile Strength (at 2% strain) | ASTM D4595 | 960 lb/ft |
| Ultraviolet (UV) Resistance (at 150 hours) | ASTM D4355 | 70% strength retained |

Aggregate for RSF and GRS Abutment. Provide Cover Coat Material, 403 Class B, in accordance with 703.06. Cleanness Value, Los Angeles Abrasion, and Retained Asphalt Film test are not required. Modify gradation requirements to allow a maximum of 5 percent passing the number 200 sieve. Provide a laboratory Direct Shear test report prepared by an accredited laboratory for each proposed source. Use aggregate that meets the following requirements:

| Property | Test Method | Requirement |
|-----------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Idaho Degradation | Idaho IT-15 | 5.0% maximum loss |
| Ethylene Glycol | Idaho IT-116 | 90% minimum retained |
| Fractured Face | AASHTO T 335, Method 1 | At least 60 percent of the material retained on the No. 4 sieve has at least one fractured face |
| Direct Shear | AASHTO T 236 | 38 degrees minimum |
| Magnesium Sulfate or Sodium Sulfate Soundness | AASHTO T 104 | Magnesium sulfate soundness loss of less than 30 percent after four cycles. Or Sodium sulfate soundness loss of less than 15 percent after five cycles |

CMU Facing.

1. Use split face for all exposed CMU block faces.
2. Use CMU blocks that meet the requirements of ASTM C90-11b, with a minimum required compressive strength of 4,000 psi and a maximum water absorption rate of 5 percent after 24 hours (ASTM C140-16).
3. Use CMU blocks that meet the freeze-thaw criteria of ASTM C1262-18. Do not use the same test block specimen for freeze-thaw testing and absorption testing. Test results from a previous pre-casting mix design, within the past 24 months, may be submitted in lieu of fabricating new CMU blocks for testing.
4. Use CMU blocks that meet the following tolerances:
 - a. Height of each block within 1/16-inch of specified dimension.
 - b. Length and width of each block within 1/8-inch of specified dimensions.
 - c. Minimum shell thickness for hollow CMU units of 1.25inch and a web thickness of 3/4inch.
5. Submit CMU block test results in accordance with ASTM C-140-03.

CMU Block Leveling Pad. Fine Aggregate for Concrete in accordance with 703.02 B. If approved by Engineer, Concrete (Class 22) in accordance with 502, or Grout (Type A) in accordance with 705.01 may be used.

CMU Block Concrete Fill. Concrete (Class 35 or higher) in accordance with 502.

CMU Block Reinforcing Steel Bars. Epoxy coated bars (Grade 60). Acceptance will be by manufacturer's certification, ITD 914.

Flashing. Aluminum fascia, mechanically formed as detailed on the plans, in minimum 8-foot lengths, with a minimum thickness of 0.040 inch.

Beam Seat Foam Board. Extruded polystyrene insulation board Type IV per ASTM C578.

Bridge Beam Plastic Sheeting. Flexible poly vinyl chloride (PVC) plastic sheeting, PVC 40 mil (0.040" minimum thickness), meeting ASTM D7176 requirements or approved equal. Bond sheeting to concrete with approved adhesive to provide a waterproof seal. Provide a waterproof seal around holes for utility conduits.

Construction Requirements.

General.

1. Submit a detailed Work plan at least 21 days before beginning GRS abutment installation. The plan must include a reinforcement geotextile layout plan for each lift together with elevation and section views. As part of the submittal, show integration with related work activities, including details on how the scour and erosion countermeasures will be installed. Do not begin GRS Abutment work until the Work plan has been approved in writing by the Engineer.
2. Hold a pre-construction meeting with the Engineer. The Contractor is responsible for scheduling the pre-construction meeting with the Engineer and the Contractor's personnel who will be installing the GRS Abutment system. Items to address may include, but are not limited to, contract requirements review and Contractor's proposed construction means and methods.
3. Construct the GRS Abutments, and each of their appurtenant components or zones including CMU facing, and the beam seat reinforcements to the locations, dimensions, lines, and grades shown on the plans.
4. Schedule excavation and RSF and GRS Abutment construction to avoid adverse weather conditions. Pre-stage materials on site to expedite the work.

Excavation.

1. Excavate to the limits of RSF and GRS Abutment.
2. Remove all loose, soft, wet, frozen, organic, or unsuitable material from below the RSF, as directed by the Engineer. Such removal, if directed by contingency, and backfill will be paid for as Excavation and Repair of Soft Spots, in accordance with the Section 205.05 of the Standard Specifications.
3. Maintain groundwater a minimum of two feet below excavation bottoms at all times.

RSF Construction.

1. Prepare the RSF base to a smooth and uniform elevation, and to the limits shown on the plans.
2. Obtain the Engineer's written acceptance of the excavation condition and dewatering operation before beginning any backfilling.

3. Do not place aggregate on snow or ice, or on a frozen subgrade.
4. Do not place frozen aggregate.
5. Wrap sides, top, and bottom in reinforcement geotextile, such that the backfill is not in contact with subgrade soil. Ensure that corners are wrapped tight. Overlap joints by at least 3 feet.
6. Place RSF backfill and reinforcement geotextile from abutment face backwards to the excavation cut (face to back).
7. In the presence of the Engineer, water and compact backfill material in maximum 8-inch vertical compacted lifts. Compact with at least 12 full coverages of a walk behind vibratory compactor meeting the following requirements:
 - a. 1500-lbs minimum static operating weight.
 - b. Centrifugal force of at least 200 lbs/inch per drum at a vibration frequency of at least 3300 vpm.
8. Sequentially number each RSF lift starting with 1 at the bottom lift for each zone.
9. Ensure that the surface each compacted lift is level to facilitate placement of the geotextile.
10. Ensure there are no wrinkles or roll folds in the reinforcement geotextile layers.
11. Place RSF Reinforcement Geotextile in accordance with the plans.
12. Before final encapsulation, ensure the top surface of the RSF backfill is graded level and compacted, and is situated at design elevation within +/- 0.05 feet.
13. Obtain written acceptance from the Engineer before beginning GRS Abutment construction. Acceptance includes complete and satisfactory documentation of proper compaction coverages.
14. Certify that each lift has been watered and compacted with the specified number of compaction coverages. Provide written daily report to Engineer documenting the compaction effort, including equipment used and number of passes with vibratory compactor per lift.

GRS Abutment and CMU Facing Construction.

1. Place a maximum 0.5-inch-thick leveling pad of Fine Aggregate for Concrete under the first course of CMU Block, as required to achieve a level bearing surface along the entire face. If the leveling pad thickness will exceed 0.5 inches, then use grout or concrete approved by the Engineer to achieve a level bearing surface along the entire face.
2. Verify with survey equipment the horizontal and vertical location of first course of CMU Block to ensure horizontal location is within ± 0.05 feet of design location, and vertical elevation is ± 0.025 feet of design elevation. Adjust the position of the CMU Blocks as necessary within these tolerances.
3. Place each CMU Facing block tightly against the adjoining block without any gaps.
4. Before placing the subsequent course of CMU block, ensure the current CMU block course is completely constructed from end to end.
5. Clean off all debris or fill material from top of CMU block before placing the reinforcement geotextile layers.
6. Offset the vertical CMU Block joints for each subsequent row. In general, ensure the vertical joints between blocks of overlying courses are midway offset.

7. Construct the GRS Abutments with alternating aggregate, reinforcement geotextile, and CMU block layers. The CMU block face batter is vertical. Use a 8-foot level to check each CMU block course for vertical and horizontal alignment. Check the face batter every other course and correct if necessary.
8. Refer to the plans for block layout. Solid CMU blocks are to be used, with the exception of the topmost hollow CMU block courses fully grouted with CMU Block Concrete Fill in accordance with the plans.
9. Place Abutment Reinforcement Geotextile between CMU Block courses and setback a distance of between 1/8- to 1/2-inch behind the front face. Before stacking additional CMU courses, trim any geotextile that extends past the CMU Block front face. Do not burn or use torches to melt reinforcement geotextile.
10. Construct corners as detailed on the Work plans. Stagger front and side facing courses to form a tight interlocking stable corner.
11. Reinforce the topmost courses of CMU Blocks as shown on the plans.
12. Saw cut the top course of CMU blocks, as required, to match the top of abutment profile requirement as shown on the plans. Smooth finish grout the top surface of abutment wall as shown on the plans.
13. Place Beam Seat Foam Board and Flashing as shown on the plans.

GRS Abutment - Aggregate Placement.

1. Place GRS Abutment Aggregate following the placement of each reinforcement geotextile layer.
2. Place the backfill in such a manner as to avoid any CMU block misalignment, disturbance, or damage to the CMU block or geotextile.
3. Remove or replace any materials that become damaged or disturbed during backfill placement. Correct any facing block misalignment or distortion due to backfill placement.
4. Place GRS Abutment Aggregate in horizontal lifts that are a maximum of 8 inches after compaction.
5. In the beam seat area, place GRS Abutment Aggregate in horizontal lifts that are a maximum of 4 inches after compaction, as shown on the plans.
6. In the presence of the Engineer, water and compact each lift with at least 12 full coverages of a walk behind vibratory compactor meeting the following requirements:
 - a. 1500-lbs minimum static operating weight.
 - b. Centrifugal force of at least 200 lbs/inch per drum at a vibration frequency of at least 3300 vpm.
 - c. Heavy compaction equipment is prohibited within three feet of the CMU Block facing. Use a walk behind vibratory plate compactor with a centrifugal force of at least 4000-lbs at a vibration frequency of at least 3500 vpm within 3 feet of the CMU Block.
7. Sequentially number each GRS lift starting with 1 at the bottom lift for each zone.
8. Per day of installation, provide a letter to the Engineer certifying that each lift has been watered and compacted with the specified number of compaction coverages. Provide written daily report to the Engineer documenting the compaction effort, including equipment used and number of passes with vibratory compactor for each sequentially numbered lift.

GRS Abutment - Reinforcement Geotextile Placement.

1. For each lift, cover the aggregate with GRS Reinforcement Geotextile such that the entire surface is covered to the dimensions shown on the plans. Ensure that reinforcements are full length. Place all reinforcement geotextiles horizontal and level in all directions.
2. Place reinforcement geotextile at 8-inch vertical intervals, unless otherwise noted on the plans. A minimum of ten layers having 4-inch vertical intervals are required immediately below the beam seat, as shown on the plans.
3. Install the reinforcements geotextile in accordance with the plans.
4. Rollout geotextile parallel to the front face of abutment when the roll length is long enough to meet the required embedment. Seams or overlaps are not allowed in a direction parallel to the abutment face. When geotextiles are laid out perpendicular to the abutment face, ensure the overlaps of adjacent geotextiles are between 2 inches and no more than 4 inches.
5. Place reinforcements directly on the compacted fill surface.
6. Ensure reinforcement geotextiles are laid taut and free of wrinkles or folds before and during backfilling.
7. Situate reinforcement geotextile between CMU Block courses in accordance with the plans.
8. Before operating any equipment on the reinforcement geotextile, ensure the reinforcements have at least 4 inches of aggregate cover.
9. Place intermediate reinforcement layers at 4-inch vertical spacing under the beam seat or beam bearing area, within the bearing bed zone, as shown on the plans.
10. If steel guardrail posts have blunted ends (no points), create 10-inch square cut outs in the upper GRS Reinforcement layers at each post location.
11. Place Bridge Beam Plastic Sheeting vertically along the back of exterior and interior Bridge Beams between the Bridge Beams and the Integrated Approach and the sides of the exterior Bridge Beams per the plans.

Sampling and Testing. Sample and test the materials incorporated into the Work plan as follows:

| Material | Test By | Sample Location | Test Interval | Test Method |
|---------------------------------------------------|---------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Reinforcement Geotextile for RSF and GRS Abutment | Contractor | Manufacturer's Certification (ITD 849) with QC test results attached | | |
| | Department | Field | 1 per manufacturer's lot | Tensile Strength (ASTM D 4595), tested in each direction |
| Aggregate for RSF and GRS Abutment | Contractor and Department | Source/Stockpile (before use) | 1 set of tests per 500 ton (3 tests minimum), each sample taken from random stockpile locations | Gradation (AASHTO T 11 and T 27), Fractured Face (AASHTO T 35, Method 1) |

| Material | Test By | Sample Location | Test Interval | Test Method |
|------------------|------------|----------------------------------------------------------------------|---------------|-------------|
| CMU Facing Block | Contractor | Manufacturer's Certification (ITD 851) with QC test results attached | | |

Placement of Superstructure. Ensure the contact pressure for crane outriggers within GRS do not exceed 4,000 psf, and that the outrigger pads are set back from the abutment face and wing walls a distance at least equal to the exposed abutment front face height.

Place beams in position by lowering them into their final location without dragging them over the abutment reinforced zone.

Operating Equipment on Geosynthetic Reinforcement. Driving is not allowed directly on the geosynthetic reinforcement. A minimum 6-inch layer of aggregate should be placed before operating any vehicles or equipment over the geosynthetic reinforcement. In the bearing reinforcement zone, hand-operated compaction equipment should be used over the 4-inch lifts to prevent excessive installation damage of the geosynthetic reinforcement. Rubber-tired equipment may pass over the geosynthetic reinforcement at speeds less than 5 mi/h.

Method of Measurement. Measurement of completed GRS Abutments with CMU Block and Reinforced Soil Foundations (RSF) will be by the lump sum.

Basis of Payment. Payment for accepted GRS Abutment with CMU Facing, RSF including all required materials, labor, equipment, and supplies will be made as follows:

| Pay Item | Pay Unit |
|-------------------------------------------------|----------|
| SP Bridge - GRS Abutments with CMU Facing & RSF | LS |

Soft Spot Repair below the RSF will be paid for under a separate pay item, if required by the Engineer. Dewatering, backfill material, and structural excavation are incidental to this item. See the plans for structural excavation and backfill limits. Over excavation for access and associated backfill is incidental to this item. The materials comprising the roadway integrated approach situated to the side of the bridge beams are not part of GRS Abutment and are paid separately.

S501-30A SP BRIDGE - THRIE BEAM RAIL
(22598 St. Charles Creek Br; 22599 E 121st S Idaho Canal Br)

Description. Furnish, fabricate, and install the thrie beam bridge rail in accordance with the details and notes shown on the plans or as directed.

Materials. Materials for the railing will be in accordance with the project plans and Section 504 of the Standard Specifications.

Use Trinity Highway Products, LLC item 957G-Thrie Beam End Section (Rounded) or approved equal on thrie beam ends.

Construction Requirements. Construction of the rail will be in accordance with Section 504 of the Standard Specifications, manufacturer's recommendations, and as shown on the plans.

Method of Measurement. The Thrie Beam Rail will not be measured by the Engineer and payment will be based on "plan quantities" as specified in Subsection 109.01.B.

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

| Pay Item | Pay Unit |
|-----------------------------|-----------------|
| SP Bridge - Thrie Beam Rail | FT |

The Department considers all labor, equipment, and materials including the end sections as incidental and the cost included in the contract unit price of this item.

S604-05A REM & RESET IRR
(22431 S Higbee Dr, Butte Arm Canal Br; 22597 W Carson St Portneuf River Br)

Description. Remove and replace existing irrigation systems within the construction area to the back of proposed sidewalk and as shown on the plans, or as directed.

Materials. Replace damaged water lines, sprinkler heads, and all other miscellaneous irrigation system items with equal or better irrigation system items. All new irrigation system items will be designed and installed to operate per manufacturer's specifications and instructions.

Construction Requirements. Before removal of existing irrigation systems, the Contractor will map existing systems to be removed and reset. The Contractor will provide 48-hour notification to property owners before entering premises. The Contractor will remove and reset the existing system as shown on the plans or as directed. All affected irrigation zones will be redesigned and checked to ensure that coverage of the lawn area is adequate and sprinkler heads adjusted as needed. Sprinkler heads in affected zones not being directly removed and reset may also need adjusted to provide coverage equal to or better than the existing system. Sprinklers will be adjusted to not place water directly on the sidewalk or other structures. Any damage to the existing sprinkler heads or lines from the Contractor's operation will be replaced by the Contractor at their expense.

If the permanent location for the sprinkler system cannot be placed due to construction activities, the Contractor will temporarily irrigate impacted areas to ensure uninterrupted watering of lawn areas during the irrigation season or repair at their expense lawn areas that are damaged. Lawn areas will be repaired according to Section 651 - LAWN CONSTRUCTION (SODDED) at no extra cost.

The existing sprinkler heads will be adjusted to finish grade. This work will be performed in coordination with Lawn Construction (Sodded).

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

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

| Pay Item | Pay Unit |
|-----------------|-----------------|
| Rem & Reset Irr | LS |

Payment will not be made until the Contractor demonstrates that the irrigation system works to the satisfaction of the Engineer.

S610-05A REM & RESET FENCE
(22431 S Higbee Dr, Butte Arm Canal Br; 22597 W Carson St Portneuf River Br; 22598 St. Charles Creek Br)

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

Materials. Reuse the existing fence materials if possible. If existing fence materials cannot be salvaged, the removed section will be replaced with new fence matching in-kind the existing materials and the requirements of Section 610.

Structural Metals
Grout Type D

Section 504
Subsection 705.04

Construction Requirements. Remove the fence as shown on the plans or as directed. Reset to the original location and alignment after final grading of roadway shoulders/driveways. Fence damaged or stolen during construction will be replaced in like and 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.

Remove and Reset Chain Link Fence on Top of Levee Wall

Cut chain link fence posts off flush with the top of the levee wall and grind to a smooth surface. Fill the voids with grout Type D. Install new chain link fence posts on top of the levee wall immediately adjacent to the voided slab of the bridge deck. Use two 5/8-inch steel expansion wedge anchors to secure a 6"x10"x0.25" Grade 50 steel plate to the top of the wall. Weld the chain link fence post to the center of the plate so that the fence post is plumb in all directions. Cut chain link fencing and attach to post. The Contractor is solely responsible for ensuring that access to the fenced area during construction is per the State's requirements in Subsection 107.18. Coordinate with property owners and be responsible for temporary fencing if required.

Method of Measurement. The Engineer will measure Remove and Reset Fence by the foot of fence reset. Levee wall chain link fence will be measured as ten (10) feet for each of the four locations (40 feet total) regardless of the length of fence reset.

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

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

S900-50A CONTINGENCY AMOUNT – MISC WORK

9/20 Mod

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 according to similar bid item units or force account as specified in Subsection 109.03.C.5.

Basis of Payment. The Department will pay for accepted quantities at agreed unit prices or on a force account basis as determined by the Engineer:

| Pay Item | Pay Unit |
|-----------------------------------------|-----------------|
| Contingency Amount - Miscellaneous Work | CA |

**KEY NO. 22431; S HIGBEE DR, BUTTE ARM CANAL BR, IDAHO FALLS
CONTRACTOR NOTES**

AMERICANS WITH DISABILITIES ACT (ADA) ACCESS DURING CONSTRUCTION

Ensure all accessibility requirements outlined in the Americans with Disabilities Act of 1990 (ADA) and current FHWA Guidelines in the PROWAG are adhered to throughout the construction process. This includes, but is not limited to, accessibility for vehicular, bicycle and pedestrian movements within the highway and/or public right-of way. All necessary temporary traffic control devices will be in place and ready for use before executing any work, including utility work, within an established construction boundary. Maintain practical continuity where accessible facilities already exist.

Frequent checks of the vehicular, pedestrian, and bicycle accommodations will be conducted during construction to ensure the implemented temporary traffic control plan is followed and all traffic control devices are maintained in good condition.

If it is determined by the Engineer that additional traffic control measures are required to accommodate any user within or beyond the project limits the modifications must be implemented within a 48-hour period after the request is made.

EMPLOYMENT AGENCY

01/18

The designated employment agency is as follows:

Idaho Department of Labor Office
P. O. Box 158
1515 E Lincoln Rd
Idaho Falls, ID 83401-3653

ENCROACHMENT PERMIT

Obtain an encroachment permit from the Idaho Irrigation District. Per Subsection 107.02 and comply with all permits. Contact, Richard Lochyer - Ditch Manager at 208-390-1211. The Department considers all costs associated with obtaining the permit as incidental to Mobilization.

ENVIRONMENTAL REQUIREMENT – MITIGATION MEASURES

The following points identify project specific mitigation measures required to be implemented by the Contractor:

- Conduct work in the dry, during irrigation off-season, to reduce impacts to waters of the United States.
- A USACE 404 Joint Application for Permits and IDEQ 401 Water Quality Certification are needed and will be made as part of the contract. All terms and conditions will be abided by and incorporated into the project.
- During construction, traffic will be detoured using S Emerson Avenue, E 14th Street, and E 17th Street. Construction is anticipated to last approximately eight to nine months and it is anticipated that S Higbee Avenue will be detoured for approximately six of those eight to nine months. The City of Idaho Falls will communicate with residents about construction details. Flaggers, barricades, and appropriate signage will be used as necessary to direct traffic.
- The Contractor will operate under Standard Item 203-050B Rem and Dispose Asbestos.
- During removal, occupational-approved lead safe practices will be adhered to, as well as proper disposal of lead-based paint steel per ITD Standard Specifications. Structural steel having lead-

based paint will be removed and delivered to a scrap metal recycler approved by the LHTAC Engineer. Final disposition of structural steel with lead-based paint will be certified in writing to the LHTAC Engineer.

- All planned work will adhere to the MBTA and the BGEPA requirements in that the Contractor must avoid and minimize impacts and harassment to listed migratory birds during construction. It is therefore recommended that the project phase of vegetation removal occur during times when no nesting birds are present. This would likely be from September to mid-December.

PROPERTY OWNER COORDINATION

Coordinate items of work affecting adjacent property owners, including landscape removal and replacement, driveway approach construction, sprinklers, irrigation facilities, fencing, sod care, and trees. Where the plans show a property use agreement boundary, give the property owner 21 (twenty-one) days' notice, in writing, before commencing work. Property owner coordination will be considered incidental to the project and no separate payment will be made. Specific property owners are as follows:

Curtis & Rebecca Ward
1333 S Odyssey Dr
Idaho Falls, ID 83404
208.521.2309
curtis@buildguardian.com

Gaye Smith
1545 S Higbee
Idaho Falls, ID 83404
208.221.3224
gsmith@intermechinc.com

Reuel Hendricks
1501 S. Higbee Ave
Idaho Falls, ID 83404
208.522.7707

Terry Gohr
1457 S Higbee Ave
Idaho Falls, ID 83404
208.206.1394

DDB Properties LLLP
Attn: Donald Bluth
2178 Craig Ave
Idaho Falls, ID 83404
208.529.5114

Jonnie Sue Fields Davis
614 N Bellin Rd
Idaho Falls, ID 83402
208-251-8709

WATER MAINS

Water mains shown on profile sheets in plans show elbows & fittings. The Contractor can adjust the grade of water mains as needed or propose other solutions to eliminate need for elbows and fittings.

Elbows and fittings placed to make vertical grade adjustments will not be paid for separately but will be considered incidental to the cost of the water mains.

ON PAGE 39, SUBSECTION 105.07, UTILITY FACILITIES

01/18

Add the following:

Sparklight
Heinz Schreier
208-589-2401
Heinz.Schreier@Sparklight.biz

Retain and protect.

Lumen
Nathan Burke
Network Implementation Engineer II
208-525-4263 office
208-360-3688 cell
nathan.burke@lumen.com

Retain and protect.

Idaho Falls Public Works
Chris Canfield
Assistant Public Works Director
208-612-8259 office
208-201-5695 cell
ccanfield@idahofallsidaho.gov

Replace trees as shown on plans as part of contract work.

City of Idaho Falls Water Division
David Richards
Water Superintendent
208-612-8471 office
208-705-0045 cell
drichards@idahofallsidaho.gov

Relocate existing water line as part of contract work.
City of Idaho Falls Sewer Division
Carl Utter
Wastewater Superintendent
208-612-8108
cutter@idahofallsidaho.gov

Adjust manhole covers as part of contract work.

Idaho Falls Power
Richard Malloy
208-612-8430
rmalloy@ifpower.org

Nathan Anderson
208-612-8430
nanderson@ifpower.org

Retain and protect existing power poles and overhead lines. Coordinate one-month in advance with Idaho Falls Power on allowed excavation and for supporting power poles. If needed, temporary shoring will be considered incidental to excavation.

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling: 1-800-342-1585; e-mailing digline@digline.com; or faxing 1-800-342-1586.

Idaho Irrigation District
Richard Lochyer
Ditch Manager
496 E 14th St
Idaho Falls, ID 83404
208-390-1211

ON PAGE 382, SUBSECTION 586.02, MATERIALS

Delete item 1. Utility Conduit

ON PAGE 426, SUBSECTION 620.02, MATERIALS

Add the following after the fifth sentence:

Provide field grown, balled and burlapped trees that have a minimum caliper size of three inches measured at a minimum of six inches above the root flare. The selected trees will need to be the same for each parallel run of trees shown on the plans. The following list of trees are approved and can be changed with prior written approval from the Engineer and the Idaho Fall Publics Works Department.

- Canyon/Bigtooth Maple (*Acer grandidentatum*)
- Hedge Maple (*Acer campestre*)
- May Day Tree (*Prunus padus*)
- European Mountain Ash (*Sorbus aucuparia*)
- Callery Pear (*Pyrus Calleryana*)

ON PAGE 427, SUBSECTION 620.03, CONSTRUCTION REQUIREMENTS

Add the following to the end of section A. Containerized Plant Requirements:

Field Grown, Balled and Burlapped Tree Requirements. Dig hole 2-3 times as wide as the root ball and the same depth as the tree was planted in the nursery. Make sure the sides of the hole are rough and uneven. Mix soil conditioner into 6 inches of loose topsoil in the bottom of planting holes, but do not mix with the soil to be used in backfilling. Set the root ball on firmly packed soil. Carefully set the tree into the planting hole so the top of the root ball is level with or slightly higher than the surround ground. If the tree is in a wire basket, completely remove it, if possible, or remove the upper one-half after the tree is in its final planting position. Take care not to damage the roots or disturb the integrity of the root ball. Adjust the position using pressure on the root ball; do not move it by twisting the trunk. Straighten the tree and stabilize it by adding topsoil around the bottom portion of the root ball. Cut and remove all twine and cut the burlap halfway down the root ball. Stand back and inspect the tree from several sides to make sure it is straight. If not, move the tree in the hole until it stands straight. Backfill with topsoil around the roots until it is half full. Water sparingly to settle the

topsoil and remove air pockets. Lightly tamp the topsoil in with a shovel handle to compress the topsoil around the root ball, taking care not to damage the roots. Continue adding topsoil until the hole is filled. Do not cover the top of the root ball with topsoil.

ON PAGE 428, SUBSECTION 620.05, BASIS OF PAYMENT

Add the following after the second sentence:

The Department considers all materials, equipment, and labor for the planting of trees, including all excavation, fertilizer, soil conditioner, topsoil, mulch, and any other items required to complete the Planting Trees (Seedlings or Container), as incidental and the cost included in the unit price of this item.

S501-51A SP BRIDGE - ANTI-GRAFFITI COATING

Description. Coat exposed surfaces of designated concrete superstructure as specified in the plans.

Materials. Provide anti-graffiti coating system consisting of either a one or two coat system to create a continuous pinhole-free film; the combination of coatings may be pigmented or clear. Use an aliphatic urethane system with a clear finish for graffiti system topcoat coating. Use a permanent type anti-graffiti coating for the protection of raw concrete substrates.

Approved systems for permanent type graffiti system are as follows:

LOXON MASONRY COATING SYSTEMS ACRYLIC CONDITIONER, CLEAR OR PIGMENTED - Base or Sealer Coat (A24V01100 Clear, A24W01100 White/Tinted to color)
SWD INVISI-SHIELD ANTI-GRAFFITI CLEAR (B65CJ2000/B60V2) -Topcoat
Sherwin Williams

TY-COTE, CLEAR OR PIGMENTED – Base or Sealer Coat
TEX-COTE GRAFFITI GARD IV GLOSS - Topcoat
Textured Coatings of America, Inc.

MC-LUSTER, CLEAR OR PIGMENTED – Base or Sealer Coat
MC-CLEAR – Topcoat
Wasser High-Tech Coatings

CRYSTAL CLEAR, CLEAR OR PIGMENTED – Base or Sealer Coat
CRYSTAL CLEAR – Topcoat
Visual Pollution Technologies, INC.

or approved equal.

Apply in accordance with the manufacturers guidelines so that the coating system qualifies for all the guarantees and warranties provided by the manufacturer. Furnish the terms of the guarantees and warranties given by the manufacturer.

Construction Requirements. Provide an ordinary surface finish on all surfaces to be coated in accordance with 502.03 or provide textured concrete surface as shown in the plans. Cure concrete in accordance with 502.03 after surface acceptance. Sandblast all surfaces to be coated clean and free from any foreign substances, such as form release agents, curing compounds, dirt, laitance, leachates, oils, grease, or other surface contaminants.

Apply base or sealer coat to the concrete surfaces as required by manufacturer. Apply anti-graffiti coating in accordance with manufacturer's written instructions, including surface preparation, application rate and environmental conditions.

Method of Measurement. The Engineer will measure acceptably completed work by the square foot.

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

| Pay Item | Pay Unit |
|-----------------------------------|-----------------|
| SP Bridge - Anti-Graffiti Coating | SF |

S600-20A FIRE HYDRANT ASSEMBLY

Description. Provide and install Fire Hydrant Assembly as shown on the plans and in accordance with the most current version of the City of Idaho Falls Standard Drawings and Specifications.

Materials. Refer to the current version of ISPWC and City of Idaho Falls Supplements. Fire Hydrant Assembly will consist of dry barrel fire hydrants meeting ANSI/AWWA C 502. Color will be Chrome Yellow, OSHA Safety Yellow or Idaho Falls approved equal.

Construction Requirements. Refer to the plans and the current version of City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work by the each.

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

| Pay Item | Pay Unit |
|-----------------------|-----------------|
| Fire Hydrant Assembly | EACH |

Materials, fittings, equipment, and labor to install Fire Hydrant Assembly will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for Fire Hydrant Assembly.

S600-45A WATER LINE - 6"

S600-45B WATER LINE - 8"

Description. Provide and install water line pipe of the size and as shown on the plans and in accordance with the most current version of the City of Idaho Falls Standard Drawings and Specifications.

Materials. Refer to the current version of the City of Idaho Falls Standard Drawings and Specifications. Water main and fittings will consist of Ductile Iron, Class 50, or higher meeting ANSI/AWWA C 151. The connection to the existing water main will use a "Macro" coupler or approved equal.

Construction Requirements. Refer to the current version of the City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work along the centerline of the pipe by the foot.

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

| Pay Item | Pay Unit |
|------------------------|-----------------|
| S600-45A Water Line 6" | FT |
| S600-45B Water Line 8" | FT |

Materials, fittings, equipment, and labor to install the water main will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for the respective item. Elbows and fittings installed to accommodate vertical grade changes will not be paid for separately but will be included in the cost of the pipe. Excavation, pipe bedding, backfill and compaction will be considered incidental to the cost of installing the water lines.

S619-05A JUNCTION BOX

Description. Install a precast concrete junction box in the approximate locations shown in the plans. Determine exact location in the field with the Engineer.

Materials. Provide a 42"x38"x28" Precast Junction Box with the following requirements:

- Constructed of a minimum 4000 psi concrete placed in one continuous pour.
- Contain rebar and welded wire reinforcement.
- Walls are a minimum of 4 inches thick.
- Bottomless box.
- Have a steel diamond plate lid with 3/8-inch minimum thickness held in place by a brass bolt.

Provide 3/4 inch aggregate for base as specified in 703.

Construction Requirements. Before installation of the junction box, check with the Engineer to determine the exact location for Junction Box placement. Junction box locations as shown in the plans are approximate and may need adjusted to avoid conflict with walls, utilities, signs, poles or any other object.

Place a minimum 6 inches of 3/4 inch aggregate base in the bottom of the junction box to allow for adequate drainage. Install the junction box with the lid flush with its frame and with the surrounding area.

Inspect the precast junction boxes for damage or defects with the Engineer.

Method of Measurement. The Engineer will measure acceptably completed work by the Each.

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

| Pay Item | Pay Unit |
|-----------------|-----------------|
| Junction Box | EACH |

The Department considers excavation and aggregate base, due to contractor's operations as incidental and the cost included in the contract unit price for this item.

S901-05C SP - 6" WATER GATE VALVE

S901-05D SP - 8" WATER GATE VALVE

Description. Provide and install water gate valves of the size and as shown on the plans and in accordance with the most current version of the Idaho Standards for Public Works Construction (ISPWC) and City of Idaho Falls Supplements.

Materials. Refer to the current version of the City of Idaho Falls Standard Drawings and Specifications. Gate valves and fittings will be consistent with the water line materials.

Construction Requirements. Refer to the current version of the City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work by the each.

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

| Pay Item | Pay Unit |
|-----------------------------------|-----------------|
| S901-05C SP - 6" Water Gate Valve | EACH |
| S901-05D SP - 8" Water Gate Valve | EACH |

Materials, fittings, equipment, and labor to install the Water Gate Valves will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for the respective items.

S901-05E SP - 2" WATER SERVICE CONNECTION

Description. Provide and install 2-inch water service connection as shown on the plans and in accordance with the most current version of the Idaho Standards for Public Works Construction (ISPWC) and City of Idaho Falls Supplements.

Materials. Refer to the plans and the current version of the City of Idaho Falls Standard Drawings and Specifications. 2-inch water service connection and fittings will be seamless copper water tube (ASTM B 88), Type K, Annealed.

Construction Requirements. Refer to the plans and the current version of the City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work by the each.

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

| Pay Item | Pay Unit |
|----------------------------------|-----------------|
| SP - 2" Water Service Connection | EACH |

Materials, fittings, equipment, and labor to install the 2" Water Service Connection will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for 2" Water Service Connection.

S901-05F SP - ACCESS STRUCTURE

Description. Provide and install an access structure as shown on the plans and in accordance with the most current version of the City of Idaho Falls Standard Drawings and Specifications.

Materials. Refer to the plans and the current version of ISPWC and City of Idaho Falls Supplements.

Construction Requirements. Refer to the plans and the current version of the City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work by the each.

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

| Pay Item | Pay Unit |
|-----------------------|-----------------|
| SP - Access Structure | EACH |

Equipment, excavation, and labor to install the Access Structure will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for Access Structure.

S902-05A SP - BROOMING

Description. Clean up material and debris from the roadway surface on S Higbee Ave and E 15th St by the use of a mechanical pickup or vacuum broom.

Materials. None.

Equipment: Provide equipment that is fully operated with a qualified operator.

Provide brooming equipment that is in good condition and capable of sweeping a path at least 6 feet wide without loosening or displacing embedded material.

Provide a water truck with a minimum capacity of 3000 gallons equipped to provide a minimum of 1.67 gallon/second at 60 psi measured at the nozzle, also provide a minimum of 2 duckbill type flushing nozzles per side and a minimum of 50 feet of 1.5-inch hose with a flushing nozzle.

The Contractor may use additional equipment for a more efficient operation.

When not in use, park or store equipment in an inconspicuous place while not blocking off private residence driveways. The Contractor is responsible for his equipment at all times.

Construction Requirements. Broom all areas within the project limits with a mechanical pickup or vacuum broom. The Department requires the Contractor to broom at least two complete coverages per day while the existing asphalt is still in place during bridge construction. Additional brooming may be necessary as directed by the Engineer.

During brooming operation, use water to control the dust. When dust is not being properly controlled, the operation will cease and not commence until adequate correction has been proven. The Contractor is responsible for obtaining the required water and providing a written release from the water provider before final payment.

Operate brooms and support vehicles in the normal direction of traffic flow. Dispose of debris at approved sites.

Method of Measurement. The Engineer will measure acceptably completed work by the hour of brooming operation.

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

| Pay Item | Pay Unit |
|-----------------|-----------------|
| SP - Brooming | HR |

The brooming pay item applies to the pollution prevention plans in lieu of a construction entrance. Brooming needed or required for other contract items are not included with this item.

Work associated with brooming is incidental, including:

1. Protecting existing manholes, valve casings, and street monuments.
2. Restoring items that were not properly protected.
3. Water applications.
4. Hand brooming.
5. Traffic control and maintenance.
6. Disposing of excess material.
7. All other work needed to complete brooming.

S911-05A SP - 18” STEEL CASING

Description. Provide and install 18-inch steel casing as shown on the plans and in accordance with the most current version of the City of Idaho Falls Standard Drawings and Specifications.

Materials. Refer to the plans and the current version of the City of Idaho Falls Standard Drawings and Specifications. Steel casing must conform to ASTM A252 Grade 3. Casing wall thickness will be a minimum 3/4-inch. All joints will be welded by a welder qualified in accordance with AWS D1.1 structural welding code, Section 3.

- Casing spacers will be “Calpico” or approved equal.
- End seal will be “Calpico” or approved equal.

Construction Requirements. Refer to the plans and the current version of the City of Idaho Falls Standard Drawings and Specifications.

Method of Measurement. The Engineer will measure acceptably completed work along the centerline of the casing by the foot.

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

| Pay Item | Pay Unit |
|-----------------------|-----------------|
| SP - 18” Steel Casing | FT |

Materials, fittings, “Calpico” casing spacers, “Calpico” end seals, equipment, and labor to install the 18” steel casing will not be measured and paid for separately but will be considered as subsidiary work and the cost thereof included in the contract unit price for 18” steel casing.

KEY NO. 22597; W CARSON ST, PORTNEUF RIVER BR, POCA TELLO CONTRACTOR NOTES

EMPLOYMENT AGENCY

01/18

The designated employment agency is as follows:

Idaho Department of Labor Office

P. O. Box 4087
430 N 5th Ave
Pocatello, ID 83205-4087

ENVIRONMENTAL REQUIREMENT – MITIGATION MEASURES

The following points identify project specific mitigation measures required to be implemented by the Contractor:

- Before construction, coordinate with local emergency providers and local public transportation providers to ensure continual communication regarding the project.
- During construction, vehicular, bicycle, and pedestrian traffic will be detoured using Trail Creek Road, Riverside Drive/N Lincoln Avenue, W Custer Street, and N Grant Avenue. The detour will last the duration of construction (approximately six to eight months). Due to the location of Irving Middle School, construction will occur during the summer months to limit impacts to buses, parents, and children traveling to and from school. The City of Pocatello will communicate with residents about construction details. Flaggers, barricades, and appropriate signage will be used as necessary to direct traffic.
- Conduct TCLP testing of the chromium and lead-containing waste stream and the remaining bridge components/debris. These tests should be conducted separately on the waste stream to assess the potential for leaching of lead and/or chromium from the bridge materials.
- During removal, occupational-approved lead safe practices will be adhered to, as well as proper disposal of lead-based paint steel per ITD Standard Specifications. Structural steel having lead-based paint will be removed and delivered to a scrap metal recycler approved by the LHTAC Engineer. Final disposition of structural steel with lead-based paint will be certified in writing to the LHTAC Engineer.
- All planned work will adhere to the MBTA and the BGEPA requirements in that the Contractor must avoid and minimize impacts and harassment to listed migratory birds during construction. It is therefore recommended that the project phase of vegetation removal occur during times when no nesting birds are present. This would likely be from September to mid-December.

POTENTIAL BOULDERS AT OLD RIVER CHANNEL

Basalt boulder/cobbles were encountered from a depth of 15.5 feet (EL. 4430.5 feet) to 17.25 feet (4428.8 feet) at the old river channel (Boring AG-3). This may be a layer of coarse material (or rip rap) placed at the bottom of the old river channel to provide a base for the placement of the overlying compacted sandy clay fill material.

POTENTIAL WOOD DEBRIS ON THE EAST SIDE OF BRIDGE

On the east side of the bridge, some wood debris came up with the water column when Boring AG-2 was backfilled. This wood debris could possibly be some wood cribbing, timber foundations, or other part of the old bridge left in place when the existing bridge was constructed.

ON PAGE 39, SUBSECTION 105.07, UTILITY FACILITIES

01/18

Add the following:

Lumen (formerly CenturyLink)
Biser Fan
208-234-0075
Biser.Fan@Lumen.com

Retain and protect.

City of Pocatello
Merril Quayle
208-234-6228
mquayle@pocatello.us

Relocate existing water line to new bridge within new insulated casing as part of the contract work. Install 2-inch water tap and fittings to replace the existing irrigation supply line to the union joint. (8" ductile iron tap, various nipples, tee, elbow, reducer, union joint, and ball valve) Coordinate with City of Pocatello Public Works Department to schedule a week for city to install new irrigation and electrical service. Water line will be back in service no more than two months after being shut off.

Idaho Power
Ethan Morgan
208-388-6510 office
208-912-6200 cell
emorgan@idahopower.com

Retain and protect. An overhead power line exists where the west bridge abutment will be located. Early coordination with Idaho Power revealed that the line can be de-energized temporarily from November to April. Coordinate with Idaho Power for exact de-energizing window dates and schedule bridge construction accordingly.

Intermountain Gas
JJ Murphy
208-637-6415
james.murphy@intgas.com

Remove facilities from existing structure, provide temporary support during construction, and install facilities on new structure following bridge completion. Work by Intermountain Gas at company expense.

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling: 1-800-342-1585; e-mailing digline@digline.com; or faxing 1-800-342-1586.

ON PAGE 123, SUBSECTION 203.03.B, REMOVAL OF BRIDGES, CULVERTS, AND OTHER DRAINAGE STRUCTURES

The existing water line removal will be considered incidental to 203-020A Rem of Bridge. Coordinate with the City of Pocatello for water shut off before removing the existing water line from Sta 13+83 Rt to Sta 15+00 Rt including the existing gate valves. Disconnect 2" service lines at union. Return 2" piping and fittings/valves to the City of Pocatello. Obtain permission from the City of Pocatello before reusing 8-inch gate valves.

ON PAGE 336, SUBSECTION 520.01, DESCRIPTION

Delete the first paragraph and replace with the following:

Drill and backfill holes to the elevation shown below.

ON PAGE 336, SUBSECTION 520.03, CONSTRUCTION REQUIREMENTS

Delete the third paragraph and replace with the following:

PROJECT NOs. A022(431), A022(597), A022(598); A022(599);
KEY NOs. 22431, 22597, 22598, 22599 *Revised per Addendum No.1 11/10/2021

Drill holes into soil to elevation 4425 feet or as directed.

S501-95A GEOSYNTHETIC REINFORCED ABUTMENT BACKFILL

Description. Provide all materials and construct geosynthetic reinforced abutment backfill in accordance with the typical sections in the Plans for Geosynthetic Reinforced Abutment Backfill, or as directed.

Materials.

- ¾” Aggregate for Untreated Base, Type B per Subsection 703.04.
- Subgrade Separation Geotextile, Type III per Subsection 718.07.

Construction Requirements. Prepare the excavation base to a smooth, uniform condition without ruts, potholes, or protruding objects such as rocks or sticks, with Class A Compaction per 205.03.G. Install geotextile in accordance with Section 640. Place the backfill material and geotextile as shown in the plans or as directed.

Place the geotextile with the roll direction perpendicular to the abutment back wall or wing walls, or as directed. Install geotextile without wrinkles or folds and tension the geotextile while placing the backfill. Cover each geotextile layer entirely before starting the next lift. If geotextile from a different orientation overlaps the geotextile behind the abutment, maintain a minimum 4-inch vertical separation between geotextile layers. Place the abutment geotextile in intervals not to exceed 8 inches between backfill lifts, or as shown in the plans. Do not wrap the geotextile at the ends unless specified in the plans.

Place the backfill in such a manner as not to misalign or damage the abutment walls, wing walls, or drainage system. Do not place backfill against newly constructed masonry or concrete structures until all Subsection 502.03 requirements have been fulfilled.

Ensure that the backfill material maximum lift thickness after compaction is 8 inches or less. Compact backfill per Class A compaction requirements. Compact backfill within 3 feet of the structure by at least 5 passes of a lightweight mechanical tamper or roller, or as directed. Density tests will not be required within 3 feet of the walls.

Slope the backfill away from all wall faces at the end of each day's operation to direct surface runoff away from the walls. In addition, do not allow surface runoff from adjacent areas to enter the wall construction site.

Method of Measurement. The Engineer will measure acceptably completed work by the cubic yard of Geosynthetic Reinforced Abutment Backfill based on plan quantity.

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

| Pay Item | Pay Unit |
|-------------------------------------------|-----------------|
| Geosynthetic Reinforced Abutment Backfill | CY |

Subgrade Separation Geotextile, Type III and ¾” Aggregate for Untreated Base, Type B will be considered as incidental to the Geosynthetic Reinforced Abutment Backfill and will not be paid separately.

Structure excavation and compacting backfill will be measured and paid per Section 210. Excavation and backfill outside the limits for structure excavation and compacting backfill defined in Section 210 are incidental to the Geosynthetic Reinforced Abutment Backfill.

S610-10A SPECIAL GATE – ABUTMENT ACCESS GATE

11/12 MOD

Description. Provide and erect fence with single leaf gate as shown and at the locations indicated in the plans.

Materials. Provide materials as specified in the plans. Fence to match bridge railing.

Concrete Class 30

Section 502

Construction Requirements. Construct fence and gate as shown in plans. Fence and gate to be custom sized to cover opening between the levee wall and the bridge abutment from finished grade to bottom of bridge. Consider using chain link fence post in levee wall as hinge post. Latch must be lockable with pad lock. City will provide and install the pad lock.

Submit proposed fence and gate shop drawings to Engineer for approval before installation.

Method of Measurement. The Engineer will measure acceptably completed work by each abutment access gate including the associated fence required to secure access to beneath the bridge.

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

| Pay Item | Pay Unit |
|-------------------------------------|-----------------|
| Special Gate – Abutment Access Gate | Each |

The Department considers all labor, equipment, and materials including hardware, coatings, concrete, and reinforcement as incidental and the cost included in the contract unit price of this item.

904-05A SP – 8” WATER LINE AND APPURTENANCES

Description. Provide and install an 8-inch water line within a steel casing as shown in the plans. Tap into 8-inch water line with 2-inch service lines and stub out.

Materials. Provide materials as specified in the plans or as follows:

| | |
|---------------------------|-----------------------------------------------------|
| 2-inch Service Riser Pipe | ASTM A53galvanized iron pipe |
| 2-inch Ball Valve | Brass Ball Valve |
| Valve Box | 6-inch Plastic Round Box with Overlapping ICV Cover |
| 8-inch Gate Valve | Per City of Pocatello |

Use restrained mechanical joints for all 8-inch fittings.

Construction Requirements. Construct an 8-inch water line within a steel casing as shown and detailed in the plans and in accordance with Idaho Standards for Public Works Construction (ISPWC) as adopted by the City of Pocatello. Connect to the existing 8-inch water line at Sta 13+83 Rt and Sta 15+00 Rt with an 8-inch gate valve at both locations as shown. Use fittings as called out in the plans and install on hangers provided with bridge construction. Provide and install hardware to secure the water line casing to the hangers.

Retain and protect remaining 2-inch irrigation lines and valve boxes not intended to be removed.

Drill and tap the 2-inch service lines into the ductile iron water line, stub out with 2-inch nipple (8 inches long) and terminate with a 2-inch ball valve. Place the riser in a valve box before backfilling. City will connect riser to existing irrigation system following construction.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

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

| Pay Item | Pay Unit |
|--------------------------------------|-----------------|
| SP – 8” Water Line and Appurtenances | LS |

The Department considers all labor, equipment, and materials including hardware to connect to the bridge hangers and thrust blocking (if needed) as incidental and the cost included in the contract unit price of this item.

KEY NO. 22598; ST CHARLES CREEK BR, BEAR LAKE CO CONTRACTOR NOTES

COFFERDAM

Installing sheet piles for a cofferdam could be difficult at this site. Note the presence of cobbles and possibility of boulders, as well as the high SPT N-Values in the upper 10 feet to 15 feet of the riverbed alluvium.

COMPLIANCE WITH 401 WATER QUALITY CERTIFICATION

Comply with the conditions detailed in the individual Section 401 Water Quality Certification (WQC) issued for this project on March 1, 2021, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ directly at 208-236-6160, Pocatello Regional Office.

EMPLOYMENT AGENCY

01/18

The designated employment agency is as follows:

Idaho Department of Labor Office
P. O. Box 576
95 E Hooper Ave #20
Soda Springs, ID 83276

ENVIRONMENTAL REQUIREMENT – MITIGATION MEASURES

The following points identify project specific mitigation measures required to be implemented by the Contractor:

- During construction, traffic will be detoured using Minnetonka Cave Road, Main Street/US-89, and 200 N/Green Canyon Road. Construction is anticipated to last approximately eight to nine months. Jericho Loop is classified as a rural, local road that serves less than 100 vehicles per day. Because this is a secondary route and has a detour nearby, Bear Lake County is amenable to close the road for construction during this timeframe. Bear Lake County will communicate with

residents about construction details. Flaggers, barricades, and appropriate signage will be used as necessary to direct traffic.

- Before construction, coordinate with local emergency providers to ensure continual communication regarding the project. In-water work (including abutment piledriving) must not commence before August 15th to avoid impacts to juvenile cutthroat trout. In-water work will be limited to August 15 through December.
- All planned work will adhere to the MBTA, the BGEPA, and ITD's current Standard Specifications in that the Contractor must avoid and minimize impacts and harassment to listed migratory birds during construction. It is therefore recommended that the project phase of vegetation removal occur during times when no nesting birds are present. This would likely be from September to mid-December.
- A USACE Joint Section 401/404 Permit/Stream Alteration Permit will be required before construction activities for impacts to St. Charles Creek. All terms and conditions in the USACE Joint Section 401/404/Stream Alteration Permit must be followed.
- A Pollution Prevention Plan will be prepared and implemented for the project.

PROPERTY OWNER COORDINATION

Coordinate items of work affecting adjacent property owners, including landscape removal and replacement, driveway approach construction, sprinklers, irrigation facilities, fencing, sod care, and trees. Where the plans show a property use agreement boundary, give the property owner twenty-one (21) days' notice in writing before commencing work. Property owner coordination will be considered incidental to the project and no separate payment will be made. Specific property owners are as follows:

Michaelson Christian E Etux
PO BOX 67
Saint Charles, ID 83272
435-757-0527 (Jane, spouse)

Logan River LLC
Michael Falk
376 E 400 S #120
Salt Lake City, UT 84111
801-414-6753 (Assistant)
208-230-7234 (Renter)
Kaylor.scriber@nmrk.com

ON PAGE 39, SUBSECTION 105.07, UTILITY FACILITIES

01/18

Add the following:

Direct Communications
Logan Tietjen
208-945-8036
logan@directcom.com

Retain and protect.

Rocky Mountain Power
James Burton
Operations Manager
208-239-5151
James.Burton@pacificorp.com

Or
Colleen Cooke-Erickson
208-239-5143
Colleen.Cooke-Erickson@pacificorp.com

Retain and protect. Overhead power facilities conflict with pile driving activities and require de-energizing during pile driving. Power shut down maximum duration is four hours per day. Coordinate power shut down with Rocky Mountain Power at least one month in advance of de-energizing.

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling: 1-800-342-1585; e-mailing digline@digline.com; or faxing 1-800-342-1586.

ON PAGE 336, SUBSECTION 520.01, DESCRIPTION

Delete the first paragraph and replace with the following:

Drill and backfill holes to the depth shown below.

ON PAGE 336, SUBSECTION 520.03, CONSTRUCTION REQUIREMENTS

Delete the third paragraph and replace with the following:

Drill holes into soil to approximate depth of 15 feet below pile cap bottom or as directed.

S501-16A RETAINING WALL - GABION BASKET

Description. Furnish and construct gabion basket retaining walls as shown in the plans or as directed.

1. Submittals. Provide the following submittals:
 - A. Manufacturer's product data before ordering gabion structure.
 - B. Installer Qualifications. Minimum of 5 years of past successful experience on 5 projects of gabion wall installation on similar or larger sized projects.

Materials. Provide materials in accordance with the following:

| | |
|--------------------------|-------------|
| Gabion Structure | Section 512 |
| Construction Geotextiles | Section 640 |

Use subgrade separation geotextile Type III in-lieu of the riprap/erosion control geotextile called for in Section 512.

Construction Requirements.

1. Preparation of Foundation
Follow the construction requirements of Section 512. Dewater as necessary.
2. Assembly, Erection, and Filling Gabion Baskets
Follow the construction requirements of Section 512.
3. Backfilling the Gabion Structure
Follow the construction requirements of Section 512. Place and compact backfill to Class A compaction.

Acceptance. Acceptance will be based on visual inspection and documentation demonstrating compliance with the above Construction Requirements.

Method of Measurement. The Engineer will measure acceptably completed work by the cubic foot of gabion baskets used.

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

| Pay Item | Pay Unit |
|--------------------------------|-----------------|
| Retaining Wall - Gabion Basket | CF |

The Department considers all labor, materials, and equipment necessary to fabricate and install the gabion basket retaining wall systems, including but not limited to, gabion baskets and accessories, rock fill material, subgrade separation geotextile Type III, dewatering, structural excavation and compacted backfill, and granular borrow used for backfilling as incidental and the cost included in the contract unit price.

S904-05B SP – ADJUST SEEPAGE PIPE

Description. Remove existing seepage/drainage pipe and adjust the discharge location to avoid conflict with proposed wall.

Materials. Match existing pipe materials for size and type and conform to Subsection 601-02.

Construction Requirements. In conjunction with the retaining wall excavation, excavate and remove the existing seepage/drainage pipe from the embankment area where the proposed Gabion Basket Retaining Wall is to be constructed. Cut the pipe square to the pipe axis leaving enough pipe protruding from the embankment to attach the required pipe joint.

Install a 45° pipe elbow to change the location of the seepage/drainage pipe outlet so as to avoid conflict with the proposed retaining wall while maintaining positive drainage. Extend the seepage/drainage pipe two feet beyond the point where the pipe daylights from the embankment. The pipe outlet should be free from obstructions and at an acute angle with the direction of flow in the adjacent channel.

Backfill 1.5 feet over the pipe with native soil that does not contain rocks larger than 2 inches. Continue backing with native soil to the proposed finished grade. Compact to Class D per Section 205.

Method of Measurement. The Engineer will measure acceptably completed work by the lump sum.

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

| Pay Item | Pay Unit |
|--------------------------|-----------------|
| SP – Adjust Seepage Pipe | LS |

S914-05A SP - AGGREGATE SURFACING

Description. For unsurfaced roads, place Aggregate Surfacing directly on aggregate base as a top course.

Material. Ensure aggregate for Aggregate Surfacing conforms to Section 703.04-2 and the following requirements.

| Sieve Size | Percent Passing |
|-------------------|------------------------|
| 1" | 100 |
| ¾" | 70 – 100 |
| 1/2" | 70– 80 |
| No. 4 | 25 – 50 |
| No. 40 | 13 – 30 |
| No. 200 | 8 – 16 |

Ensure the plasticity index is between 7 to 13.

Construction Requirements. Place Aggregate Surfacing to the thicknesses, lines, and grades specified.

Shape and compact the Aggregate Surfacing with at least 3 passes of a vibratory roller with a minimum centrifugal force of 15 tons and a minimum drum width of 60 inches.

Method of Measurement. The Engineer will measure acceptably completed work by the ton.

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

| Pay Item | Pay Unit |
|--------------------------|-----------------|
| SP - Aggregate Surfacing | TON |

**KEY NO. 22599; E 121ST S, IDAHO CANAL BR, BONNEVILLE CO
CONTRACTOR NOTES**

COMPLIANCE WITH 401 WATER QUALITY CERTIFICATION

Comply with the conditions detailed in the Section 401 Water Quality Certification (WQC) issued for this project on February 22, 2021, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ directly at 208-528-2650, Idaho Falls Regional Office.

CONCRETE CULVERT PIPE REUSE

The 36-inch concrete culvert pipe being removed from under the roadway on the east side of the Idaho Canal may be reused if not damaged in the removal process and each pipe section is inspected and approved for use by the Engineer.

EMPLOYMENT AGENCY

01/18

The designated employment agency is as follows:

Idaho Department of Labor Office
P. O. Box 158
1515 E Lincoln Rd
Idaho Falls, ID 83401-3653

ENVIRONMENTAL REQUIREMENT – MITIGATION MEASURES

The following points identify project specific mitigation measures required to be implemented by the Contractor:

- During construction, traffic will be detoured using S 1st E, E 129th S, and S 10th E. It is anticipated that E 121st S will be closed during construction from the middle of October to early March (non-irrigation season) to expedite the construction time frame. Bonneville County will communicate with residents about construction details. Flaggers, barricades, and appropriate signage will be used as necessary to direct traffic.
- During removal, occupational-approved lead safe practices will be adhered to, as well as proper disposal of lead-based paint steel per ITD Standard Specifications. Structural steel having lead-based paint will be removed and delivered to a scrap metal recycler approved by the LHTAC Engineer. Final disposition of structural steel with lead-based paint will be certified in writing to the LHTAC Engineer.
- All planned work will adhere to the MBTA and the BGEPA requirements in that the Contractor must avoid and minimize impacts and harassment to listed migratory birds during construction. It is therefore recommended that the project phase of vegetation removal occur during times when no nesting birds are present. This would likely be from September to mid-December.
- A USACE 404 Joint Application for Permits and IDEQ 401 Water Quality Certification are needed and will be made as part of the contract. All terms and conditions will be abided by and incorporated into the project.

ENCROACHMENT PERMIT

Obtain an encroachment permit from the Idaho Irrigation District. Per Subsection 107.02 and comply with all permits. Contact, Richard Lochyer - Ditch Manager at 208-390-1211. The Department considers all costs associated with obtaining the permit as incidental to Mobilization.

PROPERTY OWNER COORDINATION

Coordinate items of work affecting adjacent property owners, including landscape removal and replacement, driveway approach construction, sprinklers, irrigation facilities, fencing, sod care, and trees. Where the plans show a property use agreement boundary, give the property owner twenty-one (21) days' notice in writing before commencing work. Property owner coordination is considered incidental to the project and no separate payment will be made. Specific property owners are as follows:

Nickolas and Jacquelyn Trospen
345 E 121st S
Idaho Falls, ID 83404
208-520-3830
South Slope Holdings LLC
Lane Bowen
2331 W Entrada Tr Unit 70
Saint George, UT 84770
801-949-1964

Merrill and Bethea Hanny
535 E 121st S
Idaho Falls, ID 83404
208-589-9399
Judy Rae Hampton
583 E 121st S
Idaho Falls, ID 83404

Add the following:

Lumen (formerly CenturyLink)
Nathan Burke
Network Implementation Engineer II
208-525-4263 office
208-360-3688 cell
nathan.burke@lumen.com

Remove facilities from existing structure, provide temporary support during construction, and install facilities on new structure following bridge completion. Work by Lumen at company expense.

Intermountain Gas
Candy Elliott
208-351-3822
CANDY.ELLIOTT@intgas.com

Relocate facilities below existing structure during construction. Work by Intermountain Gas at company expense.

Rocky Mountain Power
Kyle Parkinson
503-813-6993
kyle.parkinson@pacificorp.com

Relocate power poles within project limits on south side of E 121st S before construction by Rocky Mountain Power at company expense. Overhead power facilities conflict with precast slab placement activities and require de-energizing during this process. Power shut down maximum duration is four hours per day. Coordinate power shut down with Rocky Mountain Power at least one month in advance of de-energizing.

Request locates of buried utility facilities by contacting the Utility One-Call Center by calling: 1-800-342-1585; e-mailing digline@digline.com; or faxing 1-800-342-1586.

Idaho Irrigation District
Richard Lochyer
Ditch Manager
496 E 14th St
Idaho Falls, ID 83404
208-390-1211

S901-05A SP - REM & RESET IRRIGATION BOX

Description. Remove the existing irrigation box and reset the irrigation box at new location.

Materials. Reuse the existing irrigation box structure, galvanized iron discharge riser pipe, and pump. Provide other new similar type materials including irrigation pipe, fittings, switch box, conductors, electrical weatherhead, etc. except as listed below:

3" Aggregate for Open Graded Base per Subsection 703.08.
Wood Fence Posts per Subsection 710.08.
Concrete Junction Boxes per Subsection 713.05.

Construction Requirements. If the pump has been removed by owner, then before removal document the discharge pipe configuration photographically relative to the irrigation box with dimensions.

Remove the existing irrigation box complete with slide gate, pump, electrical conduits, discharge pipe, and lid. Disconnect discharge pipe from the submersible pump if present and remove pump from irrigation box before relocation to avoid damage. Remove electrical switch box, weatherhead, and post.

Re-install existing irrigation box at the new location shown in the plans and at the same elevation. Place the irrigation box on top of 12 inches of aggregate for open graded base (rock cap). Re-route 6-inch PVC pressure line underground to avoid new bridge wing walls and connect discharge pipe to pump in the relocated irrigation box. If the pump is not available, then recreate the same configuration of the discharge pipe from photo documentation at the new location.

Install a wood fence post next to the relocated irrigation box. Mount the electrical switch box with weatherhead to the post. If the power supply cable can be repositioned to reach the switch box, then connect the power supply to the switch box and direct bury. Otherwise, set a junction box over the buried power supply cable end or cut and remove excess cable. Splice new cable, direct bury, and connect power to the switch box. Use waterproof splice connections. Connect new electrical wire of equivalent gage from the switch box to the pump.

Test operation of the pump in the Engineer's presence.

Method of Measurement. The Engineer will measure acceptably completed work by the each.

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

| Pay Item | Pay Unit |
|---------------------------------|-----------------|
| SP - Rem & Reset Irrigation Box | EACH |

The Department considers replacement costs for damaged materials caused by removing, transporting, storing, and reconstructing the irrigation box the Contractor's responsibility and expense.

S901-05B SP – 15" IRRIGATION GATE

Description. Provide and install irrigation gates of the size and at the locations identified in the plans.

Materials. Use Waterman C-10 Canal Gate or approved equal.

Construction Requirements. Mount the irrigation gate to the concrete headwall using mounting option F = Flatback for wall mounting. Install per manufacturer's recommendations over irrigation pipe inlets as shown in plans.

Test the irrigation gate operation in the presence of the Engineer.

Method of Measurement. The Engineer will measure acceptably completed work by each gate installed.

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

Pay Item**Pay Unit**

SP - Irrigation Gate

EACH

The Department considers all materials, labor, and equipment necessary to install the irrigation gates as incidental and the cost included in the contract unit price for this item.

THE FOLLOWING ARE MODIFICATIONS TO THE QASP SA 10/21/2019 TO CORRECT AN ERROR IN THE FORMULA**ON SHEET 6 OF 15 QASP SA (10/21/2019) – 106.03.B.1.e QUALITY LEVEL ANALYSIS/STATISTICAL ANALYSIS**

Delete and replace with:

$$A = \text{Maximum} \left[0, 0.5 - Q_U \times \frac{n^{0.5}}{2(n-1)} \right]$$
$$X = \text{Maximum} \left[0, 0.5 - Q_U \times \frac{n^{0.5}}{2(n-1)} \right]$$

ON SHEET 6 OF 15 QASP SA (10/21/2019) – 106.03.B.1.f QUALITY LEVEL ANALYSIS/STATISTICAL ANALYSIS

Delete and replace with:

$$A = \text{Maximum} \left[0, 0.5 - Q_L \times \frac{n^{0.5}}{2(n-1)} \right]$$
$$X = \text{Maximum} \left[0, 0.5 - Q_L \times \frac{n^{0.5}}{2(n-1)} \right]$$

**2021 SUPPLEMENTAL SPECIFICATIONS
FOR THE
2018 IDAHO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION**

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ON PAGE 11, U.S. CUSTOMARY MEASUREMENT SYMBOLS

Add the following U.S. Customary Measurement Symbols:

| | |
|------|-----------------------------|
| AU | Acre Unit |
| MFBM | Thousand Feet Board Measure |

ON PAGE 14-15, SUBSECTION 103.03.1 – ORGANIZATIONS

Add:

| | |
|-------|------------------------------------------------------|
| ATF | Bureau of Alcohol, Tobacco, Firearms, and Explosives |
| NIOSH | National Institute of Occupational Safety and Health |
| NMFS | National Marine Fisheries Service |
| USACE | United States Army Corps of Engineers |
| USFWS | U.S. Fish and Wildlife Service |

ON PAGES 15-17, SUBSECTION 101.03.2 – ACRONYMS

In proper alphabetical position, add the following:

| | |
|--------|----------------------------------------------------------|
| AAO | Asphalt Analyzer Offset |
| AFAD | Automated Flagger Assistance Device |
| BA | Biological Assessment |
| BGEA | Bald and Golden Eagle Act |
| BO | Biological Opinion |
| COD | Contractor-Obligated Defects |
| MARV | Minimum Average Roll Values |
| MBTA | Migratory Bird Treaty Act |
| NCOD | Noncontractor-Obligated Defects |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| PTFE | Polytetrafluoroethylene |
| RCRA | Resource Conservation and Recovery Act |
| SHA | State Highway Archaeologist |
| SHPO | State Historic Preservation Office |
| TCS | Traffic Control Supervisor |
| THPO | Tribal Historic Preservation Office |
| TMA | Truck Mounted Attenuator |

ON PAGES 18-20, SUBSECTION 101.04 – DEFINITIONS

In proper alphabetical position, add the following:

Biodegradable. The material will decompose under ambient soil conditions into carbon dioxide, water, and other naturally occurring materials within a time period relevant to the product's expected service life.

Blaster In Charge. The person designated by the blast contractor, who is licensed in the state of Idaho, and responsible for inspecting the blast setup, clearing the blast area before detonation, and clearing the area after the blast for reentry.

Complete. A pay item is considered complete when all work associated with the pay item is acceptable, including all associated ITD forms or other documentation, material certifications or acceptance testing, and record drawings accepted by the Department. Unless otherwise specified, completed item measurements will be of the final, in place dimensions of the completed item.

Department Headquarters. The Department headquarters are located at 3311 W State Street, Boise, ID 83703.

Disadvantaged Business Enterprise (DBE) Authorized Representative. The person delegated by the owner of the DBE firm to represent the firm in the absence of the owner.

ON PAGE 23, SUBSECTION 101.04 – DEFINITIONS

In the Roadway Prism definition: delete both instances of:

1.5H:1.0V

And replace with:

2.0H:1.0V

ON PAGE 24, SUBSECTION 101.04 – DEFINITIONS

In proper alphabetical position, add the following:

Street Monument. A survey monument set within the limits of the paved roadway, (1) on or in reference to a roadway centerline alignment so as to control the geometry of a roadway, or (2) at a PLSS section corner or at a PLSS quarter corner or, in urban areas, at a PLSS sixteenth corner.

ON PAGE 26, SUBSECTION 102.03 – EXAMINATION OF PLANS, SPECIFICATIONS, AND PROJECT SITE

Replace the first sentence of the 3rd paragraph with the following:

Immediately notify the Department in writing of any errors or omissions on the plans and proposal forms or inconsistencies between these documents and the project site. Do not take advantage of errors or omissions in the contract documents.

ON PAGE 27, SUBSECTION 102.04 – PREPARATION OF A PROPOSAL

In the second paragraph, replace "Expedite" with "Project Bids".

Add the following to the last paragraph, as specified in [67-2310, Idaho Code](#).

ON PAGE 29, SUBSECTION 102.10 – IRREGULAR PROPOSALS

Delete the subsection 102.10 and replace with:

102.10 Proposal Acceptance and Irregular Proposals.

Proposals will not be accepted or reviewed for the following reasons:

1. Not submitting the bid by the designated bid opening date and time.
2. Submitting multiple bid proposals for the same project, under the same or different name.

The Department will consider a proposal to be irregular and may reject it for the following reasons:

1. Submitting the proposal in pencil.
2. Not signing the proposal.
3. Submitting the proposal on proposal forms not provided by the Department.
4. Altering or detaching part of the proposal forms as provided by the Department.
5. Submitting the proposal with unauthorized additions, conditional or alternate bid, addenda omissions, or irregularities that might make the proposal incomplete, indefinite, or ambiguous.
6. Adding provisions to the proposal reserving the right to accept or reject an award or to enter into a contract, except as specified in 102.05.
7. Submitting the proposal without a proposal guaranty (bid bond).
8. Submitting the proposal without a unit price for each contract pay item on the bid schedule, except for alternate contract pay items as specified 102.04.
9. Not listing a specialty subcontractor (i.e., electrical, HVAC, plumbing) when required by the Department in the special provisions and in accordance with [67-2310, Idaho Code](#); or, not listing the estimated value of the specialty work, if the subcontractor possesses a public works license that limits them to less than the contract value.
10. Not acknowledging the number of addenda issued by the Department, if applicable.
11. Not submitting a completed ITD-2396 DBE Commitments form and supporting documentation within the time allowed on federally-funded projects.
12. Not meeting or exceeding the DBE participation goal, when applicable, or not providing a complete Good Faith Effort submittal substantiating that sufficient effort was made to meet the goal even though the goal was not met.
13. Not completing the state-funded contract acknowledgement form in the bid submittal for state funded projects.
14. The bidder is not listed on the QuestCDN plan holders list.
15. The bidder, or the subcontractors required to be listed at the time of bid, not possessing the appropriate license as specified in 107.03 at the time of bid for non-federally funded projects.
16. If the Department finds evidence of collusion among bidders.

Any information listed above that is considered proprietary will not be shared before contract award.

ON PAGE 29, SUBSECTION 102.12 – PROTESTING A PROPOSAL

Delete 102.12 and replace with:

To protest a determination made by the Department regarding the regularity or irregularity of a bid, submit a written protest to the Chief Engineer within 5 calendar days ([40-902, Idaho Code](#)) of the official results being posted to the Department's website (<https://apps.itd.idaho.gov/Apps/contractors/br.htm>). The protest must set forth in specific terms the reasons why the Department's determination is thought to be erroneous.

Protest by Apparent Low. If the protest is made by the apparent low bidder, the protest will be addressed by the Chief Engineer.

Third-Party Protest. If the protest is made by other than the apparent low bidder, the Chief Engineer will assign a hearing officer for a contested case hearing followed by a final decision by the Chief Engineer.

ON PAGE 29, SUBSECTION 102.14 – TIED BIDS

Delete the entire paragraph and replace with:

If there are tied bids, the apparent low bidder may be determined by random chance (e.g., drawing lots, tossing a coin) in the presence of a witness in accordance with [IDAPA 38.05.01.082](#). The Department will record video of the tie breaking event in case there is any question as to the fairness of the procedure.

ON PAGE 30, SUBSECTION 103.02 – AWARD OF CONTRACT

Add the following after the second paragraph:

In cases where approval from the Local Sponsor, the Board, and/or the FHWA must be required before award, the Department may delay the award for up to 60 calendar days without considering increases in costs because of the delay in award. In cases where the award is delayed longer than 60 calendar days, the Department will consider increases in costs because of the delay in award.

ON PAGE 31, 103.06 – FAILURE TO EXECUTE CONTRACT

Add the following after Item 2.

3. Failure to obtain the appropriate license as specified in 107.03.1.

ON PAGE 32, SUBSECTION 104.01 – INTENT OF CONTRACT

Add the following:

Voluntary Partnering:

The Department encourages the foundation of a cohesive partnership between the Department and the Contractor with its subcontractors. Structure the partnership to draw on the strengths of each organization to identify and achieve reciprocal goals. Ensure objectives are effective and efficient with contract performance and completion within budget, on schedule, and in accordance with the contract.

Ensure partnership is bilateral in makeup, and participation is voluntary. Any cost associated with effectuating this partnering will be agreed to by both parties and shared equally.

The Contractor's on-site project manager and the Engineer will meet to implement this partner initiative within 30 calendar days of notice to proceed and before the preconstruction conference, to plan a partnering development seminar/team building workshop. This planning session should determine attendees, agenda, duration, and location. Suggested attendees include the Department representatives (e.g., the Engineer, key project personnel) and the Contractor's project management (e.g., on-site project manager, key supervision personnel, subcontractors). The project design engineers and key local government personnel should be invited to attend as necessary.

Hold periodic follow-up workshops throughout the duration of the contract as agreed by the team members.

A partnership charter does not change the legal relationship between the parties to the contract nor relieve either party from the terms of the contract.

ON PAGE 38, SUBSECTION 105.04 – COORDINATION OF CONTRACT DOCUMENTS

Delete subsection 105.04, in its entirety, and replace with:

The specifications, plans, special provisions, and supplementary documents are all essential parts of the contract. In case of discrepancy between contract documents, the discrepancy is resolved by following this order of precedence (i.e., 1 presiding over 2, 3, 4, 5, 6, and 7; 2 presiding over 3, 4, 5, 6, and 7; etc.):

1. Bid schedule.
2. DBE Documentation.
3. Addenda.
4. Special provisions.
5. Quality assurance special provision.
6. Plan details.
7. Plan sheets.
8. Standard Supplementals.
9. Standard Specifications.
10. Standard drawings.
11. Quality Assurance manual.
12. Electronic files.

Calculated dimensions govern over scaled dimensions.

Immediately notify the Engineer of an apparent error or omission encountered in the contract documents. Do not take advantage of errors or omissions in the contract documents. The Engineer will determine if an error or omission exists, interpret and correct the error or omission to fulfill the intent of

the contract documents, and determine if a contract revision is required as a result of the error or omission as specified in 104.02.

If any discrepancies are found between the plans and the electronic files, the information in the plans prevails over the electronic files.

ON PAGE 42, SUBSECTION 105.14.D – MAINTENANCE DURING CONSTRUCTION

Delete 105.14.D and replace with:

D. Maintenance of Traffic.

Maintain the road for use by traffic and minimize traffic delays during roadway construction, unless otherwise directed.

Before starting the work, provide a temporary traffic control plan for approval. Include the following information:

1. Construction phasing and work areas.
2. Phasing and sequencing for implementing the temporary traffic control plan and transitioning between phases.
3. Proposed detours.
4. Emergency vehicle and school bus route accommodations.
5. Pedestrian and bicycle accommodations.
6. Plan for preserving access to cross streets and approaches.
7. Temporary traffic control devices.

Submit changes to the approved temporary traffic control plan for approval. Allow at least 2 business days for review and approval.

Provide and maintain access to cross streets and approaches at no additional cost to the Department.

ON PAGE 60, SUBSECTION 106.04 – CERTIFICATION OF MATERIALS

Delete the last paragraph and replace with:

For the Engineer to accept material based on manufacturer certification, provide the certificate and backup documents (e.g., mill reports, invoice of materials if requested) with each shipment, and identify the certified material type and quantity in the shipment.

ON PAGE 61, SUBSECTION 106.06 – STORAGE AND HANDLING OF MATERIAL

Add the following after the first sentence:

When applicable store and handle all materials in accordance with the manufacturer's recommendations. Improperly stored or handled materials are subject to rejection.

ON PAGE 66, SUBSECTION 107.08 – PRESERVATION, PROTECTION, AND RESTORATION OF PROPERTY AND LANDSCAPE

Add the following at the end of the subsection:

For each and every survey monument disturbed or destroyed by the Contractor, or as a result of project work, that either lies outside the work zone or that was marked by the PLS to be retained and protected, the Contractor will forfeit the sum of \$1,000.00.

ON PAGE 67, SUBSECTION 107.10 – RESPONSIBILITY FOR INJURY DAMAGE

In the fourth full paragraph, delete the entire paragraph starting with “Submit a certificate...” and replace it with the following:

Submit a certificate or other proof of insurance to itdplanroom@itd.idaho.gov and do not start work before obtaining approval of the insurance coverage by the Department’s Contracting Services branch.

ON PAGE 68, SUBSECTION 107.10 – RESPONSIBILITY OF INJURY DAMAGE

Delete: “The above limits may be met by policies having limits such as \$1,000,000 per occurrence, \$2,000,000 aggregate plus an umbrella policy of \$2,000,000.”

Replace with: “The above limits may be met by policies having limits such as \$1,000,000 per occurrence, \$2,000,000 aggregate plus an excess liability or umbrella policy of \$2,000,000. If an umbrella policy is used, it must follow the underlying coverage form.”

ON PAGE 69, SUBSECTION 107.11.C – RELIEF OF RESPONSIBILITY FOR DAMAGE BY PUBLIC TRAFFIC

Delete #4.

ON PAGES 71, SUBSECTION 107.17 – ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION

Delete in its entirety and replace with:

107.17 Environmental and Cultural Resource Protection.

A. Noncompliance.

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 Department 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 Department to resolve enforcement actions, including payments made or costs incurred in settlement for alleged violations of applicable laws, regulations, or requirements.

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

The Department will withhold money due to the Contractor, in an amount estimated by the Department, 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 Department 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, the Contractor may provide a suitable bond in favor of the Department 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.

The Department will give the Contractor 30 calendar days' notice of the Department's intention to withhold funds from payments which may become due to the Contractor before acceptance of the contract. Funds withheld after acceptance of the contract will be made without prior notice to the Contractor.

No withholds of additional amounts out of payments will be made if the amount to be withheld does not exceed the amount being withheld from partial payments as specified in 109.05.

If the Department has withheld funds and it is subsequently determined that it is not subject to the entire amount of the costs and liabilities assessed or proposed in connection with the matter for which the withhold was made, the Department will return the excess amount withheld to the Contractor in the progress payment following the determination. If the matter is resolved for less than the amount withheld, the Department will pay interest at a rate of 6 percent per year on the excess withhold.

If the work results in non-compliance of a permit or regulatory requirement, the work may be suspended and the permitting agency notified, if required.

The Contractor will not receive additional compensation, or time extensions, for any disruption of work or loss of time caused by any actions brought against the Contractor for failure to comply with good engineering, hydrologic, and pollution control practices.

B. 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. Commercial materials sources available and open to the public at the time of the project's bid opening are not considered a project-related action, and do not require Department environmental approvals. If the support area is on public lands, additional coordination will be needed with the land management agency. Allow a minimum of 30 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 Department. Any delay created by the clearance and resource agency concurrence will not relieve the Contractor from any contract obligations.

C. Permits.

If a permit(s) has been obtained by the Department, the permit(s) and the permit application(s) is referenced in the contract bid package. Perform work in conformance with the description of work, work area, methods, sequencing, work windows, conditions, and mitigations contained within the permit application and permit.

D. Contract Revisions – Contractor Requested.

In compliance with 104.02 and 104.03, if the Contractor requests to add, delete, or modify work activities, work areas, methods, sequencing, or work windows may require a new or modified permit or approval (e.g., Section 404 Clean Water Act, Endangered Species Act, National Historic Preservation Act Section 106, NEPA). Exception: A project without federal funds, a federal permit, or federal approval does not require approval under National Historic Preservation Act Section 106. Projects on federal lands require coordination with the appropriate federal lands management agency (e.g., BLM, Forest Service).

1. The Contractor to submit a detailed description of new or modified work, and the required environmental documentation prepared by a qualified professional hired by the Contractor.
2. The Department will transmit documents to the approving jurisdictions.
3. Cost and contract time delays are the Contractor's responsibility.
4. Obtain the Engineer's written approval before beginning any work not included in the original contract.

E. Endangered Species Act (ESA).

If the work affects listed species or designated critical habitat (i.e., under the Endangered Species Act), a biological assessment (BA) or programmatic biological assessment (PBA) is referenced in the contract bid package. Projects with an adverse effect will also include a biological opinion (BO) prepared by the USFWS or NMFS.

Unless otherwise approved by the Engineer, perform work in conformance with the description of work, work area, methods, sequencing, work windows, conditions and mitigations contained within the BA or PBA and BO. Notify the Department of any issues identified as specified in 102.03. Refer conflict or ambiguity with the contract documents to the Engineer.

F. Birds.

1. Migratory Bird Treaty Act (MBTA).

The Migratory Bird Treaty Act protects migratory and non-game birds, their occupied nests, and their eggs.

Work that may impact migratory birds includes removal of vegetation or bridge structures and rock (cliff) excavation or blasting. See the contractor's note for the approximate nesting and breeding window for species that may be anticipated.

Notify the Engineer of a discovery of nesting birds. An active nest is defined as one with eggs or a bird living in it. If active migratory bird nests are discovered on a project site, immediately stop work within 50 feet of the nest(s) or bird(s) and notify the Engineer.

If a nest has been abandoned or there are no eggs present, it can be removed and destroyed as needed. An active nest must be protected from harm. If an active nest becomes established (i.e., there are eggs or young in the nest), cease any work with potential to disturb the nesting bird until the young have fledged and the nest is unoccupied.

Work with the Engineer as needed to develop a plan to avoid impacts to birds, nestlings, or eggs. When directed, use exclusion devices, nesting prevention measures or remove and dispose of partially constructed and unoccupied nests of migratory or non-game birds on a regular basis to prevent their occupation. Nest removal activities must not result in depositing into or allowing materials to enter waters of Idaho. Unless otherwise provided, directed work will be paid as extra work as specified in 104. Adjustments may be made for delays the Engineer determines are not due to the Contractor's failure to perform the provision of the contract.

2. Bald and Golden Eagle Act (BGEA).

If an active or inactive eagle nest is visible from the project site, immediately stop work and notify the Engineer of the discovery. Work with the Engineer as needed to develop a plan to avoid impacts to eagles. Unless otherwise provided, directed work will be paid as extra work as specified in 104. Adjustments may be made for delays the Engineer determines are not due to the Contractor's failure to perform the provision of the contract.

G. Bats.

Bats are a protected non-game species in Idaho ([IDAPA 13.01.06](#)). Work that may impact bats includes removal of vegetation or bridge structures and rock (cliff) excavation or blasting.

Notify the Engineer of a discovery of bats. If active bat roosts are discovered on a project site, immediately stop work within 50 feet of the roost(s) or bat(s) and notify the Engineer.

Work with the Engineer as needed to develop a plan to avoid impacts to bats. Unless otherwise provided, directed work will be paid as extra work as specified in 104. Adjustments may be made for delays the Engineer determines are not due to the Contractor's failure to perform the provision of the contract.

H. Hazardous Material.

Conditions (e.g., the presence of barrels, buried or above ground storage tanks, contamination indications, odors, excessively hot earth, stained and discolored soils, smoke, unidentifiable powders, sludges, pellets, debris) can be possible hazardous material indicators.

If an abnormal condition is encountered or exposed that indicates the presence of a hazardous material, immediately suspend work in the area, treat the conditions with extreme caution, and notify the Engineer. Do not attempt to excavate, open, or remove without approval. Notify the Engineer immediately after the discovery of either:

1. A petroleum-based spill that meets the reportable release definition as defined in [IDAPA 58.01.02.851](#). This includes spills greater than 25 gallons or any spill that results in a sheen on a waterbody surface.
2. A hazardous waste spill that meets the disclosure definition as defined in [IDAPA 58.01.05](#) and [58.01.02.850](#).

Notify StateComm at 1-800-632-8000.

In the event of a petroleum or hazardous waste spill, implement measures, if safe to do so, to minimize contaminant spread using spill kits or other appropriate methods. Capture and dispose of the spilled materials under the Engineer's direction in accordance with DEQ and EPA requirements. Document the spill and response action, and submit a copy to the Engineer.

If load-bearing structures (e.g., bridges, culverts) will be modified or altered NESHAP compliance is required as required in 203.03.

Work occurring on existing structures that have been previously painted may contain RCRA metals (e.g., lead) and a test may be needed to verify the absence or presence. If presence of RCRA metals has not been previously determined and disclosed in the contract, the Contractor is responsible for testing previously painted structure components.

Work related to the encounter of unidentified hazardous materials will be considered differing site conditions or extra work and managed as specified in 104.

I. Inadvertent Discovery of Cultural Resources Including Human Remains.

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 Department's State Highway Archaeologist (SHA).

The Contractor will notify the Engineer that potential resources have been identified during the work. The Engineer will then immediately notify the SHA 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 SHA.

- c. The SHA 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 Department staff who will stay with the human remains until the SHA is notified. The Contractor or the Department staff will secure the area and immediately notify the Engineer, who will then contact the Department's SHA, and if necessary, the SHA will contact the appropriate law enforcement personnel.
- b. The SHA 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 SHA, and/or law enforcement.

3. Confidentiality.

In either case (i.e., discovery of cultural resources or human remains), the Contractor or the Department 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 SHA, and locations made available to the Contractor and the Engineer. Additional cultural resources investigations may be required.

Payment and contract time extension due to the inadvertent discovery and required cultural resource clearance not previously identified in the contract is specified in 104.02 and 108.07.

J. Stormwater Pollution Prevention.

Each project will require one of the following:

1. A stormwater pollution prevention plan (SWPPP) ITD-2950 form as required by a construction general permit (CGP). A SWPPP is required when ground disturbance equals or exceeds 1 or more acres and discharges to waters of the U.S.
2. A pollution prevention plan (PPP) ITD-2788 form when required by the Department.

Both plans are documents that address best management practices (BMPs) (e.g., erosion and sediment control, good housekeeping practices, inspection procedures, spill prevention, response, clean-up). Meet applicable requirements of 212.

The plan sheets (project clearance summary) identifies if a PPP or a CGP is anticipated based on estimates of ground disturbance and/or discharges to waters of the U.S.

| PPP | CGP SWPPP |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If the addition of construction support activities causes the project ground disturbance area to meet the requirements for a CGP, follow CGP requirements. | — |
| The Contractor will prepare the entire PPP using the ITD-2788 form as a template provided by the Engineer. | Revise the draft SWPPP developed by the Department, consisting of plans sheets and a template narrative (using the ITD-2950 form), included with the bid package. |
| Conduct inspections by a person who is knowledgeable in erosion and sediment control and pollution prevention practices. This includes professional accreditation (e.g., the Department's Water Pollution Control Manager (WPCM) training, Certified Professional in Erosion Control (CPESC), Certified Erosion, Sediment, and Stormwater Inspector (CESSWI)), or other applicable site management or project management experience, which can be documented and provided to the Engineer. | Conduct inspections by a certified WPCM. Training requirements are posted on the Department's Environmental website under Stormwater Inspector Requirements. |
| Document the inspections using the ITD-2786 form available online. Conduct inspections every 7 calendar days unless otherwise approved by the Engineer. | Document the inspections using the ITD-2802 form available online. |

Submit the plan and plan revisions for approval before the preconstruction conference. The Engineer may also require submittal of an electronic, editable version of the plan. Allow 15 calendar days for review, unless otherwise specified. Revise to address comments and resubmit. Adjustments in cost or time are not allowed for SWPPP approval. Once approved, all operators will sign the plan. The plan must be approved before ground disturbance.

Construction activities, construction support activities, or pollutant-generating activities are not allowed beyond the project site.

K. CGP Requirements.

For projects that require coverage under the national pollutant discharge elimination system (NPDES) General Permit for Discharges from Construction Activities (CGP), comply with the permit and the following Department requirements:

1. Designate a qualified WPCM to manage project site pollution prevention and CGP requirements. Ensure the WPCM meets the training qualification requirements posted on the Department's [website](#). Submit the WPCM's contact information and training qualifications before the preconstruction meeting. Once approved, insert the qualification information into the SWPPP.
2. Revise the draft SWPPP template provided by the Department to include the Contractor designated construction support activities, work areas, work methods, and phasing. Submit the revised SWPPP for review and approval before the preconstruction meeting.
3. Coordinate electronic NOI filing with the Engineer. Verify SWPPP certification requirements are met.
4. Do not begin construction activities until the EPA has acknowledged receipt of all required NOIs on the EPA's website and the 14 calendar day waiting period is over.
5. Post the NPDES ID (permit tracking number associated with the project NOI) in addition to the other requirements of the CGP.
6. Inspect the project site and associated support areas in accordance with the CGP requirements. Use the current version of the ITD-2802 form. Sign the inspection report and insert it into the SWPPP within 24 hours of completion of any inspection. Submit a copy to the Engineer upon request. Joint inspections with the Department's inspector may be allowed at the Engineer's discretion.
7. Field Controls. Ensure installation, operation, and maintenance of effective erosion and sediment control measures and pollution prevention measures in accordance with the CGP requirements. Ensure completion and documentation of corrective actions.
8. Recordkeeping. In accordance with the CGP, amend the SWPPP to conform to the Contractor's current sequencing and operation throughout the work. Submit proposed modifications for approval. Obtain necessary signatures and certifications from operators for required SWPPP modifications and corrective actions. Maintain SWPPP records. Retain completed copies of required documentation and recordkeeping in the SWPPP and at the project site or at an Engineer-approved offsite location.

L. Notice of Termination (NOT).

When conditions for terminating the CGP coverage have been met, request the Engineer's written approval to file a NOT using the ITD-2961 form. Do not submit a NOT without the Engineer's written approval. Provide the most current version of the SWPPP, at the time of work completion, to the Engineer.

M. Turbidity Monitoring.

Turbidity monitoring may be required for projects with USACE, USFWS or NMFS permits and may include a project-specific Water Quality Certification from Department of Environmental Quality.

Specific monitoring requirements are included within each agencies' permit conditions and are included in the contract.

N. Turbidity Monitoring for Contracts with CGP Coverage (if plume is visible).

1. Turbidity Monitoring. Turbidity monitoring is required for projects with CGP coverage that directly discharge pollutants from an unstabilized portion of the project site causing a visible plume into the waters of the U.S.
 - a. If a visible plume is observed, collect and record turbidity readings from within the plume and compare the results to background measurements (upstream of plume, 50 NTU over background) unless otherwise directed in project specific requirements.
 - b. If turbidity is less than 50 NTU (instantaneously) over the background turbidity, continue monitoring as long as the plume is visible. If over 50 NTU, then immediately cease earth-disturbing work.
 - c. Take immediate action to address the cause of the exceedance in accordance with the CGP.
 - d. Increase actions to address the cause of the exceedance and monitor frequency until state water standards are met.
 - e. Work may continue once turbidity readings return to within 50 NTUs (instantaneously) of background levels and 25 NTU for more than 10 consecutive calendar days over the background turbidity.
 - f. Provide a verbal report to the Engineer within 24 hours of any exceedance of the Idaho State Water Quality Standards, followed by a written report within 5 calendar days using the [ITD-2790](#) form.
2. Turbidity Logbook and Diary.
 - a. Maintain a legible, organized logbook and construction diary at the project site and make it available for inspection with the SWPPP.
 - b. Logbook entries must include the following information:
 - (1) Date.
 - (2) Time.
 - (3) Sample location.
 - (4) Turbidity result (NTUs).
 - (5) Cloud cover (i.e., cloudy, partly cloudy, or clear), wind direction and speed, precipitation (inches) in last 24 hours, and ambient air temperature (°F) at the time of sample collection.
 - (6) Visual observations of any discharge in accordance with the CGP.
 - (7) If applicable, corrective actions taken and their observed effectiveness.
 - (8) Printed name and signature of the sample collector.
 - c. Include photographic documentation of any visible variation in water quality.

- d. Include a map or sketch, including GPS coordinates, of each sample location.
- e. Submit routine monitoring data to the Engineer or to regulatory agencies upon request.
- f. Include documentation in the SWPPP that any personnel collecting samples and testing water quality are qualified to perform this task.

O. Basis of Payment.

PPP or SWPPP development, revisions, modifications, and inspections are incidental and included in the contract pay items, unless otherwise specified.

ON PAGES 77-80, SECTION 107.19 – SURVEY MONUMENT PRESERVATION

Delete the section in its entirety and replace with the following:

107.19 Survey Monument Preservation.

Retain an Idaho licensed professional land surveyor (PLS) to:

- 1. Locate, verify, and tie the position of the known survey monuments documented on the plans, if any, for each assigned project.
- 2. Perform historical research and field search for other survey monuments within the project site that are not documented on the plans. For any additional monuments found, locate, tie, reference, and report them to the Engineer and the Contractor.
- 3. Provide written confirmation to the Engineer and the Contractor that the work under 107.19.1 and 107.19.2 have been completed before allowing the Contractor to occupy the project site.
- 4. Furnish the necessary materials, equipment, and labor to:
 - a. Adjust existing monuments.
 - b. Replace substandard monuments.
 - c. Install new vaults or adjust existing vaults around the monuments within the paved surfaces to the grade established or as directed.
 - d. Reestablish monuments disturbed by the work.
- 5. Record positions of all survey monuments found within the work area (e.g., the median, roadway, shoulders, roadway slopes) and, for contracts with work planned at the right of way, along the right of way fences. Copies of plans showing original right of way monument positions can be obtained from the Department.
- 6. Material acceptance will be by visual inspection. Materials required for the installations and adjustment of vaults will be as specified in 618.02 and as in:

| | |
|------------------------------------------------|-----|
| Portland Cement | 701 |
| Aggregates..... | 703 |
| Metals | 708 |
| Concrete Curing Compounds and Admixtures | 709 |

7. Preliminary Procedure.

Before commencing work that will or may disturb survey monuments, the Contractor will retain an Idaho licensed PLS to locate, reference, and tie all survey monuments within the project site including, but not limited to, the following:

- a. Public and private land corners and all accessories to those corners.
- b. Control points or benchmarks set by agencies of the United States government, the state of Idaho, counties, cities, or private surveyors.
- c. Right of way monuments that may be disturbed by the work.

A list of known survey monuments will be provided in the contract.

8. Preserve Existing Survey Monuments.

- a. The Contractor will retain and protect the survey monuments within the project site that are not shown on the plans to be disturbed by the work.
- b. The Contractor will not remove, destroy, bury, or alter any survey monuments, unless authorized by the PLS and the Engineer.

9. Survey Monuments Disturbed by the Work.

- a. For each survey monument shown in the plans, follow recommended actions. Survey monuments disturbed during construction will be re-established in kind or with a monument of superior quality as determined by the PLS before project completion. Any survey monument set, adjusted, or replaced will be in accordance with [54-1227, Idaho Code](#) and will be surmounted with a cap of such material and size that it can be permanently and legibly marked with the date and PLS license number in responsible charge of placing, adjusting, or replacing the monument.
- b. Public and private land corner monuments disturbed during construction will be reestablished and re-monumented in accordance with [55-16, Idaho Code](#). Any survey monument set or adjusted will be in accordance with [54-1227, Idaho Code](#) and for Public Land Survey System (PLSS) corner monuments will be surmounted with a cap of such material and size that it can be permanently and legibly marked in accordance with the current Manual of Surveying Instructions published by the United States Department of the Interior, Bureau of Land Management. Mark the cap in accordance with the Manual of Surveying instructions.
- c. Federal, state of Idaho, and local survey monuments disturbed by the work will be reestablished in the original position as determined before construction and in accordance with the standards, rules, and procedures of the original monumenting agency. In the case of NGS survey monuments, the Idaho's NGS Geodetic Coordinator on staff at Idaho State University (ISU), if available, or the NGS Northwest Regional Geodetic Advisor in Seattle, Washington will be consulted before the removal and reestablishment of any NGS or United States Coast and Geodetic Survey monument.
- d. Survey monuments lying within the paved portions that will or may be disturbed during the work will be treated as follows:

- (1) Installations for street monuments within the paved portions of the roadway and more than 1 foot inside the edge of the asphalt shoulder (edge of oil) that will or may be disturbed will conform to the specifications for a street monument as specified in 618.
 - (2) If an existing survey monument meets the minimum requirements of [54-1227, Idaho Code](#), it can be retained or adjusted vertically in place as determined by the PLS.
 - (3) If an existing survey monument does not meet the minimum requirements of [54-1227, Idaho Code](#), a new survey monument which meets or exceeds the minimum requirements of [54-1227, Idaho Code](#) or the standards of the original monumenting agency, whichever is a superior monument, will be installed by or under the direct supervision of the PLS.
 - (4) If an existing survey monument must be removed for the work, a new survey monument which meets or exceeds the minimum requirements of [54-1227, Idaho Code](#) or the standards of the original monumenting agency, whichever is a superior monument, will be installed by or under the direct supervision of the PLS.
 - (5) Each state highway system right of way monuments disturbed will conform to the specifications for a right of way marker as specified in 618.
- e. Any survey monument discovered during the work and not identified in the plans will be located, referenced, tied, and reported under the responsible charge of the PLS. If an unidentified monument is to be disturbed during construction, it will be re-established and re-monumented.
 - f. Any survey monument disturbed and not identified on the plans or referenced by the PLS before it being disturbed will be reestablished and re-monumented under the responsible charge of the PLS from the best available evidence and information of record in accordance with accepted survey methods and procedures of the Idaho Code and/or the original monumenting agency. Re-monumentation will be in accordance with this section.
 - g. Any survey monument not intended to be replaced by the work but that was willfully or carelessly disturbed or destroyed by the Contractor, or as a result of the contracted work, will be re-established and re-monumented as specified in this section.
 - h. The PLS will mark his/her license number, the year, the word "RESET," and the original project stationing and offset on all centerline or right of way monuments reset, replaced, adjusted, restored, re-established, re-monumented, or reconstructed. All newly installed centerline, right of way, and street monuments on the state highway system will be in accordance with the Department's specifications.

10. Documentation.

Following the completion of the work, the PLS will verify the monument positions, stamp the survey monuments, and verify the vaults (casings) have been installed, if required.

- a. If public land corner monuments were adjusted or replaced, or if any accessories to the public land corner monuments have been established, the PLS will file the appropriate

documentation in the county or counties where the project site is located in accordance with [55-16, Idaho Code](#).

- b. If private land corner monuments, centerline monuments, or right of way monuments were adjusted or replaced, a record of survey will be filed in accordance with [55-19, Idaho Code](#). Before filing the record of survey, submit drawing to the Engineer for review, complete the corrections noted and resubmit as indicated, and file the record of survey when approved.
- c. The PLS will submit a copy of the documents recorded at the county offices.
- d. If NGS survey monuments were disturbed and/or reset, the PLS will submit copies of the monument reset information as provided to and approved by the NGS.
- e. The PLS will submit a written report, which documents the actions taken by him/her or the Contractor to preserve or restore each survey monument within the project site.
 - (1) Before construction, include the Geodetic or State Plane coordinate positions (including coordinate system, datum, and project combination factor used) of each survey monument within the project site.
 - (2) After the work has been completed, include the Geodetic or State Plane coordinate positions of each survey monument.
 - (3) Include the actions taken by the Contractor and the PLS to preserve, adjust, or replace each and every survey monument.
 - (4) The PLS will seal and sign this document.

11. MCPD Submittal.

The PLS will obtain and complete the MCPD master template form, in its entirety, with global positions (e.g., WGS-84 latitude, longitude, and orthometric height) and with State Plane Coordinates of all survey monuments located, referenced, and tied during and checked after the work. The PLS will submit the completed MCPD template directly to the MCPD Data Steward at ISU (mcpd@isu.edu) and submit a copy to the Engineer. The MCPD template is available at

http://giscenter.isu.edu/research/Techpg/GC/zip/MCPD_MASTER_TEMPLATE.zip. In the submittal of the MCPD to ISU, include a letter of transmittal signed and sealed by the PLS.

Survey monument preservation work to locate, reference, reestablish, replace, install, adjust, or reconstruct survey monuments and vaults, and to obtain and complete the MCPD template for submittal will be paid by force account as specified in 109.03.C.5.

ON PAGES 83 AND 84, SUBSECTION 108.03.A – PROJECT SCHEDULE

Add the following to number 6 under part A:

Unless otherwise allowed by the Engineer.

Delete the second sentence in number 7 under part A and replace with:

Leads and lags may be used when applicable.

Delete: "Ensure each CPM schedule submittal includes 1 electronic CPM schedule copy and 2 paper copies including:" and replace with "Submit each CPM schedule in a format acceptable to the Engineer and in a format compatible with the most current version of Microsoft Project, including:"

ON PAGE 89, SUBSECTION 108.08 – FAILURE TO COMPLETE ON TIME

Replace the first sentence with the following:

If the contract time expires, liquidated damages will be assessed as shown in Table 108.08-1 for each day the work remains substantially incomplete after the contract time or its most recent extension has expired. The daily rate will be assessed per working day for working day contracts and per calendar day for calendar day and completion date contracts for each working day the work remains substantially incomplete after the contract time or its most recent extension has expired.

Table 108.08-1 – Schedule of Liquidated Damages

| Original Contract Amount | | Daily Liquidated Damage |
|--------------------------|------------------|-------------------------|
| From More Than | To and Including | |
| \$0 | \$100,000 | \$500 |
| \$100,000 | \$500,000 | \$1,000 |
| \$500,000 | \$1,000,000 | \$2,000 |
| \$1,000,000 | \$2,000,000 | \$3,000 |
| \$2,000,000 | \$4,000,000 | \$4,000 |
| \$4,000,000 | \$6,000,000 | \$5,000 |
| \$6,000,000 | \$8,000,000 | \$6,000 |
| \$8,000,000 | \$10,000,000 | \$7,000 |
| \$10,000,000 | \$15,000,000 | \$9,000 |
| \$15,000,000 | \$20,000,000 | \$11,000 |
| \$20,000,000 | | \$12,000 |

ON PAGE 92, SUBSECTION 109.01 – MEASUREMENT OF QUANTITIES

Delete the first paragraph and add the following:

The Engineer will measure the contract pay item quantities, except for items that require the Contractor to provide survey measurement as specified in 675, using the units of measure specified in the contract and the methods of measurement and calculation as specified in this subsection. The U.S. customary system of weights and measures units is defined in [15 CFR](#).

Unless otherwise agreed upon by the Engineer, progress payments will not be issued for items requiring survey measurement until the Engineer has received a statement of quantities, along with supporting documentation and calculations, signed and sealed by a licensed Idaho professional engineer or professional land surveyor.

Measurements will be rounded as specified in Table 109.01-1.

Table 109.01-1 – Standard Rounding

| Pay Unit | Rounding |
|------------------------------------|-----------------|
| Acre / Acre Unit (AU) | 0.001 |
| Contingency Amount (CA) | 0.01 |
| Cubic Foot (CF) | 0.1 |
| Cubic Yard (CY) | 0.1 |
| Day | 1 |
| Each | 1 |
| Foot (ft) | 0.5 |
| Gallon (gal) | 1 |
| Hour (hr) | 0.5 |
| Lump Sum (LS) | 0.001 |
| Mile | 0.01 |
| Month | 1 |
| Pound (lb) | 1 |
| Square Foot (SF) | 0.1 |
| Square Yard (SY) | 0.1 |
| Station (Sta) | 0.01 |
| Thousand Feet Board Measure (MFBM) | 0.001 |
| Thousand Gallons (MG) | 1 |
| Ton | 0.01 |

ON PAGE 100, SUBSECTION 109.03.C.5.d – PAYMENT FOR CONTRACT REVISIONS

Replace the word “feeds” with “fees”.

ON PAGES 104-105, SUBSECTION 109.04 – INCREASES OR DECREASES DUE TO TAXES

Delete all of 109.04 and replace with the following:

109.04 Increases or Decreases Due to Taxes. The total contract amount includes applicable federal, state, and local taxes and duties.

The Department will not adjust the contract amount for increases or decreases due to taxes, unless the amount of an increase or decrease is greater than \$100 from the contract amount.

Notify the Engineer promptly of a statute, court decision, written ruling, or regulation that will result in an increase or decrease in the contract amount. Price escalation will be calculated in as specified in 109.02.B. using the Department’s form (e.g., ITD-2624, ITD-2625).

A. Increases Due to Taxes.

The Department will increase the contract amount if the following conditions exist:

1. A statute, court decision, written ruling, regulation, or price escalation on materials (e.g., fuel, asphalt) based on nationally published cost indexes increases federal, state, or local excise tax or duty on the transactions or property covered by the contract and takes effect after the contract date or causes an increase in sales tax burden through price escalation.

2. The statute, court decision, written ruling, or regulation was unanticipated by the Department and the Contractor before the contract date.
3. The Contractor pays or bears the burden of the federal, state, local excise tax or duty, or rate increase. The Department will increase the contract amount by the amount of the tax, duty, or rate increase paid by the Contractor. If requested by the Engineer, verify in writing the new federal, state, local excise tax or duty, or rate increase was not included in the contract amount.

B. Decreases Due to Taxes.

The Department will decrease the contract amount if the following conditions exist:

1. A statute, court decision, written ruling, regulation decreases federal, state, or local excise tax or duty on the transactions or property covered by the contract and takes effect after the contract date.
2. The statute, court decision, written ruling, regulation, or price de-escalation on materials (e.g., fuel, asphalt) based on nationally published cost indexes was unanticipated by the Department and the Contractor before the contract date or causes a decrease in sales tax burden through price de-escalation.
3. The Contractor pays or bears a lesser burden for federal, state, local excise tax or duty, or rate decrease. The Department will decrease the contract amount by the amount of the relief, refund, or drawback. Pay this amount to the Department as directed.

The Department will also decrease the contract amount if the Contractor, through fault or negligence or failure to follow the Engineer's instructions, is required to pay or bear the burden of a federal, state, or local excise tax or duty, or does not obtain a refund or drawback.

ON PAGE 106, SUBSECTION 109.05 – PARTIAL PAYMENTS

Add the following after the last paragraph:

As work progresses, payment will not be made on any pay item or portion thereof as specified in 109.05, until all acceptance documentation (e.g., material certifications, test results) and quantity calculations have been received and verified by the Department. Acceptance documentation and quantity measurement will be in accordance with the contract requirements.

ON PAGE 107, SUBSECTION 109.08 – ACCEPTANCE AND FINAL PAYMENT

Add the following before the first paragraph:

The Contractor will have 20 business days after the last charged contract day and notification by the Engineer to submit outstanding documentation on completed work or the Contractor will receive a pay reduction for failure to submit documentation for the applicable pay item(s) as documented on a change order.

Second to last paragraph, change 105.15 to 105.16.

ON PAGE 108, SUBSECTION 110.01 – GENERAL REQUIREMENTS

Delete section 110.01 replace with:

For federal-aid contracts, the Contractor will comply with 110 in accordance with the Special Equal Employment Opportunity Responsibilities under 23 CFR 140 and 23 CFR 230, Subpart A and D (also refer to United States Department of Transportation (USDOT) form FHWA-1273 attached to each contract).

The Contractor will take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375. The Contractor must ensure compliance with the Uniformed Services Employment and Reemployment Rights Act (USERRA) and the Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) where appropriate.

Contractors, consultants, suppliers, and service providers bidding and performing the Department's federal-aid funded projects must register as vendors at <https://itd.dbesystem.com>.

For more information, contact the Office of Civil Rights 208-334-8567 or email civilrights@itd.idaho.gov.

ON PAGE 108, SUBSECTION 110.02 – CIVIL RIGHTS/EQUAL EMPLOYMENT OPPORTUNITY

Delete section 110.02 replace with:

The Contractor will establish and administer wages, working conditions, employee benefits, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, in a non-discriminatory manner. When advertising to hire employees, the Contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer". All advertisements will be published in newspapers or other publications having a large circulation among women and minority groups in the project area where the work force would normally be sourced.

ON PAGE 108, SUBSECTION 110.03 – DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Delete the last sentence of the 2nd full paragraph with link and replace with the following:

For additional DBE program information, see the Department's DBE program requirements located at: <https://apps.itd.idaho.gov/apps/ocr/ocrdbeprogram.aspx>.

ON PAGE 109, SUBSECTION 110.03.A.1 – DISADVANTAGED BUSINESS ENTERPRISE FOR RACE/GENDER – NEUTRAL CONTRACTS

Delete the third sentence of the third full paragraph and replace with the following:

The Contractor must complete and submit the ITD-2396 form, with all supporting documentation to the Department's Office of Civil Rights by 5:00 pm MT on the day of bid opening or the Contractor's bid will be deemed irregular as specified in 102.10. The ITD-2396 form, with all supporting documentation must be emailed to DBESubmittal@itd.idaho.gov or delivered to the Department's headquarters.

ON PAGE 113, SUBSECTION 110.03.B.1 – DISADVANTAGED BUSINESS ENTERPRISE FOR RACE/GENDER – CONSCIOUS CONTRACTS

Delete the third sentence of the first full paragraph and replace with the following:

The Contractor must complete and submit the ITD-2396 form, with all supporting documentation to the Department's Office of Civil Rights by 5:00 pm MT on the day of bid opening or the Contractor's bid will

be deemed irregular as specified in 102.10. The ITD-2396 form, with all supporting documentation must be emailed to DBESubmittal@itd.idaho.gov or delivered to the Department's headquarters.

ON PAGE 114, SUBSECTION 110.03.B.4, DISADVANTAGED BUSINESS ENTERPRISE FOR RACE/GENDER – CONSCIOUS CONTRACTS

Delete this subsection in its entirety and replace with:

4. The Department requires all bidders to furnish DBE commitments on the ITD-2396 form and all supporting documentation for a construction contract by 5:00 pm MT on the day of bid opening. The ITD-2396 form, with all supporting documentation must be emailed to DBESubmittal@itd.idaho.gov or delivered to the Department's headquarters. The forms must contain:
 - a. The identity of the DBE firm(s) the Contractor is committing to use in meeting the contract's DBE goals. Any DBE commitment statements of confirmation must be made to the Contractor regardless of subcontracting relationships.
 - b. Description of the work and associated dollar amounts each DBE firm offered to perform.
 - c. The DBE submittal package includes the ITD-2396 form, and the DBE quote or the ITD-2399 form which must include the:
 - (1) Commitment statement (a written statement that the DBE is committed to performing the work quoted, if selected).
 - (2) Date.
 - (3) Prime Contractor (can be shown as "To Prime Contractor" or "To All Prime Contractors"; cannot be shown as "To All Bidders").
 - (4) Project identifier (project name and/or key number).
 - (5) DBE work items.
 - (6) DBE firm total (must match the ITD-2396 form).
 - (7) DBE signature, which can be in one of the following forms:
 - (a) Handwritten signature or initials.
 - (b) An electronic signature that is not typed using software (e.g., Adobe® Reader, Adobe Professional, Adobe E-Signature, DocuSign®).
 - (c) Other acceptable forms of confirming the commitment include:
 - i. Email with the DBE email return address, project name, and key number in the subject line and place the committed dollar amount in body of the email with typed first and last name and title of sender.
 - ii. DBE firm letterhead with the project name, key number, and the committed dollar amount in body of the letter with a typed or signed first and last name and title.
 - d. The name of the Contractor's designated Equal Employment Opportunity Officer responsible for administering the Contractor's DBE program.

- e. The Contractor must use the above-mentioned forms, unless the committed DBE firm(s) is unable or unwilling to perform because of default, decertification, or other relevant factors.
- f. Any change to the original DBE Commitment must be accompanied by written acknowledgement from the DBE subcontractor.

ON PAGE 115, 110.03 B.7, DISADVANTAGED BUSINESS ENTERPRISE FOR RACE/GENDER – CONSCIOUS CONTRACTS

Delete the last 2 sentences of the last paragraph and replace with the following:

Afterward, the Contractor must revise the DBE participation percentages by change order, identifying the replacement DBE, their quote, and statement of confirmation. The Engineer must approve the revised plan with concurrence from the Department's Office of Civil Rights. Failure of the Contractor to meet 110.03.B will be a violation of the contract.

ON PAGE 119, SUBSECTION 110.05 – TRIBAL EMPLOYMENT RIGHTS ORDINANCES (TERO)

Delete the last sentence.

ON PAGE 123, SUBSECTION 203.03.A – GENERAL

Delete the following from the first paragraph:

Remove salvageable material without unnecessary damage, salvage material in sections or pieces that may be readily transported and stored at specified places within the project site. Unusable material may be disposed of out of view from the project site with written permission from the property owner before placing the material. Dispose of unusable material so no unsightly appearance will result. Submit copies of property owner agreements.

Remove from the last sentence of the first paragraph:

...prism of the construction.

Replace with:

...roadway prism.

ON PAGE 123, SUBSECTION 203.03.D – REMOVE SIGN ASSEMBLY

Replace Part D with the following:

D. Remove Sign Assembly. This includes signs, sign posts, and sign post foundations. If the sign is to be reinstalled, protect signs during transportation and storage to prevent damage.

ON PAGE 123, SUBSECTION 203.03.E.1.a – REMOVAL AND DISPOSAL OF ASBESTOS

Replace subsection a. with the following:

File the appropriate notification with the EPA Region 10 NESHAP Coordinator at least 10 calendar days before beginning the removal operation.

ON PAGE 125, SUBSECTION 203.04 – METHOD OF MEASUREMENT

Add the following after the second sentence:

Removal of miscellaneous items will be by the lump sum and will include all items specified in the special provisions.

Removal of sign will be measured for each removed sign assembly regardless of the number of posts or the number of signs attached to the post(s).

ON PAGE 125, SUBSECTION 203.05 – BASIS OF PAYMENT

Delete the first two pay items and replace with:

Removal of Miscellaneous Items.....Each, ft, SF, SY, LS

Removal of _____.....Each, ft, SF, SY, LS

ON PAGE 127, SUBSECTION 205.01 – DESCRIPTION

After paragraph E add:

F. Guardrail Terminal Grading. Construct guardrail terminal grading.

ON PAGE 127, SUBSECTION 205.02.B – GRANULAR BORROW

Delete second and third sentences and replace with:

If the material has a sand equivalent less than 30, it must have less than 5 percent passing the No. 200 sieve, in accordance with AASHTO T 27 / T 11.

ON PAGE 127, SUBSECTION 205.02.D – SHOULDER MATERIALS

Delete existing sentence and replace with:

Provide ¾-inch aggregate for untreated base that meets 703.04.

ON PAGE 128, SUBSECTION 205.02.H – GUARDRAIL TERMINAL MATERIALS

After paragraph G add:

H. Guardrail Terminal Materials. Provide ¾ inch aggregate for untreated base, Type A or B, that meets 703.04.

ON PAGE 129, SUBSECTION 205.03.E – EXCAVATION AND REPAIR OF SOFT SPOT

Delete the last sentence of the first paragraph under part E and add the following:

Excavate down 2 feet minimum from the top of the roadbed or to the lines and grades as directed.

Delete the first sentence in the third paragraph.

ON PAGE 131, SUBSECTION 205.03.G – CLASSES OF COMPACTION AND DENSITY REQUIREMENTS

Remove from the third sentence:

...below embankments...

Replace with:

...at the top of subgrade in excavations...

In Table 205.03-1 – Class A Compaction, delete “205.03.E.2” and replace with “205.03.F.2”.

ON PAGE 131, SUBSECTION 205.03.G.1 – CLASS A COMPACTION

Remove from the first sentence:

...an approximate 2H:1V slope.

Replace with:

...the roadway prism.

Replace Table 205.03-1 with:

Table 205.03-1 – Class A Compaction (AASHTO T 99 Method C)

| Material Property | Required Compactive Effort | Classification |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------|
| 10 percent or more retained on the 3 inch sieve; or more than 30 percent retained on the ¾ inch sieve | As specified in 205.03.F.2 | Too granular to test |
| Less than 10 percent retained on the 3 inch sieve; and less than or equal to 30 percent retained on the ¾ inch sieve | Minimum of 95 percent of maximum dry density | Testable material |

ON PAGE 131, SUBSECTION 205.03.G.4 – CLASS D COMPACTION

Remove from the first sentence:

...on an approximate 2H:1V slope...

ON PAGE 131, SUBSECTION 205.03.H – BLASTING

Delete subsection 205.03.H and replace with:

H. Blasting. Perform rock fragmentation blasting using production and controlled blasting techniques to construct engineered rock cuts. Plan and execute blasting operations in a safe and professional manner. The Engineer will review blasting plan submittals solely for compliance with the contract, plans, and specifications. The Engineer’s blasting plan submittal reviews do not relieve the Contractor’s responsibility for blasting accuracy, adequacy, and safety.

1. Definitions.

- a. Production Blasting. Blasting using wider spaced blast holes that typically contain larger explosive charges to expedite movement and fragmentation for rock removal from the main excavation area adjacent to the controlled blast line or from the production holes in a rock quarry.

- b. Controlled Blasting. Blasting that includes presplit blasting or cushion blasting techniques. Controlled blasting uses closer spaced and carefully aligned blast holes that typically contain lighter charges than production blast holes to produce a stable, smooth surface or shear plane, along the specified line and grade of the final excavated backslope with minimal blast damage. Controlled blast holes are the first row of blast holes, normally located within 24 inches of the top of the staked slope.
 - (1) Presplit Blasting. Presplit blasting detonates a single line of lightly-loaded, closely spaced, final backslope blast holes either before production blast drilling or before adjacent production blast hole detonation, to produce a highly controlled, smooth cut face.
 - (2) Cushion Blasting. Cushion blasting is similar to presplitting, except that cushion blast hole detonation along the final backslope is immediately after production and buffer blast hole detonation. Where the horizontal distance from the cut face to the existing rock face is less than 15 feet, the Contractor may cushion blast instead of presplitting. With the exception of these criteria, the requirements specified for presplitting also apply to cushion blasting.
- 2. Regulations. Comply with federal, state, and local laws, regulations, and conditional use permits for blasting operations, including the purchase, transportation, storage, and use of explosive material. Federal regulations include the following:
 - a. Safety and Health. OSHA, 29 CFR Part 1926, Subpart U.
 - b. Storage, Security, and Accountability. Bureau of Alcohol, Tobacco, and Firearms (BATF), 27 CFR Part 555, *Commerce in Explosives*.
 - c. Shipment. DOT, 49 CFR Parts 171-179, 390-397.
- 3. Qualifications. Submit the following for approval at least 21 calendar days before the planned start of drilling and blasting operations:
 - a. Blaster-In-Charge. Provide a Blaster-In-Charge to supervise and direct blasting operations. Blasting material transportation, storage, drilling, loading, detonation, monitoring, reporting, and operations are under the Blaster-In-Charge's direct supervision. Provide the following minimum experience and qualifications:
 - (1) A résumé showing at least 5 years of successful experience in similar construction blasting work adjacent to utilities, residential or commercial structures, transportation facilities, and critical habitats. Quarry work is not acceptable experience.
 - (2) Include a list of blasting projects with the following information: dates, affiliations to the Contractor, explosive suppliers, and owner reference names and current contact information. Include a brief narrative with each project describing controlled blasting techniques, controlling fly rock to within the right of way, scaling, pre-blast surveys, post-blast surveys, vibration/noise/air overpressure monitoring, blast design, and blasting adjacent to utilities, structures, transportation facilities, and critical habitats, and any major recommended blast plan modifications made during the projects.
 - (3) Include a complete list of blasting licenses held, current, lapsed, or revoked.

- (4) Must have been responsible for 3 projects with at least 10,000 linear feet of documented successful presplit holes.
 - (5) Must be in good standing with licensing boards where they hold or have held licenses, regardless of state and federal regulatory agencies governing the use of explosives.
 - (6) Five (5) references with knowledge of qualifications and reliability. Include name, relationship, and current telephone number for each reference.
 - (7) Pre-approved blasting consultants on the Department's Consultant Term Agreement List for the G8. The blasting consultant service category would be acceptable as Blaster-In-Charge.
- b. Blasting Crew Personnel. Personnel names and evidence they have completed at least 24 hours of blasting safety training in the last 5 years or have at least 2 years of blasting experience, along with proof of a Federal Employee Possessor Permit for each crew person.
 - c. Drillers. Names and evidence the drillers are proficient in the drilling methods required to perform the work.
 - d. Vibration Specialist. Name and résumé showing at least 5 years of experience as a vibration specialist on projects with similar more complex work.

Upon receipt of a complete qualifications submittal, the Engineer will have 10 business days to approve or reject the proposed Blaster-In-Charge and other personnel. Do not start work, mobilize equipment, or order materials until the qualifications submittal has been approved by the Engineer.

An alternate Blaster-In-Charge requires Engineer prior-approval with the same submittal requirements as above. Work will be suspended if the Blaster-In-Charge is substituted without prior Engineer approval. The Contractor is fully liable for any additional costs and delays resulting from such work suspensions, with no adjustment in contract time or delay costs.

- 4. Blasting Plans. A general blasting plan and site-specific blasting plan are required for production and controlled blasting operations. Blasting plans are not required for boulder reduction blasts (e.g., mudcapping, blockholing).
 - a. General Blasting Plan. Submit a general blasting plan signed by the Blaster-In-Charge for review and approval by the Engineer at least 21 calendar days before beginning drilling and blasting operations. Upon receipt of a complete submittal, the Engineer will have 10 business days for general blasting plan review and approval. Do not deliver explosives to the project until the general blasting plan is accepted. If any approved general blasting plan revisions are required during construction, resubmit the entire general blasting plan package and allow 10 business days for Engineer review and approval. Include the following information in the general blasting plan:
 - (1) Safety Plan. Include procedures and safety precautions for transporting, handling, storing, loading, and detonating explosives, conducting pre-blast and post-blast surveys, monitoring blasts, managing misfires, and removing and disposing of excess explosives. Include the following information:
 - (a) Blaster-In-Charge name and current contact information. Certify the Blaster-In-Charge is responsible for the following:

- i. Supervising and directing day-to-day drilling and blasting operations, including the transport, storage, handling, and loading of explosives and blasting agents (including primers and initiators).
 - ii. Clearing the blast site before each blast.
 - iii. Responsible person for required reports and documentation for blasting operations (e.g., general blast plan, site-specific blast plans/reports, drill logs, daily explosive material consumption, loss reports, monitoring reports).
 - iv. Checking for misfires and determining the blast site is safe to enter after each blast, including recovery and disposal of misfires or undetonated explosives.
- (b) Flyrock and blast debris prevention plan, including methods to control flyrock within the right of way, and to prevent personal injury and property damage. Provide flyrock containment system designs as a contingency.
- (c) Plan for recovery and disposal of misfires or undetonated explosives.
- (d) Plan for potential blast site electrical hazards, including lightning detection and protection.
- (e) Emergency plan to address personal injuries, including hospital and EMS phone numbers.
- (f) Disposal plan for explosives packing materials.
- (g) Anticipated work schedule and blast time(s). Blasting is only allowed during daylight hours, within ½ hour after sunrise and ½ hour before sunset.
- (2) Explosives transportation and storage plan, including:
 - (a) Explosives supplier names, addresses, and telephone numbers.
 - (b) Explosives transport vehicle descriptions, license plate numbers, travel routes, proposed travel hours, and driver qualifications.
 - (c) Magazine and day-box onsite locations.
 - (d) Explosives and accessories inventory system.
 - (e) Contact information for person(s) responsible for security of blasting material and supplies.
- (3) Area security plan, including explosives and general site security, site communication methods, pre-blast and post-blast signage, audible signaling systems, road closure requirements, and pre-blast notification methods for affected agencies or entities.
- (4) **Manufacturer's technical** and safety data sheets for proposed explosives, primers, initiators, and related blasting devices and accessories.
- (5) Pre-blast scaling, pioneered access road, and drilling and blasting operations bench excavation plans, methods, and equipment lists. Indicate if angle or fan-drilled holes are anticipated.

- (6) Production and controlled blasting scaled typical plan and section views, including station and offset limits, maximum blast length, free face, burden, hole pattern, holes per blast, hole inclination, hole depth, hole diameter, and subdrill depth.
 - (7) Anticipated loading diagram showing type and amount of explosives, primers, initiators, powder factor, charge weight per delay, stemming depth, and material description. Show explosive quantity to be used per delay and per blast.
 - (8) Initiation Method Sequence. Anticipated blast hole-initiation sequence diagram and explanation, including delay times for each blast hole. Identify the delay system type and associated delay periods.
 - (9) Methods for limiting dust and noise.
 - (10) Fire prevention and protection plan, including post-blast observers and fire watch duration.
 - (11) Temporary traffic control plan as specified in 105.14.D for Engineer review and approval when blasting operations will occur within 1,000 feet of a roadway. Cover or remove blasting signs when there are no explosives in the area or the area is otherwise secure. The Blaster-In-Charge is required to determine whether road users in the blasting zone will be endangered by the blasting operation. If there is danger, do not permit road users to pass through the blasting zone during blasting operations.
 - (12) Routine paperwork document templates (e.g., drill logs, ground vibration and air overpressure monitoring reports, pre-blast and post-blast survey forms).
- b. Site-Specific Blasting Plans (ITD-1006 Blast Plan form and ITD-1008 Blast Report form). Upon Engineer approval of the general blasting plan, submit site-specific blasting plans for each controlled and production blast. The site-specific blasting plan consists of two primary documents: the ITD-1006 Blast Plan and its companion ITD-1008 Blast Report. Submit the ITD-1006 Blast Plan for Engineer review and approval at least 24 hours before loading any holes. Submit the companion ITD-1008 Blast Report with the same corresponding blast number within 24 hours after the blast. Include the following in the ITD-1006 Blast Plan:
- (1) Proposed excavation sequence.
 - (2) Proposed blast station limits and plan view, showing how the proposed blast fits into the lift excavation sequence.
 - (3) Top and bottom elevations of each lift.
 - (4) Scaled drawings for each blast showing access, containment, drill pattern plan and section views, clearing limits, free face, burden, blast hole locations and hole identification number, blast hole spacing, subdrill depths, lift height, blast hole diameters, and blast hole inclinations.
 - (5) Proposed loading diagram for each blast showing powder factor, charge per delay, type and quantity of explosives, primers, and initiators, decking locations, and range of stemming depths for variations within the drill pattern.
 - (6) Proposed blast hole initiation method and sequence for each blast. Include delay times, delay system, and down hole firing times.

- (7) Flyrock, air overpressure (noise), and ground vibration control measures.
 - (8) Estimated in-place rock volume to be blasted. Include the total length of production and controlled blast holes.
 - (9) Drill logs for each blast hole with the following information: date, time, driller name/signature, helper name, hole identification number, hole collar location, hole depth, collar elevation, tip elevation, hole orientation, penetration rate, color and character of cuttings, and other pertinent information or observations. Include geologic features that could affect the blast loading or performance (e.g., groundwater, voids larger than 6 inches, zones of soft or weathered rock, mud pockets, changes in drill effort, loss of drill water, drill rod drops). Provide the drill logs with the ITD-1006 Blast Plan Form.
 - (10) Location and orientation of rock joints, fractures, faulting, bedding planes, or other rock mass structural features.
 - (11) Post-blast rockfall containment designs and procedures.
 - (12) When ground vibration or air overpressure damage is possible to buildings, structures, utilities, and sensitive natural features, include the attenuation study information for the affected items and indicate that the peak particle velocity versus peak frequency will not damage any item.
 - (13) Pre-blast condition survey records of nearby buildings, structures, utilities, and natural features for potential ground vibration or air overpressure, when applicable.
5. Pre-Blast Condition Survey and Vibration Monitoring and Control. The Contractor is responsible for damage resulting from blast related ground vibrations and air overpressure. Determine the need for vibration monitoring depending on soil and rock conditions, blasting parameters as outlined in the blasting plans, and proximity of buildings, structures, utilities, and sensitive natural features that may be subject to damage from ground vibrations or air overpressure. If vibration or air overpressure monitoring is required, conform to the following requirements:
- a. If not specified in the contract, establish blasting criteria for buildings, structures, utilities, and natural features that conform to federal, state, or local regulations. Present blasting criteria in terms of distance of the facility or feature from blasting, maximum allowable peak particle velocity versus peak frequency limits for each structure type, and air overpressure structure damage limits.
 - b. Conduct a pre-blast condition survey of nearby buildings, structures, utilities, and natural features that could become potentially damaged by blasting-related ground vibrations or air overpressure. Document the natural frequency of each affected structure or feature. Use a survey method acceptable to the Contractor's insurance company. Submit the pre-blast condition survey records with the ITD-1006 Blast Plan form.
 - c. Control ground vibrations and air overpressure with properly designed delay sequences and maximum allowable charge weights per delay. Verify allowable charge weights per delay by an attenuation study using representative trial blasts and measuring ground vibrations and air overpressure levels. The attenuation study will enable successful prediction of the peak particle velocity in any component (longitudinal, transverse, or vertical) anywhere on the surface of the structure(s). Conduct test blasts with blast plan modifications that limit ground

vibrations and air overpressure to levels that will not cause damage to nearby buildings, structures, utilities, and/or natural features as determined by the vibration specialist. Submit the attenuation study results and predicted peak particle velocity versus peak frequency for each structure.

- d. When ground vibration or air overpressure damage is possible, monitor each blast with digital recording seismographs and air overpressure monitoring equipment calibrated within the last year and approved. Locate monitoring equipment in accordance with the vibration specialist's directions, placing a minimum of 3 recording stations between the blast area and closest susceptible structures, utilities, or natural features, as well as at least 1 station on each susceptible structure. For ground vibration monitoring, use self-triggering seismographs capable of measuring peak air overpressure and recording particle velocity, displacement, and acceleration for three mutually perpendicular components of vibration in the range generally found for controlled blasting. The instrument will contain internal calibration and triaxial orthogonal transducers with flat frequency response from 2 to 250 hertz, with a minimum sampling rate of 1,000 data points per second with sufficient memory to store the full blasting sequence and their locations. Seismographs must be capable of producing a permanent digital time history file for each ground motion episode.

Ensure blasting operations incorporate collected data and findings from vibration and air overpressure monitoring by having the vibration specialist interpret seismograph and air overpressure records. Submit the interpreted seismograph and air overpressure records with a certifying signature by the vibration specialist. If actual peak particle velocity versus peak frequency measurements exceed those predicted for a structure, adjust the site-specific blast plan for the actual structural response to the blasting. Such adjustments may include changes to pattern, loading, timing, flyrock measures.

Record each blast using digital video equipment from 2 locations that clearly show the entire proposed blast site.

6. Test Blasting. Before beginning drilling for production or controlled blasting, demonstrate acceptable performance of a site-specific blasting plan for both a production blast and a controlled blast, by drilling, blasting, and excavating a test blast up to 100 lineal feet in length, as measured along roadway centerline, with the proposed containment measures in-place. Production and controlled drilling and blasting operations are not allowed until test blasting is complete and accepted by the Engineer. Conduct test blasting at Engineer-approved locations within the planned excavation area. Excavate shot rock to expose the entire back slope for test blast evaluation.

Space blast holes for controlled blasting (presplit or cushion) no more than 30 inches apart for the initial test blast. Adjust the spacing as necessary to produce acceptable results. Use the accepted spacing for future controlled blasting, or subsequent test blasts if necessary.

A test blast is unacceptable when any of the following occurs:

- a. Slopes are unstable.
- b. Slopes exceed overbreak tolerances within the limits of the excavation, as shown in the plans, or as determined by the Engineer for the site geology.
- c. Non-planar, irregular surface with overhangs, protrusions, ridges, or ledges are created.
- d. Excessive blast damage occurs within the limits of the excavation, as shown in the plans, or

as determined.

- e. Poor fragmentation results in oversize material requiring secondary blasting and rehandling.
- f. Safety of the public is jeopardized.
- g. Property or natural features are endangered.
- h. Excessive or uncontrolled flyrock is generated and not contained within the right of way.
- i. Excessive ground vibration or air overpressure occur where damage to buildings, structures, utilities, or natural features is possible.
- j. Desired slope or rock face conditions are not produced.

Revise the site-specific blasting plan and conduct additional test blasts when a test blast is unacceptable. Production and controlled drilling and blasting may begin only after site-specific blasting plans are accepted by the Engineer. The Engineer has the authority to suspend the Contractor's blasting operations at any time throughout construction and require additional test blasts when the Contractor produces unacceptable results.

7. Blasting Operations.

- a. General. Use explosives and initiating devices that are less than 1 year old or in accordance with the manufacturer's recommendations for specialty products. Blast holes are not allowed to remain loaded with explosives overnight, but must be detonated the same day they are loaded. Stage explosives at locations directed by the Blaster-In-Charge, and as approved by the Engineer. Properly dispose of explosive packing materials and remove them from the project site before each blast.

Establish survey control necessary for the drilling to meet the required horizontal and vertical control tolerances. Establish a survey control method for transferring the blasting plan grid pattern on the accepted site-specific blasting plan form to the field. Paint or stake the drill hole identification number and collar elevation next to each drill hole for field identification.

Provide the drill logs with the ITD-1006 Blast Plan form for every blast.

Ensure blast holes are drilled to the correct depth and free of obstructions for the entire depth before placing charges. Take necessary precautions when placing charges so caving of material from the walls of the holes and the hole collar will not occur. If drill hole conditions vary from dry to wet, use appropriate explosive type(s) and/or blasting accessories to accomplish the specified results.

Protect blast holes with a temporary plug to keep overburden, drill cuttings, or other foreign material from falling into the holes after drilling. Fill unused drill holes with ½"-minus crushed stone or approved materials.

Mitigate uncontrolled gas pressure loss during blasting and excessive blast noise by stemming the upper portion of blast holes with appropriate dry granular material passing the ½ inch sieve. Do not stem holes with drill cuttings.

Blast according to the accepted site-specific blasting plan. Use blasting mats, rockfall containment systems, and other protective devices to prevent damage to surrounding features and contain flyrock within the right of way.

Stop drilling and blasting operations immediately and perform additional test blasting when any of the below unacceptable results occurs:

- a. Slopes are unstable.
- b. Slopes exceed overbreak tolerances within the limits of the excavation, as shown in the plans, or as determined by the Engineer for the site geology.
- c. Non-planar, irregular surface with overhangs, protrusions, ridges, or ledges are created.
- d. Excessive blast damage occurs within the limits of the excavation, as shown in the plans, or as determined.
- e. Poor fragmentation results in oversize material requiring secondary blasting and rehandling.
- f. Safety of the public is jeopardized.
- g. Property or natural features are endangered.
- h. Excessive or uncontrolled flyrock is generated and not contained within the right of way.
- i. Excessive ground vibration or air overpressure occur where damage to buildings, structures, utilities, or natural features is possible.
- j. Desired slope or rock face conditions are not produced.

The Engineer has the authority to suspend the Contractor's blasting operations at any time when any of the above unacceptable results occurs.

Remove or stabilize cut face rock that is loose, hanging, or potentially dangerous after each blast. Scale by hand or machine methods as approved by the Engineer. Do not drill the next lift until slope stabilization and blast cleanup work is complete. Scaling and stabilization requirements also apply to excavated soil slopes, and ripped or blasted rock slopes associated with pioneer and access roads.

- b. **Production Blasting.** Drill a lighter-loaded buffer row of production holes on a parallel plane adjacent to the controlled blast line to prevent blast damage to the final backslope face when performing controlled blasting. Detonate production holes in a controlled delay sequence.

Drill production blast holes on the pattern in accordance with the accepted site-specific blast plan within two drill hole diameters of the planned collar location. If more than 5 percent of the drill hole collars in a lift are out of tolerance, fill each hole outside of the location tolerance with ½"-minus crushed stone, or approved material, and redrill at the proper location, at no additional cost to the Department.

Drill production blast holes to the design depth on the accepted site-specific blast plan. Redrill shallow holes to the proper depth if more than 5 percent of the production blast holes in a lift do not conform to the design depth requirements. Except when subdrilling, do not drill production blast holes below the controlled blast hole base plane.

- c. **Controlled Blasting.** Use angle- or fan-drilled holes for pioneering the tops of rock cuts and preparing working platforms. Use equipment or methods approved by the Engineer for areas not accessible to track drill equipment.

Remove potentially dangerous boulders or other material located beyond the excavation limits before drilling controlled blast holes. Removal of material located beyond the excavation limits is extra work.

Before drilling, completely remove overburden, soil, and loose or decomposed rock along the top of the excavation for a distance of at least 30 feet beyond the end of the production hole drilling limits, or to the end of the cut.

Use controlled blasting to form the final backslope of rock cuts where the design slope ratio is $3/4H:1V$ or steeper and the slope height is more than 10 feet above the ditch grade.

Control drilling operations by using equipment and techniques that accurately control the drill angle as it enters the rock, to ensure that no hole deviates from the excavated backslope planned final plane by more than 9 inches from the proposed spacing and alignment, either in the parallel or normal direction. If more than 5 percent of the holes exceed the variance, reduce the lift height and modify drilling operations until the holes are within tolerance.

The maximum allowable horizontal offset bench width for drill equipment clearance for multi-lift blasts is 2 feet. Adjust the initial controlled blast hole locations to account for additional width needed for planned offset benches. Remove benches during excavation of the next lift to a slope of at least 45° below horizontal. The Department will not pay for presplit holes exceeding these tolerances.

Drill controlled blasting holes a maximum of 3 inches in diameter and within 3 inches of the staked collar location. Fill and redrill blast holes outside of the location tolerance when more than 5 percent of the hole collars in a lift are outside of the location tolerance. Use $1/2$ "-minus, crushed stone or other approved material to fill the blast holes before redrilling. Drill the controlled blast hole line at least 30 feet beyond loaded production holes or to the end of the cut.

Do not exceed 30 feet for bench height or drill hole length, unless longer holes are approved by the Engineer and can be successfully demonstrated in a test blast. Limit subdrilling to one-half of the hole spacing or 24 inches, whichever is deeper.

Do not use bulk ammonium nitrate and fuel oil (ANFO) for controlled blasting. Use only standard explosives manufactured specifically for controlled blasting in controlled blast holes, unless approved by the Engineer.

Use explosives in controlled blast holes with a maximum diameter of no greater than one-half the controlled blast hole diameter.

As long as satisfactory presplit slopes are obtained, the Contractor may either detonate the presplit blasting holes forming the final backslope face before drilling for production blasting, or detonate the presplit blasting holes within the same production blast event, provided the presplitting drill holes are detonated at least 25 milliseconds ahead of the adjacent production blast holes

If blasting operations cause fracturing of the final rock face, repair or stabilize it in an approved manner at no cost to the Department. Repair or stabilization may include removal, rock bolting, rock dowels, or other slope stabilization techniques, as approved by the Engineer.

8. Reporting.

- a. Post-Blast Report (ITD-1008 Blast Report Form). For each site-specific blasting plan's ITD-1006 Blast Plan form, submit a post-blast report on the ITD-1008 Blast Report form with the same corresponding blast number. Submit the complete blast report within 24 hours following a blast and before loading for the next blast. The purpose of the ITD-1008 Blast Report is to record the actual drill hole and loading configuration that took place in the field versus what was planned in the ITD-1006 Blast Plan form. The ITD-1008 Blast Report also serves as the official record for measurement and payment for controlled blasting. Include the following in the ITD-1008 Blast Report:

- (1) Brief blast results narrative (e.g., overbreak, blast damage, noise levels, flyrock, drill trace retention, fragmentation, material containment, material rehandling requirements, misfires).
- (2) Proposed changes for future blasts that will improve results (e.g., pattern, loading, timing).
- (3) Proposed repairs or stabilization plan for unstable or blast damaged slopes.
- (4) Blast hole depth measurements verified by the Blaster-In-Charge.
- (5) Blast layout with station and offset limits, plan and section views, drill pattern, free face, burden, blast hole spacing, blast hole diameters, blast hole angles, lift height, and sub drill depth.
- (6) Actual loading diagram with type and amount of explosive, primers, initiators, and stemming depth.
- (7) Actual blast hole-initiation sequence, including delay times and delay system in each blast hole.
- (8) Trade names and sizes of explosives, primers, and initiators used.
- (9) Measurement of any overbreak quantities following lift mucking.
- (10) Ground vibration and air overpressure records as specified in 205.03.H.8.b.
- (11) Daily explosive material consumption and report of loss report (e.g., ATF daily summary of magazine transactions) with Blaster-In-Charge signature.
- (12) Blast loading and detonating date and time.
- (13) Blaster-In-Charge name and signature.

- b. Monitoring. Submit digital videos within 24 hours after each blast.

If vibration and/or air overpressure monitoring is required, submit a vibration and air overpressure report for review within 24 hours following a blast and before loading for further blasting.

Include the following:

- (1) Vibration or air overpressure recording station type used and instrument identification numbers.
- (2) Name of vibration specialist observing the blast and interpreting vibration and air

overpressure data.

- (3) Blast identification number and blast location.
- (4) Distance and direction of ground vibration and air overpressure recording stations from the blast area.
- (5) Type of material ground vibration recording stations were sitting on at the blast time.
- (6) Maximum applicable charge weight per delay.
- (7) Peak displacement, particle velocity, and frequency recorded at each ground vibration sensor location.
- (8) Peak overpressure recorded at each air overpressure sensor location.
- (9) Dated and signed copy of instrument records.
- (10) Post-blast condition survey noting changes from the pre-blast survey.
- (11) Comments on blasting success in terms of adherence to established ground vibration or air overpressure criteria and management practices.

When failing to meet ground vibration and air overpressure criteria and management requirements, submit proposed changes to future site-specific blasting plans that will produce acceptable results.

Submit the final post-blast survey reports with property owners' acknowledgement of receipt (e.g., email, letter) to the Engineer. Repair damage to public or private property caused by the use of explosives as a first order of work. The Department will not pay for damage repairs.

- c. Close-out. Submit a written statement signed by the Blaster-In-Charge certifying:
 - (1) Blast holes loaded with explosive material have been either detonated or unloaded and disposed of properly.
 - (2) Blasting is complete and explosive material has been removed from the project site.

ON PAGE 137, SUBSECTION 205.04 – METHOD OF MEASUREMENT

Add the following to the end of the section:

- 10. Process old road will be by the lump sum.

ON PAGE 138, SUBSECTION 205.05 – BASIS OF PAYMENT

After Soft Spot Repair add:

| | |
|---------------------------------|------|
| Guardrail Terminal Grading..... | Each |
| Process Old Road..... | LS |

Add at the end of the subsection:

Work required by, and associated with, the Blaster-In-Charge is incidental to controlled blasting.
 Slope finishing is incidental and the work included in other contract pay items.

Replace the 13th paragraph with the following:

The Department will pay for the over-drill limits made necessary for offset benches in multi-lift cuts as specified in 205.03.H.7.c.

Add at the end of the subsection:

Surveys associated with blasting including surveys for drill holes are incidental. Reducing oversize material from rock excavations are incidental.

Payment for controlled blasting will be based on accepted quantities documented on the ITD-1008 Blast Report form.

ON PAGES 143-145, SECTION 210 – STRUCTURE EXCAVATION AND COMPACTING BACKFILL

Delete section 210, in its entirety, and replace with:

210.01 Description. Excavate and dispose of materials required for the construction of structures, unless otherwise specified as structural excavation. Include necessary drainage, pumping, bailing, sheeting, shoring, and the construction and removal of cribs and cofferdams. Remove old structures or parts as required. Place and compact backfill material as compacting backfill. Include sloping and cleaning up the sites.

The contract pay item structure excavation schedule no. 1 includes excavation for bridges, boxes, and stiffleg culverts. The contract pay item structure excavation schedule no. 2 includes excavation for other structures.

210.02 Materials. Provide materials as specified in:

| | |
|-------------------------------------|--------|
| Granular Borrow..... | 205.02 |
| Controlled Density Fill | 522.02 |
| Aggregate for Untreated Base..... | 703.04 |
| Aggregate for Granular Borrow | 703.11 |

210.03 Construction Requirements.

A. General. Remove and dispose of unsuitable foundation material below the designed elevation as directed. Use suitable surplus excavated material in the construction of embankments. Replace material removed below the designed elevation with approved material.

Sheet and brace trenches if necessary. Do not remove sheeting or bracing until backfill has progressed enough to prevent damage to pipelines or structures.

Remove sheeting and bracing used in supporting structure excavation.

Where rock, hardpan, or other unyielding material is encountered and a yielding material is required, remove the unyielding material below the grade specified and backfill as directed.

Do not begin structure construction or backfill placement until the foundation has been approved. Do not use frozen material as backfill, and do not place backfill on snow-covered or frozen surfaces.

Place backfill consisting of suitable material in 8-inch maximum, uncompacted layers and compact to Class A compaction as specified in 205.03.G.

For backfill material placed within 3 feet of a concrete structure or retaining wall, uniformly distribute the backfill material in layers of no more than 8 inches and compact with lightweight compacting equipment having an impact force of 1,000 to 3,000 pounds. Compact the backfill to the density requirements for Class A compaction as specified in 205.03.G, before successive layers are placed. For backfill material determined by the Engineer as too granular to test, apply at least 5 overlapping compacting equipment passes per 8-inch lift or less.

Compact backfill in areas not within a roadway prism, or special backfill around pipe underdrains not requiring a higher degree of compaction for some other purpose, to approximately the same density as the adjacent undisturbed soil or gravel. Perform compaction by any effective means.

B. Structures. For structures or retaining walls founded on rock, excavate rock to the elevation shown in the plans. Remove any weathered, highly broken rock at the excavation bottom. Level excavated rock surfaces to the plan elevation with Class 15 or higher class concrete before constructing the structure or wall foundations.

Use appropriate equipment and take precautions to ensure that structure and retaining wall foundation soils are not disturbed during excavation that may affect their bearing capacity. Remove disturbed, soft, or unsuitable materials from the excavation and backfill with granular borrow or other approved material to the plan elevation. Replace material disturbed by the Contractor's operations at no additional cost to the Department.

Compact the bottom of soil excavations with a minimum of 5 overlapping passes with an approved compactor.

Take precaution when pumping water from foundation enclosure interiors to prevent the possibility of concrete materials being carried away. Do not pump during the placing of concrete or for at least 24 hours after, unless it is done from a suitable sump or well point separated from the concrete work.

When placing backfill material under water, place backfill in layers not thicker than 2 feet. Compaction is not required for this placement type.

Do not place backfill against newly constructed masonry or concrete structures before meeting the requirements in Table 502.03-5.

210.04 Method of Measurement. The Engineer will measure acceptably completed work by the cubic yard based on planned quantity.

The Engineer will measure structure excavation as the volume of material within prism-limiting planes as follows:

1. Structures:
 - a. The bottom of the foundation.
 - b. The vertical planes 2 feet outside of and parallel to the outside lines of the structure, in the case of bents with individual column footings, the entire bent are considered as 1 structure.
 - c. With upper limits as follows:
 - (1) In embankment sections, the existing ground surface as cross-sectioned.
 - (2) In roadway cut sections or channel changes, the planes of the roadway cut or channel change as excavated.

The Engineer will measure compacting backfill by the cubic yard of backfill material placed and as follows:

1. Structures:
 - a. Below the original ground surface. A volume equal to the volume of structure excavation less the volume of the permanent structure, including the opening, contained within the limits of measurement for structure excavation.
 - b. Above the original ground surface. The volume contained between the outside walls of the structure and vertical planes 4 feet outside the original ground surface or the horizontal plane 1 foot above the top of the structure or of the subgrade, whichever is less.
 - c. Volumes of backfill placed through water around abutments, wing walls, and piers will not be included in the measurement of quantities for compacting backfill.

210.05 Basis of Payment. The Department will pay for acceptable quantities at the contract unit prices as follows:

| Pay Item | Pay Unit |
|-------------------------------------------|----------|
| Structure Excavation Schedule No. 1 | CY |
| Structure Excavation Schedule No. 2 | CY |
| Compacting Backfill | CY |

When the contract does not include a contract pay item for structure excavation or compacting backfill, this work is incidental and included in other contract pay items.

The Department will pay for required structure backfill or bedding material whose source is other than structure excavation at the contract unit price for the material being used or as extra work if no unit price was established.

If the Contractor is directed to remove material below the elevation specified, the Department will pay for the excavation work at the contract unit price or as extra work.

The Department will pay for Class 15 concrete used to backfill rock excavation below the bottom of the design footing grade based on the actual quantity used, but not to exceed a prism 1 foot outside the footing neat lines with an average depth of 1 foot below the bottom of footing.

Payment will not be made by the Department to excavate, backfill, and compact material removed for safety purposes or foundation soils that become disturbed due to the Contractor's operations.

The Department will pay using plan quantities as specified in 109.01.

ON PAGE 150, SUBSECTION 212.05 – BASIS OF PAYMENT

Delete number 10 and replace with:

10. Removal of BMPs as determined necessary.

ON PAGE 152, SUBSECTION 213.03 – CONSTRUCTION REQUIREMENTS

Delete the following:

Western Laboratory; Parma, ID

Delete the second to last paragraph of this subsection:

Incorporate approximately ½ pound of the total seed mix per acre into the topsoil before placement begins. Apply the remaining seed mix over the topsoil after placement.

ON PAGE 155, SUBSECTION 251.03 – CONSTRUCTION REQUIREMENTS

Add to the end of #2:

During the nesting season, monitor vegetation or structures for nesting birds. Preemptive measures to avoid migratory bird species include clearing outside the nesting season, regular monitoring of bird activity, removal and disposal of unoccupied nests to prevent occupation, and exclusion devices (e.g., bird repellent spray, netting) that does not result in death or injury to adult birds.

ON PAGE 161, SUBSECTION 303.03.A – GENERAL

Delete “Mix the base by 1 or a combination of the following 4 methods:” and delete 1-4.

ON PAGE 163, SUBSECTION 304.03 – CONSTRUCTION REQUIREMENTS

Change 205.03.D to 205.03.E.

ON PAGE 166, SUBSECTION 308.04 – METHOD OF MEASUREMENT

Delete #2 and replace with: “At the Engineer’s request, randomly selected, empty transporting vehicles may be weighed on a local, certified scale able to produce a scale ticket for the Engineer’s documentation and verification.”

ON PAGE 172, SUBSECTION 403.02 – MATERIALS

Change both references of Table 703.06-2 and Table 703.02-2 to Table 703.06-1.

ON PAGE 173, SUBSECTION 403.03.C – BROOMING

Delete the first sentence of #1 and replace with: “Broom loose chips from the roadway and other areas listed in 403.03.C.2 at the end of each day’s operations.”

Delete 2 a. and replace with “In curb/gutter and on sidewalk sections.”

Delete #5 and renumber #6 to #5.

ON PAGE 179, SUBSECTION 404.05 – BASIS OF PAYMENT

Replace CY with SY.

ON PAGE 212, SUBSECTION 409.01.A – CLASSIFICATION

In Table 409.01-1 under “Minimum Cementitious Content” replace 660 with 600 and replace AASHTO TP 110 with AASHTO T 380.

ON PAGE 215, SUBSECTION 409.02 – MATERIALS

Replace AASHTO TP 110 with AASHTO T 380.

ON PAGE 221, SUBSECTION 409.03.H.4.a.(1) – JOINTS/LOAD TRANSFER DEVICES/DOWEL BAR ASSEMBLIES/FABRICATION

Delete (1) and replace with:

- (1) Fabrication. Fabricate dowel bar assemblies, or baskets, in single units for appropriate lanes before being placed on grade. Submit material detail sheets with basket size and complete anchoring details for approval.

ON PAGE 222, SUBSECTION 409.03.H.4.b.(3) – JOINTS/LOAD TRANSFER DEVICES/DOWEL BAR INSERTERS/DOWEL BARS

Replace “TFE” with “PTFE”.

ON PAGE 237, SUBSECTION 415.03.A – MIX DESIGN

Add the following:

Provide an optimized emulsion content for the microsurfacing mix design, using no less than 3 emulsion contents spread over a range not to exceed 2.0 percent residual.

ON PAGE 238, SUBSECTION 415.03.F – AUXILIARY EQUIPMENT

Add the following:

Screen the aggregate when loading units going from the stockpile area to the lay down operation.

ON PAGE 238, SUBSECTION 415.03.G – CALIBRATION

Add the following:

In the Engineer’s or their representative’s presence, demonstrate that the calibration data has been entered into the computerized control unit used to print the pay ticket.

ON PAGE 240, SUBSECTION 415.03.R.5 – PRODUCTION MICROSURFACING

Replace 5 with:

5. Limit the emulsion content to within 1.0 percent of the job-mix design, not to exceed specifications.

ON PAGE 240, SUBSECTION 415.03.S.1 – REPORTING

Replace 1 with:

1. Maintain quality control documentation and make available to the Engineer upon request or at completion of daily work. This includes machine counts for aggregate, emulsion, and water.

ON PAGE 241, SUBSECTION 415.04 – METHOD OF MEASUREMENT

Replace this section with:

The printouts from the calibrated computerized monitoring will be used to measure the pay items. Microsurfacing aggregate will be measured by the ton (dry weight basis). Polymer-modified emulsified asphalt will be measured by the ton, as delivered to the project site. Submit printouts daily. Make daily machine counts available for verification of Contractor supplied printouts.

ON PAGE 255, SUBSECTION 431.03 – CONSTRUCTION REQUIREMENTS

Add the following after the 6th paragraph:

Mill a consistent straight line to the Engineer’s satisfaction.

ON PAGE 260, SUBSECTION 502.01.A – CLASSIFICATION

Replace Table 502.01-1 with the following:

| Concrete Class (100 psi)(28 day) ^(a) | Minimum Cementitious Content lb/yd ³ ^{(b)(c)} | Maximum Cementitious Content lb/yd ³ | Maximum Water Cement Ratio | Air Content Percent |
|-------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------|----------------------------|---------------------|
| 45 and greater ^{(d)(e)(f)(g)} | 560 | 750 | 0.44 | 0-6.0 |
| 35 to less than 45 ^{(d)(e)(f)(g)} | 470 | 615 | 0.44 | 0-6.0 |
| 30 | 470 | 570 | 0.49 | 6.5±1.5 |
| Seal Concrete | 660 | NA | 0.6 | 0-6.0 |

Delete Table 502.01-2 and replace with:

Self-consolidated concrete must meet the requirements in Table 502.01-2 for mix design approval and field acceptance testing.

Table 502.01-2 – Self-Consolidating Concrete

| Flow, in (AASHTO T 347) | Visual Stability Index (AASHTO T 351) | J-Ring Test Value (J), in (AASHTO T 345) | Static Segregation, % (ASTM C1610) |
|-------------------------|---------------------------------------|------------------------------------------|------------------------------------|
| 20-30 | 1.5 maximum | J < 0.75 | 10% maximum |
| Field Test | Field Test | Mix Design | Mix Design |

ON PAGE 263, SUBSECTION 502.02 – MATERIALS

Delete:

AASHTO TP 110

Replace with:

AASHTO T 380

Delete the following note under “Sampling Freshly Mixed Concrete”:

When concrete is delivered by means of a concrete pump, obtain samples at the final point of placement (discharge pipe).

Delete “Standard Method of Test for Slump Flow of Self-Consolidating Concrete Cylinders” and replace with “Standard Practice for Static Segregation of Hardened Self-Consolidating Concrete Cylinders”.

ON PAGE 263, SUBSECTION 502.03.A – PROPORTIONING

Replace all references to AASHTO TP 110 with AASHTO T 380 and delete all references to ASTM C1567.

Under Subsection A. Proportioning add the following to the end of the first paragraph:

Submit the mix design on the ITD-916 form along with the following documentation:

1. Proposed mix design.
2. Copies of test reports.
3. Aggregate gradations.
4. Final set time.
5. ASR determination.
6. Slump.
7. Water source.
8. Aggregate size number.
9. Design air content.
10. Basic mix design strength.
11. Design mix strength.
12. Laboratory qualification.
13. Tester qualification.

ON PAGE 267, SUBSECTION 502.03.D.7.a – MIXING AND DELIVERY

Add the following to the end of 7.a:

If a set stabilizer meeting ASTM C494 is used, the Contractor may extend the discharge time and revolution count in accordance with the manufacturer's recommendations. Submit this information with the mix design for approval.

ON PAGE 267, SUBSECTION 502.03.D.7.e – MIXING AND DELIVERY

Delete e and Table 502.03-4.

ON PAGE 274, SUBSECTION 502.03.E.5 – REMOVAL OF FALSEWORK AND FORMS

Add note ^(c) to the 4th row (Bridge decks, top slabs of concrete box culverts or stifflegs) of Table 502.03-5.

Add the following note to the "Minimum Days" column

- ^(f) 1 day is 24 hours.

ON PAGE 276, SUBSECTION 502.03.F.4 – PLACING CONCRETE/MASSIVE PLACEMENT

Delete the second paragraph and replace with:

Concrete used in massive placements must not exceed a temperature of 158 °F at any time from placement through the full 7-day curing period. The difference between the surface temperature and the center of mass temperature for a placement must not exceed 35 °F at any time from placement throughout the full 7-day curing period.

ON PAGE 283, SUBSECTION 503.02 – MATERIALS

Add the following:

Splices 708.32

Add the following after the second paragraph:

Order additional mechanical splices to account for field sampling.

ON PAGE 285, SUBSECTION 503.03.E – SPLICES

Delete the fifth and sixth paragraph and replace with:

Make one tension test specimen splice to represent each lot of bars spliced at the project site and submit for testing 15 calendar days before installation. A lot consists of every 50 epoxy-coated or every 50 non-epoxy-coated bars spliced at the project site of one size. Tension test each specimen to destruction or to the specified ultimate strength, whichever is less.

ON PAGE 303, SUBSECTION 505.03.A – GENERAL

In the second sentence of the second paragraph delete:

required production pile length

And replace with:

revised estimated production pile length

Add the following to the end of A. General:

Piles must achieve the required pile driving criteria through 2 consecutive, 1-foot or 1-inch penetration intervals.

ON PAGE 304, SUBSECTION 505.03.E – STEAM, AIR, DIESEL, HYDRAULIC HAMMERS

Add the following to the end of E. Steam, Air, Diesel, Hydraulic Hammers:

Provide hydraulic hammers with at least 3 hydraulic control settings that ensure predictable energy or equivalent ram stroke. The maximum stroke for concrete piles is 2 feet. The hydraulic hammer stroke must be able to be set at 0.5-foot increments up to the maximum stroke. Supply hammer instrumentation with an electronic read out and control unit that allows the Engineer to monitor, and the operator to read and adjust the hydraulic hammer energy or equivalent ram stroke. When pressure measuring equipment is required to determine hydraulic hammer energy, calibrate the pressure measuring equipment before use in accordance with the hammer manufacturer's written requirements. Provide an acceptable written record of the calibration before beginning pile driving. If the Contractor is

unfamiliar with hydraulic hammer operation, a manufacturer's representative must be onsite for the first driven piles to ensure that the equipment is operated properly.

ON PAGE 306, SUBSECTION 505.04 – METHOD OF MEASUREMENT

Replace 1. with the following:

1. Provide and drive piles and test piles will be by the foot of pile below the cutoff elevation not including the pile shoe or tip.

ON PAGE 306, SUBSECTION 505.05 – BASIS OF PAYMENT

In the second sentence of the second paragraph delete:

required pile lengths

And replace with:

revised estimated pile lengths

Add the following after the last paragraph:

The cost to drive pile shoes or tips is incidental.

ON PAGE 313, SECTION 507 – BRIDGE BEARINGS

507.01 Description. Provide and place bearings including plain unreinforced elastomeric pads, reinforced elastomeric pads with steel laminates, or polytetrafluoroethylene (PTFE) pads with stainless steel mating surface that meet AASHTO Specifications for Highway Bridges at girder supports as specified in the plans.

Provide bearings with the dimensions, material properties, elastomer grade, and type of laminates specified. Show the design load specified and testing requirements.

If filled PTFE sheet is used, only glass-fiber filler will be approved.

507.02 Materials. Provide bearings as specified in:

| | |
|-----------------------------------------------|--------|
| Elastomeric Bearings | 720.02 |
| Polytetrafluoroethylene (PTFE) Bearings | 720.03 |

Provide manufacturer certificates of compliance for materials used in the bearings.

507.03 Construction Requirements.

1. Fabrication. Fabricate bearings as specified in 720.02.
2. Testing. Test materials for elastomeric bearings and finished bearings as specified in 720.02.
3. Installation. Install bearings as specified in 720.02.

507.04 Method of Measurement. The Engineer will measure acceptably completed work by the each.

507.05 Basis of Payment. The Department will pay for acceptable quantities as follows:

| Pay Item | Pay Unit |
|---------------------------------------|-----------------|
| Elastomeric Bearings – Plain..... | Each |
| Elastomeric Bearings – Laminated..... | Each |
| PTFE Bearings..... | Each |

ON PAGE 317, SUBSECTION 509.02 – MATERIALS

Delete 509.02 Materials and replace with:

509.02 Materials. Provide materials as specified in:

| | |
|---------------------------------------|--------|
| Portland Cement..... | 701 |
| Aggregate..... | 703 |
| Air Entraining Admixtures..... | 709.03 |
| Set Retarding Admixtures..... | 709.04 |
| Water Reducing Admixtures..... | 709.05 |
| Lithium Nitrate Admixtures..... | 709.06 |
| Secondary Cementitious Materials..... | 714 |
| Water..... | 720.01 |

The Engineer will accept nonstructural concrete from qualified concrete suppliers by certification.

ON PAGE 317, SUBSECTION 509.03.A – PROPORTIONING

Insert the following at the beginning of 509.03.A:

A. Proportioning. Submit a concrete mix design and include compressive strength data from the Contractor's laboratory or an approved independent laboratory. Uniquely identify each submitted mix design. Submit the proportion of the ingredients for each mix design for Engineer review. Proportion each batch as specified in 509.03.

Replace AASHTO TP 110 with AASHTO T 380 and delete ASTM C1567.

ON PAGE 320, SUBSECTION 510.02.E – PACKAGING

Add the following title to the latex-modified concrete properties table:

Table 510.02-2 – Latex-Modified Concrete Properties

ON PAGE 321, SUBSECTION 510.02.E – PACKAGING

Add the following title to the silica fume concrete properties table:

Table 510.02-3 – Silica Fume Concrete Properties

Delete the minimum cement content of 560 lb/yd³ and replace with 520 lb/yd³.

ON PAGE 324, SUBSECTION 510.03.E –PLACING AND FINISHING

Add the following to the end of the section:

Apply a continuous fog spray of water to screeded and finished concrete. Provide fogging equipment for spreading a fine mist over concrete surfaces without ponding water. Continue fogging behind the final floating operation until placement of the cure system, and as directed by the Engineer. Do not fog concrete surfaces to aid surface finishing.

ON PAGE 328, SUBSECTION 511.02.C – SPRAY-APPLIED WATERPROOFING SYSTEM TYPE E SYSTEM

Delete D4541 and replace with D7234.

ON PAGE 335, SUBSECTION 512.04 – METHOD OF MEASUREMENT

Delete the sentence and replace with:

The Engineer will measure acceptably completed work by the square foot of wall surface area from the bottom to the top of the gabion baskets.

ON PAGE 335, SUBSECTION 512.05 – BASIS OF PAYMENT

Delete the section and replace with:

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

| Pay Item | Pay Unit |
|------------------------|-----------------|
| Gabion Structure | SF |

Structural excavation, gabion basket backfill, geotextile, backfill behind gabion baskets, and compacting backfill are incidental.

ON PAGE 337, SUBSECTION 521.03.A – TESTING/GENERAL

In the last sentence, delete “additional” and change “An” to “A”.

ON PAGE 337, SUBSECTION 521.03.B – TESTING/TESTING AND REPORTING

Delete the first sentence and the first 3 bullets.

Delete the first sentence of the second paragraph and replace with:

The consultant engineer will operate the pile driving analyzer and monitor pile driving in real time on-site or remotely, from the beginning to the end, or as directed.

Add to the end of the second numbered list:

4. Graphs showing RMX, BLC, CSI, STK, and FMX by depth of penetration.
5. The hammer stroke and blow count when the CAPWAP analysis is performed will also be included.

Delete the last paragraph on the page and replace with:

The Contractor will submit a final CAPWAP analysis report to the Engineer that is sealed and signed by an Idaho licensed professional engineer within 2 working days after the test(s) completion for each project site visit. The report will contain the required information and the CAPWAP analysis. The report must include the project key number, and information on the test pile, soil conditions, pile driving hammer, field test results (including the pile hammer stroke height at the hammer blow used for the CAPWAP analysis and the interval pile hammer blow count), and CAPWAP analysis with any comments that the consultant may have on the results.

ON PAGE 340, SUBSECTION 522.02 – MATERIALS

Delete Table 522.0-1 – CDF Mixture Properties and replace with:

Table 522.02-1 – CDF Mixture Properties

| CDF Mix Property | |
|------------------------------------------------|-------------|
| Maximum gallons of mixing water per cubic yard | 50 |
| Pounds of cement per cubic yard | 50 ± 5 |
| Pounds of fly ash per cubic yard | 250 ± 10 |
| Pounds of dry aggregate per cubic yard (an | 3,200 ± 100 |
| Slump, inches | 6-8 |

Delete the following sentence at the end of the subsection:

Provide CDF verification test results from 3 compressive strength testing cylinders.

ON PAGE 341, SUBSECTION 551.01.A – GENERAL

Add the following after the first paragraph:

Survey the bridge deck and approach slabs before overlay surface preparation and after overlay placement as specified in 675.03.S.3.e.

ON PAGE 345, SUBSECTION 551.03.B.1.a – CONTRACTOR QUALIFICATION AND TRIAL OVERLAY/EXPERIENCE/TRIAL OVERLAY

Replace the second sentence of the third paragraph with the following:

The pull-off tests must have a minimum tensile bond strength of 250 psi or a failure area at a depth of 1/8 inch or more into the base concrete in at least 50 percent of the test area.

ON PAGE 346, SUBSECTION 551.03.B.2.a – CONTRACTOR QUALIFICATION AND TRIAL OVERLAY/NO EXPERIENCE/TRIAL OVERLAY

Delete the first paragraph and replace with:

Trial Overlay. Meet the requirements for a trial overlay given in 551.03.B.1 except the minimum plan dimensions of the concrete pad and trial overlay are 12 feet in width and 75 feet in length. The trial overlay must meet the following additional requirements:

ON PAGE 348, SUBSECTION 551.03.F – PLACEMENT OF PPC

Add the following after the last paragraph:

Ensure a minimum $\frac{3}{4}$ inch overlay depth. If the overlay thickness at any location on the bridge or approach slab is expected to be more than 1 inch thick, string lines must be used for grade control of the finishing machine.

ON PAGE 352, SECTION 553 – EPOXY OVERLAY

Delete the entire section and replace with the following:

SECTION 553 – EPOXY OVERLAY

553.01 Description. Prepare and apply an epoxy and aggregate overlay on the concrete bridge deck surface area between the curb faces and from the beginning to the end of the bridge and on the approach slabs as specified. Submit the following:

- A. Submit the name and phone number of the epoxy material manufacturer's technical representative at the preconstruction meeting.
- B. At least 10 calendar days before the epoxy overlay placement, submit:
 1. The epoxy materials manufacturer's written mixing instructions, safety data sheets, independent test results, and a certificate of compliance stating the epoxy materials meet the requirements listed in Table 553.02-1.
 2. Independent test results and a certificate of compliance stating the aggregates meet the requirements listed below in Tables 553.02-2 and 553.02-4 or in Tables 553.02-3 and 553.02-4 and that it is compatible with the epoxy material.

553.02 Materials. Provide an epoxy resin base and hardener that is a modified Type III, 2-component system that meets the requirements of ASTM C881, Grade 1, Classes B and C. Store the epoxy in accordance with the manufacturer's specifications. Ensure epoxy properties meet Table 553.02-1:

Table 553.02-1 – Epoxy Requirements

| Property | Requirement | Test Method |
|-----------------------------------------|------------------------------------------------|-----------------------------------------------------------------|
| Gel Time | ≥ 15 to ≤ 45 | ASTM C881, Paragraph 11.2 modified |
| Tensile Strength (neat) | $\geq 2,000$ psi to $\leq 5,000$ psi at 7 days | ASTM D638 |
| Tensile Elongation (neat) | $\geq 40\%$ to $\leq 80\%$ at 7 calendar days | ASTM D638 |
| Viscosity | > 7 to < 25 poises | ASTM D2393, Brookfield RVT Spindle No. 3 at 20 rpm |
| Minimum Compressive Strength at 3 hours | 1,000 psi at 75 °F | ASTM C579 modified (with plastic inserts), mixed with aggregate |

| | | |
|------------------------------------------|----------------------|-----------------------------------------------------------------|
| Minimum Compressive Strength at 24 hours | 5,000 psi at 75 °F | ASTM C579 modified (with plastic inserts), mixed with aggregate |
| Minimum Adhesion Strength at 24 hours | 250 psi at 75 °F | ACI 503R, Appendix A, VTM 92 |
| Permeability to chloride ion at 28 days | 100 coulombs maximum | AASHTO T 277 |

Pack materials in puncture, rupture, and leak proof containers. Label each container as part A or part B and clearly mark the name and address of the manufacturer, name of the product, mixing proportions and instructions, lot and batch numbers, date of manufacture, and quantity.

Provide aggregate topping that is clean, dry, and free from deleterious matter. Ensure the aggregate is compatible with the epoxy material. Furnish aggregates in appropriate packaging that is clearly labeled (i.e., showing the name of the manufacturer and location of processing) and protects the aggregate from contaminants, rain, and other moisture. Provide aggregate as shown in the plans and that meets the properties in Tables 553.02-2 or 553.02-3. If aggregate is not specified in the plans, either aggregate is acceptable. Provide an aggregate with gradation that meets the requirements in Table 553.02-4.

TABLE 553.02-2 – Calcined Bauxite Aggregate Requirements

| Property | Requirement | Test Method |
|-------------------------------------------------------|--------------|--------------------------------------|
| Resistance to Degradation – LA Abrasion Test | 20% maximum | AASHTO T 96 or ASTM C131 “D” Grading |
| Resistance to Degradation – Micro-Deval Abrasion Test | 5% maximum | AASHTO T 327 or ASTM D6928 |
| Moisture Content | 0.2% maximum | AASHTO T 255 |
| Aluminum Oxide | 87% minimum | ASTM C25 |
| Mohs Scale Hardness | 8 minimum | ----- |

TABLE 553.02-3 – Standard Aggregate Requirements

| Properties | Requirement | Test Method |
|-------------------------------------------------------|--------------|---------------------------------------|
| Resistance to Degradation – LA Abrasion Test | 20% maximum | AASHTO T 96 or ASTM C131, “D” Grading |
| Resistance to Degradation – Micro-Deval Abrasion Test | 10% maximum | AASHTO T 327 or ASTM D6928 |
| Moisture Content | 0.2% maximum | AASHTO T 255 |
| Mohs Scale Hardness | 7 minimum | ----- |

Table 553.02-4 – Aggregate Gradation AASHTO T 27

| Sieve Size | Total Percent Passing |
|------------|-----------------------|
| No. 4 | 100 |
| No. 6 | 95 – 100 |
| No. 16 | 0 – 5 |

553.03 Construction Requirements.

Ensure the epoxy overlay manufacturer's representative is on the project site at all times and who, upon consultation with the Engineer, may suspend work items that do not meet specification requirements. Work may resume only after taking appropriate remedial action to satisfy the manufacturer's representative and the Engineer. Plan and perform the work to allocate the specified minimum curing periods, or other longer curing periods prescribed by the manufacturer, before opening to public or construction traffic.

A. Equipment. For mechanical applications, provide equipment with a minimum of an epoxy distribution system, aggregate spreader, application squeegee, moisture and oil-free compressed air, and a source of lighting if work will be performed at night. Ensure the epoxy distribution system accurately blends the epoxy materials in accordance with the manufacturer's written specifications and distributes epoxy at the specified application rates to cover 100 percent of the work area. Propel aggregate spreader to uniformly and accurately apply the aggregate.

For manual applications, provide equipment with calibrated containers for measuring epoxy volumes, a paddle-type mixer, squeegees, shovels, and brooms that are suitable for mixing the epoxy and applying the epoxy and aggregate at the specified application rates.

B. Preparation of Concrete Surfaces. Repair minor potholes and delamination in the deck surface by removing the damaged concrete and patching with an Engineer-approved cementitious patching material before installation of the overlay. Epoxy overlay material is an acceptable alternate patching material. Strike off patches so they are level with the existing deck and finish with wooden floats. Portland cement concrete patches require a minimum cure period of 28 calendar days before application of the overlay.

Before placing the overlay, obliterate all pavement markings and thoroughly clean the entire concrete deck by steel shot blasting to ensure proper bonding between the epoxy and the concrete substrate. Achieve a final surface texture meeting numbers 5 through 7 as defined in ICRI Guideline No. 03732 and as shown by surface profile samples available from ICRI, or ASTM E965 pavement macrotexture depth of 0.04 to 0.08 inches. Shot blasting is meant to expose the coarse aggregate and ensure the surface is cleaned of asphalt material, oil, dirt, rubber, curing compounds, paint carbonation, laitance, weak surface mortar, and other potentially detrimental materials, which may interfere with the bonding, or curing of the overlay. Remove and repair loosely bonded patches and remove pavement markings. Use moisture and oil-free compressed air or high volume leaf blowers to remove dust that adheres to the prepared surface.

In order to determine the adequacy of the surface preparation, perform at least 1 bond test per lane of each bridge. For each test, apply palm-sized patties of binder aggregate, $\frac{1}{4}$ to $\frac{3}{8}$ inch thick at 3 locations. After the samples have cured, remove the patties with a hammer, and chisel to examine the fracture and delamination plane. Verify concrete with fractured aggregate has attached to the entire underside of the patty. If only lattice or small particles of concrete are attached, further deck preparation is required.

C. Overlay Application. Handle and mix the epoxy resin and hardening agent in a safe manner to achieve the desired results in accordance with the specifications and the manufacturer's written instructions. Only apply epoxy overlay materials when weather or surface conditions allow the material to be properly handled, placed, and cured within the specified requirements for project sequencing, traffic control, or when rain is not imminent within the manufacturer's recommended cure times. Completely dry the prepared surface when applying epoxy. The Engineer may allow moisture and oil-free heat sources or torches to dry the surface. Ensure the temperature of the deck surface, epoxy, and aggregate components are at least 55 °F and rising at the time of application. Do not apply epoxy if the gel time is less than 5 minutes or if pavement temperatures exceed 115 °F. In situations where road closures are

not under strict time constraints, obtain the Engineer's approval to apply epoxy at lower temperatures. Apply the epoxy overlay and aggregate using a double pass method. The double pass method applies the epoxy and aggregate in 2 separate layers at the corresponding application rates specified in Table 553.03-1.

TABLE 553.03-1 – Double Pass Method – Epoxy and Aggregate Application Rates

| Double Pass Method | Estimated Epoxy Rate gal/yd ² | Aggregate lbs/yd ² (a) |
|------------------------|------------------------------------------|-----------------------------------|
| 1 st Course | 0.22 | 10 |
| 2 nd Course | 0.45 | 14.5 |

(a) Application of aggregate must be of sufficient quantity to completely cover the epoxy.

Mix the epoxy at a volume ratio of 1 part A to 1 part B and mechanically stir with a paddle-type mixer for 3 minutes or according to the epoxy manufacturer's written instructions. After the epoxy has been properly mixed, immediately and uniformly apply to the pavement surface with a 3/16 to 1/4 inch V-notched squeegee. Apply the aggregate to cover the epoxy material while the epoxy material while the epoxy is still fluid. Remove and replace first course applications that do not receive enough aggregate before gelling.

Ensure each course of epoxy overlay cures before removing the excess unbonded aggregate to prevent tearing or damaging of the surface. Use moisture and oil-free compressed air, high-volume leaf blowers, or vacuum broom to remove excess aggregate. After loose aggregate is removed, remove remaining dust using moisture and oil-free compressed air, high-volume leaf blowers, or vacuum broom. Obtain the Engineer's approval before opening the first course to traffic. Begin application of the second course only after removing dust. The Department prohibits traffic on the overlay until it has cured sufficiently to prevent damage from wheel loads as specified in Table 553.03-2.

Table 553.03-2 – Typical Curing Times

| Average Temperature of Deck, Epoxy, and Aggregate Components in °F | | | | | | |
|--------------------------------------------------------------------|--------|-------|--------|-------|--------|----------------|
| Course | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | Above 85 (a) |
| 1 | 4 hr | 3 hr | 2.5 hr | 2 hr | 1.5 hr | 1 hr |
| 2 | 6.5 hr | 5 hr | 4 hr | 3 hr | 3 hr | less than 3 hr |

(a) Refer to manufacturer's written instructions.

Apply the second course at the rates specified in Table 553.03-1. Apply epoxy to ensure the wet epoxy does not coat the wear (top) surface of the aggregate. Once the epoxy is cured, remove loose aggregate from the surface with moisture and oil-free compressed air, high volume leaf blowers, or vacuum broom. After removing loose aggregate, if there are any areas where epoxy has coated the top surface stone, remove the excess epoxy using a light shot or sandblast.

Protect the bridge deck expansion joints with a bond breaker (e.g., duct tape) that can adequately seal the joints from the epoxy. The Contractor may also use duct tape to delineate application areas. The Department recommends taped areas or bond breakers be removed before epoxy starts to harden. The Contractor may also remove epoxy by scoring the overlay before gelling or by saw cutting after cure. Feather the overlay out at the end of the bridge or approach slab and at expansion joints (edge of armor angle) in accordance with the manufacturer's written instructions.

If the Contractor's operations or actions damage or mar the overlay, remove the damaged areas and

reapply the overlay to the Engineer's satisfaction. In the event that part of the epoxy mixture does not cure, completely remove the overlay from the affected area and discard. Completely remove residual epoxy remaining on the pavement by mechanical means (e.g., steel shot, abrasive blasting, scarifying) before reapplying the overlay.

Maintain and provide records for each batch provided, including:

1. Number of batches mixed and volume per batch.
2. Location of batches as placed on deck, referenced by stations.
3. Batch time.
4. Gel time (50 milliliter sample).
5. Temperature of the air, deck surface, and epoxy components.
6. Loose aggregate removal time.
7. Time open to traffic.

553.04 Method of Measurement. The Engineer will measure acceptably completed work by the square foot of deck surface.

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

| Pay Item | Pay Unit |
|---------------------|-----------------|
| Epoxy Overlay | SF |

Surface preparation, including obliteration of pavement markings, is incidental. Patch and repair of concrete will be paid under 582.

ON PAGE 358, SUBSECTION 565.01 – DESCRIPTION

Delete products 2, 3, and 4.

ON PAGE 358, SUBSECTION 565.02.A – BINDER MATERIAL

Delete existing sentence and replace with:

Provide premixed, premeasured polymer asphalt expansion joint binder material and aggregate. Ensure joint binder material meets the requirements in Table 565.02-1. Ensure aggregate is crushed, double washed, and dried granite, basalt, or orthoquartzite and is premixed with binder material.

ON PAGE 359, SUBSECTION 565.02.B – AGGREGATE

Delete in its entirety.

ON PAGE 359, SUBSECTION 565.03.C – BINDER

Delete the last sentence.

ON PAGE 360, SUBSECTION 565.03.G – AGGREGATE PREPARATION

Delete in its entirety.

ON PAGE 360, SUBSECTION 565.03.H – AGGREGATE PROPORTION AND LAYER THICKNESS

Delete in its entirety.

ON PAGE 361, SUBSECTION 566.02 – MATERIALS

Delete the entire subsection and replace with the following:

566.02 Materials. Provide neoprene seals and adhesive as specified on the plans or an approved equal and as specified in 704.04.

ON PAGE 363, SECTION 568 – ELASTOMERIC CONCRETE HEADER

Delete the entire section and replace with the following:

SECTION 568 – ELASTOMERIC CONCRETE HEADER

568.01 Description. Provide and install elastomeric concrete headers in prepared blackout areas as specified. Include the collection and disposal of waste debris.

568.02 Materials. Provide elastomeric concrete that consists of a field-mixed, 2-part polyurethane material and pre-graded aggregate mix; the Department does not allow epoxy-based materials.

Provide a manufacturer’s certification that attests the proposed materials are pre-tested and meets this specification.

A. Elastomeric Concrete. Provide ambient cure material, 100 percent solids, 2-component polyurethane with pre-graded aggregate mix exhibiting the physical properties listed in Tables 568.02-1 and 568.02-2. When properly mixed and poured, the elastomeric concrete cures rapidly, flows and fills voids, spalls, or irregularities to form a monolithic unit.

Table 568.02-1 – Elastomeric Cured Binder

| Physical Properties | Test Method | Minimum Requirement |
|---------------------|-------------|---------------------|
| Tensile Strength | ASTM D638 | 1,000 psi |
| Ultimate Elongation | ASTM D638 | 150% |
| Tear Resistance | ASTM D624 | 80 lb/in |

Table 568.02-2 – Elastomeric Cured Binder and Aggregate

| Physical Properties | Test Method | Minimum Requirement |
|-------------------------------|-------------|---------------------|
| Compressive Strength | ASTM D695 | 2,000 psi |
| Resilience @ 5% deflection | ASTM D695 | 90% |
| Wet Bond Strength to Concrete | Note 1 | 250 psi |
| Impact Resistance @ -20 °F | Note 2 | No cracks |
| Durometer Hardness | ASTM D2240 | 50 |

Note 1: Saw briquette in half so that cut surface area equals approximately 1 square inch. Ensure mortar briquette conforms to ASTM C190. Place briquette in mold and cast elastomeric concrete against sandblasted surface. Submerge specimen in room temperature water for 7 calendar days. Test specimen to failure using a Riehle Briquette Tester. Failure can occur anywhere within the test specimen.

Note 2: Cast 2.5-inch diameter and 0.375-inch thick disc test specimens then condition for 4 hours at test temperature. Drop a 1 pound steel ball onto the center of the specimen through a plastic tube from a height of 7 feet.

B. Bonding Agent. Provide manufacturer's 2-component, 100 percent solids bonding agent. Apply bonding agent to the sides and base of the preformed concrete blockout before elastomeric concrete placement. Store, mix, and apply in accordance with the manufacturer's safety data sheet and written instructions.

Identify liquid components by the following information:

Part A – Resin Color: Clear

Part B – Activator Color: Tan

Submit certified test results meeting the requirements in Tables 568.02-1 and 568.02-2 for the proposed products for approval before use.

568.03 Construction Requirements. Meet with the Engineer and discuss the method of installation before performing the work pertaining to the elastomeric concrete headers.

Ensure a qualified manufacturer's representative is onsite during the initial installation to meet with the Contractor and the Engineer, to train the Contractor in mixing and placement procedures, and to ensure the installation procedures are in accordance with the manufacturer's warranty requirements.

Ensure the concrete blockout has cured for 7 calendar days and has reached a minimum compression strength of 3,000 psi before placing elastomeric concrete. Sandblast and vacuum the blockout surfaces and immediate surrounding concrete area to remove dirt, dust, sand, oil, grease, paint, corrosion deposits, laitance, and bond-inhibiting materials immediately before placing the elastomeric concrete.

Prime the substrate surface as specified by the manufacturer and ensure joint gap is as specified on the plans before placing the elastomeric concrete. Mix and place the elastomeric concrete in accordance with the manufacturer's instructions and as specified. Provide the Engineer with 1 set of the manufacturer's instructions at least 1 week before the placement begins. Install the elastomeric concrete when the temperature is at least 45 °F and rising.

568.04 Method of Measurement. The Engineer will measure acceptably completed work by the cubic yard.

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

| Pay Item | Pay Unit |
|----------------------------------|----------|
| Elastomeric Concrete Header..... | CY |

Removal of existing expansion joint material within designated blockout areas and expansion joint seal installation are covered in other contract pay items.

ON PAGE 367, SECTION 576 – GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCEMENT

Delete the entire section and replace with:

576.01 Description. Provide and place glass fiber reinforced polymer (GFRP) as specified.

576.02 Materials. Provide GFRP reinforcement meeting ASTM D7957/D7957M. Provide GFRP reinforcement that is deformed and/or sand coated.

A. Submittals. Provide 2 copies of written certifications that the GFRP reinforcement meets this specification. The written certification must list the identifying lot information and test values and test procedures used to determine the physical properties of the GFRP reinforcement. Provide certifications bearing the notarized signature of a manufacturer's representative having quality control responsibility. Identify each bundle of GFRP reinforcement with a durable tag displaying the corresponding lot numbers.

B. Repair Material. Comply with the bar manufacturer's requirements for the material used to repair the cut ends of GFRP reinforcement. Perform all repairs of cut ends at the GFRP reinforcement manufacturer's plant unless otherwise approved.

576.03 Construction Requirements.

A. Material Handling. When handling GFRP reinforcement, use equipment that avoids damaging or abrading the GFRP reinforcement. Do not drop or drag the GFRP reinforcement.

B. Storage. Store GFRP reinforcement above the ground surface on platforms, skids, or other supports as close as possible to the point of placement. Cover the bars with opaque plastic or other types of cover to protect the bars from the external environment. Prevent exposure of GFRP reinforcing bars to temperatures above 120 °F during storage.

C. GFRP Placement. Secure GFRP reinforcement firmly in place before and during concrete placement by means of bar supports adequate in strength and number to prevent displacement and to keep the reinforcing at the proper distance from the forms and as specified in 503.03.D. Steel tie wires, bar chairs, supports, or clips must be fully coated with either epoxy or plastic. Provide adequate vertical restraint of GFRP reinforcement to prevent upward movement in the fresh concrete due to buoyancy.

When placed in the work, reinforcement must be free from dirt, paint, grease, oil, or other foreign materials deleterious to bonding with the surrounding concrete. Before placing concrete, remove foreign materials by cleaning the bars using methods and materials recommended by the bar manufacturer and Engineer approved.

D. Field Cutting. Field cutting GFRP reinforcement is not permitted, except with the Engineer's prior approval. Shear cutting and flame cutting are not permitted methods of field cutting. Coat field cut ends as described in this specification. Repair all surface damage due to field cutting GFRP reinforcement as described below or replace the bar with an undamaged bar.

E. Bending. If bent GFRP reinforcement is required, the bends must be pre-fabricated. Field bending or straightening of GFRP reinforcement is not permitted.

F. Repair of Bar Damage. Repair all visible damage to the accepted GFRP reinforcement. Repair damaged areas using materials and procedures specified by the GFRP manufacturer.

G. Concrete Placement. If the reinforcement is not adequately supported or tied to resist settlement, floating upward, or movement in any direction during concrete placement, halt concrete placement until corrective measures are taken.

576.04 Method of Measurement. The Engineer will measure GFRP reinforcement by the foot.

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

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

| | |
|-----------------------------------------------------------|----|
| Glass Fiber Reinforced Polymer (GFRP) Reinforcement | ft |
|-----------------------------------------------------------|----|

Ties, bar chairs, supports, or clips used for fastening GFRP reinforcement in place are incidental.

ON PAGE 370, SUBSECTION 577.03.A – CONCRETE COLUMNS

Add the word “at” in the third sentence, so the text reads “Install spacer sets at the top, bottom, and at intervals of 6 feet or less along the column.”.

ON PAGE 370, SUBSECTION 577.02.B – SHELL OR H-PILES

Delete the word “course” and replace with “coarse”.

ON PAGE 370, SUBSECTION 577.03.B – SHELL OR H-PILES

Delete “Shell or” from letter B.

Add letter C:

- C. Shell Piles. Fill the lower 5 feet of the sleeves with coarse aggregate before placing and compacting the MSE backfill, and after the pile is lowered into the sleeve but before pile driving begins. Ensure the inside sleeve is not closer than 2 inches from the steel pile.

ON PAGE 370, SUBSECTION 577.03.D – COARSE AGGREGATE FINISHING

Add the following new subsection heading before the last paragraph:

- D. Coarse Aggregate Finishing.

Also, in the same paragraph, replace “course” with “coarse”.

ON PAGE 371, SUBSECTION 578.01.B – SUBMITTALS

Delete the second paragraph.

At the end of the subsection add:

- Submit the electronic as-built shop drawings in PDF format before contract closeout.

ON PAGE 372, SUBSECTION 578.03 – CONSTRUCTION REQUIREMENTS

Add the following sentence to the end of the second paragraph:

- Ensure that dimensional tolerances meet ASTM C1577, Section 12.

Delete the eighth paragraph and replace with the following:

- Apply a waterproof membrane as specified in 511 to the top slab of all buried culverts. Use waterproof membrane Type D when ballast and asphalt pavement are placed across the culvert. Use waterproof membrane Type E when only asphalt pavement is placed across the culvert.

ON PAGE 378, SUBSECTION 582.03.A – PREPARATION OF CONCRETE SURFACES

Delete the heading for part A and replace with the following:

A. Preparation of Concrete Surfaces.

Delete the 5 requirements and replace with:

1. Compressive Strength: 4,500 psi minimum at 28 days, per ASTM C109.
2. Bond Strength: slant shear: 1,500 psi minimum at 28 days, per ASTM C882.
3. Drying shrinkage: less or equal to 0.10 percent, per ASTM C157.
4. Permeability will be 2,000 coulombs or lower at 28 days, per ASTM C1202.
5. Freeze-thaw resistance will have a durability factor of 90 percent or higher after a minimum of 300 cycles, per ASTM C666.
6. Coefficient of thermal expansion: between $5.3 \times 10^{-6}/^{\circ}\text{F}$ and $6.4 \times 10^{-6}/^{\circ}\text{F}$, per ASTM C531 (optional).

ON PAGE 394, SECTION 601 – PIPES, GENERAL

Delete the word “Conduits” from the section title and replace with the word “Pipes”.

ON PAGE 394, SUBSECTION 601.02 – MATERIALS

Add as the new first sentence in this subsection:

$\frac{3}{4}$ ” Aggregate for Untreated Base, Type B per 703.04 with Class A compaction may be used in the bedding zone of culverts outside the roadway prism in shallow trenches (e.g., for approaches, driveways).

In the second sentence of the first paragraph, replace “AASHTO PP 63” with “AASHTO R 82”.

ON PAGE 394, SUBSECTION 601.03.A – GENERAL

Add the following to the end of 601.03.A:

Minimum and maximum pipe cover heights will be measured from top of pipe to finished grade.

Designs for larger pipe sizes, different pipe cover heights or conditions not included in these Standard Specifications or the Special Provisions, must be performed by an Idaho licensed professional engineer.

ON PAGE 394, SUBSECTION 601.03.B – CONCRETE PIPE

Add the following to 601.03.B after the first paragraph:

Recess the pipe bedding to receive pipe bells.

Pipes that show cracks or other damage will be rejected.

Minimum concrete pipe cover is 1 foot.

ON PAGE 394, SUBSECTION 601.03.D – PLASTIC PIPE

Add the following to the end of 601.03.D:

Table 601.03.D-1 – Minimum Plastic Pipe Cover Heights

| Road Surface Type | Minimum Plastic Pipe Cover Height ^(a) (ft) |
|------------------------------|-------------------------------------------------------|
| Flexible Pavement or Unpaved | 2.0 |
| Rigid Pavement | 1.5 |

^(a) Minimum cover for plastic pipe larger than 48 inch diameter is half the pipe diameter.

ON PAGE 396, SECTION 602 – CULVERTS

Delete section 602, in its entirety, and replace with:

602.01 Description. Provide and install culverts.

602.02 Materials. Provide materials as specified in 601.

Provide pipe joints that are either silt-tight or leak-resistant as specified in 601.02.

Provide size No. 1, 2a, or 2b coarse aggregate for concrete as specified in 703.02 and ¾ inch minus aggregate for untreated base as specified in 703.04.

Controlled density fill as specified in 522.

602.03 Construction Requirements. Install pipes as specified in 601.03.

In continuous water flow situations (e.g., creek crossings), place controlled density fill in the bedding zone for 3 feet of culvert length at the upstream end.

602.04 Method of Measurement. The Engineer will measure acceptably completed work by the foot along pipe centerline. The Engineer will allow an additional 1 foot for each connecting band used in making an authorized extension of existing corrugated metal pipe. The Engineer will include culvert sections attached to aprons in culvert measurements.

Pipe aprons required only because PVC or PE pipe is used will not be measured or paid for separately when other pipe material is acceptable.

602.05 Basis of Payment. The Department will pay for accepted quantities as follows:

| Pay Item | Pay Unit |
|---------------------------|----------|
| _____ Pipe Culverts | ft |
| _____ Pipe Arch | ft |

Structure excavation, compacting backfill, trench zone backfill, and pipe bedding zone material are incidental and included in the culvert contract unit price.

ON PAGE 397, SECTION 603 – PIPE SIPHONS

Delete section 603, in its entirety, and replace with:

603.01 Description. Provide and install pipe siphons.

603.02 Materials. Provide materials as specified in 601.

Provide pipe joints that are leak-resistant with a maximum working pressure of 10 psi as specified in 601.02.

Provide size No. 1, 2a, or 2b coarse aggregate for concrete as specified in 703.02 and ¾ inch minus aggregate for untreated base as specified in 703.04.

603.03 Construction Requirements. Install metal pipe siphons as specified in 601.03.

Completely fill the siphon with water and repair leaks that develop before backfilling, using approved methods. If there are leaks around joints in rubber-gasketed concrete pipe, encase the joint using an approved reinforced concrete collar. Only 2 collar and joint repairs are allowed for each 150 feet of pipe. Empty the siphon of water before making repairs and then refill, retest, and obtain approval before backfilling.

603.04 Method of Measurement. The Engineer will measure acceptably completed work by the foot along pipe centerline. The Engineer may calculate the length from the dimensions of the approved siphon layout.

603.05 Basis of Payment. The Department will pay for acceptable quantities as follows:

| Pay Item | Pay Unit |
|-------------------------|----------|
| _____ Pipe Siphon | ft |

Structure excavation, compacting backfill, trench zone backfill, and pipe bedding zone material are incidental and included in the pipe siphon contract unit price.

ON PAGE 398, SECTION 604 – IRRIGATION PIPELINES

Delete section 604, in its entirety, and replace with:

604.01 Description. Provide and install irrigation pipelines.

604.02 Materials. Provide materials as specified in 601.

Provide pipe joints that are leak-resistant with a maximum working pressure of 10 psi as specified in 601.02.

Provide Size No. 1, 2a, or 2b coarse aggregate for concrete as specified in 703.02 and ¾ inch minus aggregate for untreated base as specified in 703.04.

604.03 Construction Requirements. Install pipe as specified in 601.03.

Test for leaks by closing off a section with suitable water bulkheads, filling the line with water, and applying pressure to the line equal to the maximum static head the finished line will be subjected to at the point of testing. Locate and repair leaks as approved.

604.04 Method of Measurement. The Engineer will measure acceptably completed work by the foot along pipe centerline. The Engineer will allow an additional 1 foot for each connecting band used in making an authorized extension of existing corrugated metal pipe.

604.05 Basis of Payment. The Department will pay for accepted quantities as follows:

| Pay Item | Pay Unit |
|-----------------------------|----------|
| _____ Irrigation Pipe | ft |

Structure excavation, compacting backfill, trench zone backfill, and pipe bedding zone material are incidental and included in the irrigation pipe contract unit price.

ON PAGES 399-401, SECTION 605 – SEWERS, MANHOLE AND VALVE COVERS

Delete section 605, in its entirety, and replace with:

605.01 Description. Construct sewers with manholes, inlets, connections, and other appurtenances to carry stormwater or sewage. Adjust and repair manhole and valve covers.

605.02 Materials. Provide materials as specified in:

| | |
|-------------------------------------------------------------------|--------|
| Concrete | 509 |
| Portland Cement | 701 |
| Gaskets for Concrete Pipe | 706.11 |
| Rubber Gaskets for Corrugated Metal Pipe | 706.12 |
| Metals | 708 |
| Reinforcing Steel..... | 708.02 |
| Manhole Covers and Rings, Grates, Catch Basins, Inlets, etc. | 708.22 |
| Concrete Curing Compounds and Admixtures | 709 |

Provide pipe joints that are silt-tight or leak-resistant as specified in 601.02.

Provide other materials as specified in 601.

Corrugated PE pipe may only be used for storm sewers as specified in 706.16 and with the following additions:

1. Use Type S pipe.
2. Do not subject a pipeline with couplings to pressure flow.

Use only precast concrete manufacturers that hold current certification under the NPCA Plant Certification Program, the PCAA Plan Certification Program, the ACPA QCast Plant Certifications Program, or the PCI Plant Certification Program.

Provide size No. 1, 2a, or 2b coarse aggregate for concrete as specified in 703.02 and ¾ inch minus aggregate for untreated base as specified in 703.04.

605.03 Construction Requirements. The Contractor may tunnel or jack to cross under cross walks, house drives, or service pipes. Excavate and compact backfill as specified in 210.

Lay concrete pipe for sanitary sewer lines beginning at the lower (downstream) end with the receiving end upstream and with ends fully joined using suitable means to prevent air circulation within the pipeline. Provide and install rubber-gasketed joints as specified in 601.03.

Install pipes as specified in 601.03.

Test the line for leaks before accepting the sewer line as specified in 601.03.

Install spiral rib corrugated steel pipe and ABS pipe in accordance with the manufacturer's written instructions.

Test the line for leaks before accepting the sewer line as follows:

1. Close off a section with suitable watertight bulkheads.
 - a. Fill the line with water.
 - b. Apply 4 feet of head pressure to the line measured from the top of the pipe at the upstream end, and supplying water to the section under test so the water loss may be measured.

The Engineer will not accept the sewer line if the water loss exceeds 200 gallons per inch of pipe diameter per mile per day. Locate and correct any leaks if the loss exceeds the volume allowed.

The Contractor may test by the low pressure air method as an acceptable alternate to hydraulic testing as follows:

1. Test installation on runs or sections. The Department will allow preliminary testing before backfilling. Test when the pipe is in a wet condition.
2. Use an approved apparatus and method recommended by the pipe manufacturer.
3. Prepare the installation being tested, between its plugged ends, by pressurizing it to an internal pressure of 4 psi. Air pressure is defined as the pressure in excess of back pressure on the installation that would occur if the pipe were submerged in water. Hold an air pressure of 4 psi for at least 2 minutes or as long as needed for the pressure to stabilize.
4. The tested section, when tested on the air pressure drop method, will be if the time required for the pressure to drop from 3.5 to 2.5 psi coincides with ASTM C924.

The Contractor may test connections to inlet and outlet structures by blocking off a pipe section of the outlet, filling the structure with water, and observing the water surface drop. To be acceptable, water loss must not exceed 0.002 gallons per inch of inside perimeter of connection per foot of structure height or length per hour with no outside back pressure.

Construct manholes, catch basins, inlets, sediment and oil trap manholes, and sediment control catch basins as specified in 708.22.

A. Adjusting Manhole and Valve Covers.

Adjust the existing manhole and valve covers to conform to the new finished pavement grade. Exercise care in operations in order to not damage the structures, equipment, or utilities (e.g., water, gas, power). Any damage occurring to the utilities due to the Contractor's operation will be repaired at no additional cost to the Department. Make any masonry adjustment by using bricks, concrete blocks, or placed concrete.

Coordinate with the utility owner 5 business days before lowering the manhole or valve covers. Locate and lower the manhole or valve covers before excavation and adjust to match the finished pavement grade. Where excavation is necessary to adjust to the design elevation, place backfill in 3-inch lifts and tamp by hand.

Place concrete collars around manholes and valve covers as specified. The concrete collar will be 1 foot wide, measured from the metal cover edge to the cut pavement edge. A 10-foot straightedge will be used to determine the completed installation surface smoothness. Place concrete collars ¼ inch below the finished grade. Adjust any high points by grinding.

B. Manholes, Valves, Catch Basins, and Inlets.

Construct manholes, valve frames and covers, catch basins, and inlets.

Adjust existing manhole and valve frames and covers to the finished pavement grade. Coordinate with the utility owner 5 business days before making adjustments. Replace damaged manhole or valve frames and covers.

Install concrete collars around manhole and valve frames. Use Idaho IR 87 to test surface smoothness.

605.04 Method of Measurement. The Engineer will measure the acceptably completed work as follows:

1. By the foot along pipe centerline, excluding the distance across catch basins, manholes, inlets, and other structures where the pipe, or a portion of pipe, is not actually incorporated in the finished product.
2. Manholes, valve frames and covers, catch basins, and inlets by the each.
3. Manhole and valve frame and cover adjustment and replacement by the each.

The Engineer will not measure structure excavation and backfill.

605.05 Basis of Payment. The Department will pay for acceptable quantities as follows:

| Pay Item | Pay Unit |
|-------------------------------------|-----------------|
| _____ Storm Sewer Pipe..... | ft |
| _____ Sanitary Sewer Pipe | ft |
| Manholes, Type _____ | Each |
| Catch Basis, Type _____..... | Each |
| Inlets, Type_____ | Each |
| Sediment and Oil Trap Manhole | Each |
| Sediment Control Catch Basin..... | Each |
| Adjust Manhole Covers..... | Each |
| Adjust Valve Covers | Each |
| Replace Damaged Manhole Frame..... | Each |
| Replace Damaged Valve Risers..... | Each |

Structure excavation, compacting backfill, and trench zone backfill and pipe bedding zone material are incidental, and included in the sewer, manhole and valve cover contract unit price.

ON PAGE 411, SUBSECTION 612.02 – MATERIALS

Add:

Excavation and Embankment..... 205

ON PAGE 411, SUBSECTION 612.03.A – GUARDRAIL

Add the following after paragraph 4:

Install guardrail terminals in accordance with the manufacturer’s written installation instructions. Provide and install self-adhesive object marker sheeting to the end of guardrail terminals or provide an object marker for each guardrail terminal.

ON PAGE 411, SUBSECTION 612.04 – METHOD OF MEASUREMENT

Delete the 612.04 section and replace with:

612.04 Method of Measurement. The Engineer will measure acceptably completed work as follows:

1. W-beam guardrail, precast concrete barrier, and cast-in-place concrete barrier will be by the foot, including the length of anchors, terminals, and transitions.
2. Guardrail anchors, guardrail terminals, guardrail transitions, concrete barrier terminals, and concrete barrier transitions will be per each.

ON PAGE 412, SUBSECTION 612.05 – BASIS OF PAYMENT

Delete the 612.05 section and replace with:

612.05 Basis of Payment. The Department will pay for acceptable quantities at the contract unit prices as follows:

| Pay Item | Pay Unit |
|------------------------------------------|-----------------|
| W-beam Guardrail | ft |
| Guardrail Anchor | Each |
| Guardrail Terminal, _____ | Each |
| Guardrail Transition, _____ | Each |
| Precast Concrete Barrier | ft |
| Concrete Barrier Terminal, _____ | Each |
| Concrete Barrier Transition, _____ | Each |
| Cast-in-place Concrete Barrier | ft |

The additional payment for anchors, terminals, and transitions cover the additional materials and work necessary for these items. The chamfered barrier for guardrail transition is incidental to the guardrail transition pay items.

Guardrail terminal grading is measured and paid in as specified in 205.

Miscellaneous guardrail or barrier components are incidental and the cost included in the guardrail or barrier contract unit prices.

ON PAGE 418, SUBSECTION 616.03.D.2 – FOUNDATIONS/OVERHEAD SIGN BRIDGES, CANTILEVER SIGN STRUCTURES, TEE SIGN STRUCTURES

Delete the third paragraph and replace with:

Tighten all bolts that are not anchor rods as specified in 504.03.L.2.

ON PAGE 418, SUBSECTION 616.04 – METHOD OF MEASUREMENT

Add the following after item 6:

7. Reinstalled signs will be per each sign reinstallation. Sign posts and foundations will be paid by their respective pay items.

ON PAGE 421, SUBSECTION 618.03 – CONSTRUCTION REQUIREMENTS

Delete the last sentence of the first paragraph starting with “Mark right of way...” and replace with the following:

Mark right of way and centerline monuments with station and offset.

ON PAGE 422, SUBSECTION 618.05 – BASIS OF PAYMENT

At the end of the subsection add the following:

Payment for marker posts and street monuments required under 107.19 are not included in the quantities of work under this section.

ON PAGE 425, SUBSECTION 619.03.D – POLES

In the last paragraph, delete “Formula No. 14” and replace with “Formula No. 2”.

ON PAGE 429, SUBSECTION 621.01 – DESCRIPTION

To the end of the first paragraph, add “specified”.

ON PAGE 431, SUBSECTION 621.03.D – SEEDING

Delete the first sentence in the third paragraph.

ON PAGE 434, SUBSECTION 621.03.G – WATERING

Replace “May 30 and September 15” with “May 1 and October 14”.

ON PAGE 440, SECTION 626 – TEMPORARY TRAFFIC CONTROL

Delete section 626 and replace with the following:

SECTION 626 – TEMPORARY TRAFFIC CONTROL

626.01 Description. Provide, install, maintain, remove, and relocate temporary traffic control devices.

626.02 Materials. Provide material as specified in:

| | |
|--------------------------------------|-----|
| Guardrail and Concrete Barrier | 612 |
| Crash Cushions..... | 613 |

| | |
|-------------------------------|--------|
| Signs and Sign Supports..... | 616 |
| Pavement Markings | 630 |
| Retroreflective Sheeting..... | 712.02 |

Ensure temporary traffic control devices are in acceptable or marginal conditions as defined in American Traffic Safety Services Association’s (ATSSA) Quality Guidelines for Temporary Traffic Control Devices and Features.

A. Temporary Traffic Control Signs. Provide temporary traffic control signs meeting 616.

B. Channelizing Devices. Provide weighted base tubular markers, surface-mounted tubular markers, vertical panels, drums, barricades, or other channelizing devices.

Provide weighted base or surface-mounted tubular markers that are at least 36 inches high and have at least 3 inches width when facing traffic.

Provide barricades that have the following minimum lengths:

1. Type 1: 2 feet.
2. Type 2: 2 feet.
3. Type 3: 7 feet.

C. Temporary Pavement Markings. Provide temporary pavement marking tape, temporary waterborne pavement marking paint, or temporary raised pavement markers.

1. Temporary Pavement Marking Tape. Provide retroreflective or non-retroreflective pavement marking tape.
 - a. Retroreflective Pavement Marking Tape. Use white or yellow retroreflective pavement marking tape in accordance with ASTM D4592 Type I. When used for broken-line pavement markings, use 2-foot long line segments or as otherwise shown.
 - b. Non-Retroreflective Pavement Marking Tape. Use black or gray non-retroreflective tape to cover conflicting pavement markings in accordance with ASTM D4592 Type I, except without retroreflective elements.
2. Temporary Waterborne Pavement Marking Paint. Use white or yellow waterborne pavement marking paint as specified in 630.
3. Temporary Raised Pavement Markers. Provide white or yellow 2-sided temporary flexible raised pavement markers when used on undivided highways.

Provide white or yellow reflectorized rigid raised pavement markers for temporary applications. Provide 2-sided markers when used on undivided highways. Install in accordance with the manufacturer’s written installation instructions. Ensure that markers are removable without the use of heat, grinding, or blasting.

D. Floodlights. Provide floodlights capable of illuminating flagger stations, work areas, and equipment crossings with at least 5 foot-candles or greater. Ensure floodlights are equipped with a meter that records hours of operation.

E. Arrow Boards. Provide arrow boards with a meter that records hours of operation.

F. Portable Changeable Message Signs (PCMS). Provide PCMS with message sign, control system, power source, and mounting and transporting equipment components. Provide PCMS equipped with a meter that records hours of operation.

G. Temporary Traffic Control Signal. Provide portable temporary traffic control signals in accordance with NEMA TS-5 Type TR1. Provide portable temporary traffic control signals with a meter that records hours of operation.

H. Temporary Concrete Barrier. Provide temporary concrete barrier meeting 612.

I. Temporary Crash Cushion. Provide temporary crash cushions meeting 613. Provide test-level 2 or 3 temporary crash cushions when the highway posted speed is less than 45 mph. Provide test-level 3 temporary crash cushions when the highway posted speed is greater than or equal to 45 mph.

J. Shadow Vehicle and Truck Mounted Attenuator (TMA) or Trailer Attenuator. Provide a shadow vehicle and TMA or shadow vehicle with trailer attenuator in accordance with the manufacturer's written instructions. Provide test level 2 or 3 TMAs or trailer attenuators when the highway posted speed is less than 45 mph. Provide test-level 3 TMAs or trailer attenuators when the highway posted speed is greater than or equal to 45 mph.

K. Temporary Pedestrian Facilities. Provide temporary pedestrian facilities.

1. **Pedestrian Channelizing Devices.** Provide pedestrian channelizing devices that are crashworthy, detectable to long cane users, visible to pedestrians with vision disabilities, and have continuous bottom and top surfaces. Provide a smooth and continuous hand-trailing edge between 32 and 38 inches above the walkway. Provide a continuous detection plate between 2 and 8 inches above the walkway. Ensure the hand-trailing edge and detection plate are in the same vertical plane.

On the pedestrian side of pedestrian channelizing devices or when not exposed to traffic, provide retroreflective or non-retroreflective sheeting in a contrasting pattern of alternating light and dark colors on the hand-trailing edge, positioned vertically or at a 45 degree angle, and consisting of a minimum of 6 inches of sheeting or other contrasting materials. When exposed to vehicular traffic, provide retroreflective sheeting on the hand-trailing edge and bottom detection plate.

2. **Temporary Curb Ramps.** Provide temporary curb ramps meeting ADA requirements.

L. Radar Speed Feedback Trailers. Provide radar speed feedback trailers capable of showing a Speed Limit sign above a Vehicle Speed Feedback plaque and capable of automatically dim light output to 50 percent in low light conditions. Provide the Vehicle Speed Feedback plaque with the legend YOUR SPEED in black text on an orange or yellow retroreflective background and a changeable legend displaying the speed of the approaching vehicle with two digits in orange or yellow luminous text on a black opaque background. Disable flashing, color changing, strobe lights, word messages, or other dynamic elements if the device is equipped with these features.

Ensure the changeable display is dark when no vehicles are approaching and that the changeable display goes dark when the speed of an approaching vehicle exceeds the speed limit by more than 10 mph. Ensure the Speed Limit sign and Vehicle Speed Feedback plaque are approximately the same width and that the bottom of the Speed Limit sign is at least 7 feet above the pavement with the Vehicle Speed Feedback Plaque immediately beneath the Speed Limit sign.

M. Temporary Rumble Strips. Provide temporary portable rumble strips that are black, orange, or white, require no adhesives or anchors for installation, weigh at least 100 pounds, have a profile no greater than 3/4 inch tall, are at least 10 inches wide, and that can be used on highways with speeds up to 80 mph.

N. Flagger Equipment. Provide flaggers and flagger equipment.

1. Provide flaggers with high-visibility safety apparel and a STOP/SLOW paddle.
2. Provide Automated Flagger Assistance Devices (AFAD).

O. Pilot Car. Provide a vehicle with a PILOT CAR FOLLOW ME sign mounted on the rear of the pilot vehicle. Show the company name of the pilot car contractor on each side of the vehicle.

626.03 Construction Requirements. Perform temporary traffic control work as follows:

A. General. Identify a project traffic control supervisor (TCS) certified by ATSSA or Evergreen Safety Council to direct the installation, modification, and maintenance of temporary traffic control devices. Provide contact information for the TCS. Provide a schedule and contact information for personnel working under the direction of the TCS that can be contacted will respond 24 hours per day during the duration of the temporary traffic control operations to provide temporary traffic control maintenance.

Under the direction of the TCS, install temporary traffic control devices before changing traffic patterns. Do not use devices for purposes other than those for which they are intended. Cover or remove temporary traffic control devices when not applicable.

Keep temporary traffic control zones as short as practical. Restore normal traffic operations to the extent practical during non-working hours and during planned or unplanned work stoppages. As specified in 105.14.D, ensure individual traffic delays do not exceed 15 minutes and traffic delays do not exceed a total of 30 minutes through the length of the project site, unless otherwise approved in writing. Implement remedial action to eliminate the excess traffic delays.

At least once per week, ensure temporary traffic control devices function well during non-daylight hours.

Obtain approval before removing temporary traffic control devices.

B. Temporary Traffic Control Maintenance. Monitor and maintain the temporary traffic control plan and devices during the duration of the temporary traffic control operations. Temporary traffic control maintenance includes repairing, replacing, and cleaning temporary traffic control devices, restoring displaced devices, removing and resetting devices (excluding temporary concrete barrier) for different phases, and inspecting the temporary traffic control. Initial setup and final removal of temporary traffic control is incidental and included in the contract price for the temporary traffic control devices. Coordinate temporary traffic control maintenance operations before performing the work.

C. Temporary Traffic Control Signs. Ensure temporary traffic control devices are in acceptable or marginal condition as defined in the ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features. Repair or replace devices that are unacceptable as defined in the ATSSA guidelines. Ensure temporary traffic control devices remain in place and serviceable during the time their use is required.

Ensure signs remaining in place for more than 3 calendar days are installed on breakaway sign post(s). Sign posts, as specified in 616, at the following heights:

- 5 feet from the bottom of the sign to the elevation of the near edge of the pavement in rural areas.
- 7 feet from the bottom of the sign to the top of the curb where parking or pedestrian movements are likely to occur.
- Secondary signs mounted below another sign may be 1 foot less than the heights describe above.

Provide additional temporary traffic control signs if traffic queues extend upstream of the first temporary traffic control device. Remove or cover the signs when no longer needed.

D. Channelizing Devices. Provide weighted bases when necessary to ensure channelizing devices remain in place.

Attach surface-mounted tubular markers with an adhesive in accordance with the manufacturer's written installation instructions. Do not nail or bolt tubular markers to the pavement.

E. Temporary Pavement Markings. Install temporary markings as soon as practical. For temporary pavement markings, omit the test strip when waterborne paint is used. Use temporary flexible raised pavement markers or temporary rigid raised pavement markers to supplement or as a substitution for other pavement markings. Use 2 raised pavement markers placed side by side with a 3 inch gap between markers to mark double lines. Use 2 raised pavement markers placed side by side to mark wide lines. The Engineer may require additional markers placed at a reduced spacing. Ensure pavement markings are visible in the day and night. Repair damaged markings.

Remove surface-mounted tubular markers, temporary paving market tape, temporary raised pavement markers, and rigid raised pavement markers without damaging pavement surface.

F. Floodlights. Illuminate flagger stations, work areas, and equipment crossings with floodlights when nighttime work is being performed. Provide lighting 30 minutes before sunset and up to 30 minutes after sunrise when workers or operational equipment are present. Ensure floodlighting does not produce a glare condition for approaching road users, flaggers, or workers.

When floodlights are used, provide an extra floodlight onsite for backup. When a flagger station or work area is moved, use the backup floodlight to illuminate the new station.

G. Portable Changeable Message Signs (PCMS). Secure the PCMS and temporary traffic control signal control systems with a lock and change the default control system password to prevent tampering.

H. Temporary Concrete Barriers. When necessary for construction phasing, remove, store, and reset temporary concrete barrier. Store the removed barrier outside the highway clear zone. Replace damaged sections of temporary concrete barrier.

Provide temporary traffic control until the temporary concrete barrier is reset. Coordinate removing and resetting temporary concrete barrier before performing the work.

I. Temporary Crash Cushions. When necessary for construction phasing, remove, store, and reset temporary crash cushion in accordance with the manufacturer's installation instructions. Store removed crash cushions outside the highway clear zone. Replace damaged crash cushions. Provide temporary traffic control until the temporary crash cushion is reset.

J. Shadow Vehicles and TMAs or Trailer Attenuator. Use a shadow vehicle with TMA or trailer attenuator to provide positive protection between the work space and highway users. Do not use the shadow vehicle transport material or to perform work tasks. Replace TMAs and trailer attenuators when damaged. Coordinate shadow vehicle and TMA or trailer attenuator use before deployment.

K. Temporary Pedestrian Facilities. Use pedestrian channelizing devices to close sidewalks and to delineate alternate routes when work activities impact pedestrian facilities to ensure accessibility features consistent with the features of the preconstruction pedestrian facility. When sidewalks are closed, ensure that pedestrian channelizing devices cover the entire width of the sidewalk.

Use temporary curb ramps when work activities impact accessibility features. Ensure the temporary curb ramps are consistent with the features of the preconstruction pedestrian facilities.

L. Radar Speed Feedback Trailers. When used, place the radar speed feedback trailer near the work space. When used, program the Vehicle Speed Feedback plaque to turn off the changeable display when the speed of an approaching vehicle exceeds the speed limit by more than 10 mph. Coordinate temporary traffic control maintenance operations before performing the work.

M. Temporary Rumble Strips. Use temporary rumble strips in accordance with the manufacturer's written instructions to attract the attention of highway users to temporary traffic control zone features.

N. Flagger Control. Perform flagger control with certified flaggers. Certified flaggers have completed a flagger training course from a Department-approved source and carry a current certificate of training. Certifications issued by other state Departments of Transportation that have a reciprocity agreement with the Department and foundations will be accepted. Use AFADs to provide physical separation between highway users and the flagger. Use one flagger to control each AFAD. Coordinate flagging operations, including AFAD use, before performing the work.

O. Pilot Car. Coordinate pilot car operations before performing the work.

626.04 Method of Measurement. The Engineer will measure acceptably completed work as follows:

1. Temporary traffic control signs will be by the square foot of sign.
2. Weighted based tubular markers, surface-mounted tubular markers, vertical panels, drums, and barricades will be per each.
3. Temporary pavement marking tape and temporary pavement marking waterborne paint will be by the foot and will include removal when applicable.
4. Temporary flexible raised pavement markers and temporary rigid raised pavement markers will be per each.
5. Floodlights will be by the hour or day.
6. Arrow boards will be by the hour or day.
7. Portable changeable message signs will be by the hour or day.
8. Temporary traffic control signal will be by the hour or day.
9. Temporary concrete barrier and removing and resetting temporary concrete barrier will be by the foot.
10. Temporary crash cushions and removing and resetting temporary crash cushions will be per each.
11. Shadow vehicles with TMAs or trailer attenuators and replacement of damaged TMAs or trailer attenuators will be per each.
12. Pedestrian channelizing devices will be by the foot. Temporary curb ramps will be per each.
13. Radar speed feedback trailers will be by the hour or day.
14. Temporary rumble strips will be per each temporary rumble strip array.
15. Miscellaneous temporary traffic control items will be measured and paid by force account as specified in 109.03.C.5.

16. Temporary traffic control maintenance will be by the hour.
17. Flagger control will be by the hour and is limited to the number of hours flagging stations are staffed. A separate payment for each AFAD used will be by the number of hours operated by a flagger.
18. Pilot car operation will be by the hour.

Maintain a daily record of hours for temporary traffic control maintenance, and other items measured by the hour. Provide the records weekly for approval of hours recorded. Provide a weekly report of each non-daylight hour temporary traffic control inspection to include temporary traffic control activities, the time the temporary traffic control was reviewed, any actions taken, and any other pertinent information. If allowed by the Engineer, no additional payment will be made for temporary traffic control plan changes, flagging, and pilot car operations for the Contractor's sole convenience.

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

| Pay Item | Pay Unit |
|---------------------------------------------------|-------------|
| Temporary Traffic Control Signs..... | SF |
| Weighted Base Tubular Markers | Each |
| Surface-Mounted Tubular Markers | Each |
| Vertical Panels..... | Each |
| Drums..... | Each |
| Barricade, Type ____ | Each |
| Temporary Pavement Marking Tape | ft |
| Temporary Flexible Raised Pavement Markers..... | Each |
| Temporary Rigid Raised Pavement Markers..... | Each |
| Temporary Pavement Marking – Waterborne..... | ft |
| Floodlights | Hour or Day |
| Arrow Board, Type ____..... | Hour or Day |
| Portable Changeable Message Sign (PCMS)..... | Hour or Day |
| Temporary Traffic Control Signal..... | Hour or Day |
| Temporary Concrete Barrier | ft |
| Remove and Reset Temporary Concrete Barrier..... | ft |
| Temporary Crash Cushion..... | Each |
| Remove and Reset Temporary Crash Cushion | Each |
| Shadow Vehicle and TMA or Trailer Attenuator..... | Each |
| Pedestrian Channelizing Devices | ft |
| Temporary Curb Ramp..... | Each |

| | |
|-----------------------------------------------------|-------------|
| Radar Speed Feedback Trailer..... | Hour or Day |
| Temporary Rumble Strips..... | Each |
| Miscellaneous Temporary Traffic Control Items | CA |
| Temporary Traffic Control Maintenance | Hour |
| Flagger Control..... | Hour |
| Automated Flagger Assistance Device (AFAD) | Hour |
| Pilot Car..... | Hour |

Initial setup and final removal of temporary traffic control is incidental and included in the contract price for the temporary traffic control devices. Lights and flags on signs and sign posts are incidental and included in the contract price for temporary traffic control signs.

ON PAGE 453, SUBSECTION 630.02 – MATERIALS

Replace this section with: Provide materials as specified in:

| | |
|---------------------------------------------|--------|
| Paint..... | 707 |
| Glass Beads Used in Pavement Markings | 720.08 |

Provide paint and beads in original packaging showing the lot numbers. Preapproved lots do not need to be tested. For paint lots that have not been preapproved, sample paint materials in accordance with Idaho IR 7 and submit the samples for testing to the Central Materials Laboratory. For bead lots that have not been preapproved, provide a sample 50 pound bag of glass beads for testing by the Central Materials Laboratory. Receive lab approval before using the paint or glass beads. Allow 2 weeks for laboratory testing.

Provide paint and beads in original packaging showing the lot numbers. Sample paint materials in accordance with Idaho IR 7 and submit the samples for testing to the Central Materials Laboratory. Provide a sample 50 pound bag of glass beads for testing by the Central Materials Laboratory. Receive lab approval before using the paint or glass beads. Allow 2 weeks for laboratory testing.

ON PAGE 453, SUBSECTION 630.03.A – WATERBORNE PAINT

Delete the third and fourth sentences in 1 and replace with:

Place 2 paint applications for permanent pavement markings and 1 paint application for temporary traffic control pavement markings unless otherwise specified in the plans or as Engineer directed. When applying pavement markings on undivided highways to a centerline rumble strips or a seal coat, place the second application of centerline paint in the opposite direction of the first application to ensure full visibility of the pavement markings in each direction.

ON PAGE 455, SUBSECTION 631.02 – MATERIALS

Delete not specified and add the following:

Provide materials as specified in:

| | |
|---------------------------|--------|
| Fog Coat..... | 408 |
| Emulsified Asphalts | 702.03 |

Provide CSS-1 or CSS-1H diluted emulsified asphalt for the fog coat.

ON PAGE 455, SUBSECTION 631.03 – CONSTRUCTION REQUIREMENTS

Delete the third paragraph and add the following:

Remove debris and apply fog coat as specified in 408. When applicable, remove and dispose of debris before opening adjacent lanes to traffic.

When rumble strips are installed under pavement markings, place 1 application of temporary pavement markings, construct and fog coat rumble strips, then place 2 applications of pavement markings as specified in 630.

ON PAGE 455, SUBSECTION 631.05 – BASIS OF PAYMENT

After the last sentence add:

Rumble strips that deviate 2 inches or greater longitudinally from the initial marking will be paid at 50 percent of the unit price for the length of the deviation. Deviations of 4 inches or greater longitudinally from the marking will be paid at 0 percent of the unit price for the length of the deviation. The length of the deviation will be measured to the nearest foot.

The first application of pavement markings will be paid for as temporary pavement markings as specified in 626. The permanent pavement markings will be paid as specified in 630.

ON PAGE 457, SUBSECTION 632.03.B – CLASS B REMOVAL

In the first paragraph change ASTM D458 to ASTM D4580.

ON PAGE 461, SUBSECTION 640.03.F – UNDERGROUND DRAINAGE

Delete the third paragraph of 640.03.F in its entirety.

ON PAGE 461, SUBSECTION 640.03.G – EROSION CONTROL

Add the following to the end of the first sentence in the first paragraph:

and as shown in the plans.

Delete the second paragraph and replace with:

Lap geotextile up against structures one half the riprap layer depth. Anchor geotextile upstream edges, downstream edges, top edges not against structures and bottom edges as shown in the plans.

Delete the last paragraph of 640.03.G in its entirety.

ON PAGE 463, SUBSECTION 641.02 – MATERIALS

Delete the third paragraph and replace with:

Provide the test dates on the certification. As a means of identification, provide tags on the product rolls with the manufacturer's name, full product name, style or product code number, and lot and/or roll number, which will permit field determination of the product delivered to the project site is covered by the certification.

Delete the footnote in Table 641.02-1 and replace with:

- (a) Minimum Average Roll Values (MARV) in the weakest direction. The geogrid type is shown on the plans. When the geogrid type is not shown, use Type II.

ON PAGE 464, SUBSECTION 641.03 – CONSTRUCTION REQUIREMENTS

In the third sentence of the second paragraph delete the following:

first the

And replace with:

the first

In the last paragraph, delete “by construction activity”.

ON PAGE 465, SUBSECTION 645.01 – DESCRIPTION

Add the following to the first paragraph:

If the Engineer, or consultant working under the Engineer’s direction, is responsible for damage to the field laboratory or its equipment beyond what is expected during normal use, the Engineer will reimburse the Contractor for the damage at a reasonable replacement or maintenance cost. The Contractor must demonstrate to the Engineer that the damage was beyond normal wear and tear before the Engineer will reimburse the Contractor for damage.

ON PAGE 465, SUBSECTION 645.02.A – MATERIALS

Delete 12 and replace with:

12. Provide electric heating and electric air conditioning, capable of maintaining a room temperature within 5° of 70° F continuously, with lights, furnaces, and ovens operating.

Delete 2 Counter and replace with:

2. Counter. Provide a minimum of 66 unobstructed square feet of counter space measuring 24 to 30 inches wide. Metal clad counters are required for class II, III, and IV field laboratories. Round sharp edges. The counter must be equipped with a stainless steel sink, with minimum dimensions of 15 inches by 20 inches by 8 inches deep, and will include a faucet, flexible hose type sprayer, and drain.

ON PAGE 466, SUBSECTION 645.02.C – CLASS II FIELD LABORATORY – AGGREGATE, SOILS, AND SUPERPAVE SP 2

Add a #4:

4. Specific Gravity Station. Including the necessary equipment and accessories to perform the AASHTO T 209 (bowl method) and AASHTO T 166 Method A.

ON PAGE 467, SUBSECTION 645.02.D – CLASS III FIELD LABORATORY – AGGREGATE, SOILS, AND SUPERPAVE SP 3 AND SP 5

Delete 3.

ON PAGE 468, SUBSECTION 645.03 – CONSTRUCTION REQUIREMENTS

Delete the first sentence in the first paragraph and replace with:

The field laboratory will be clean and operational for at least 10 working days before the start of testing and will only terminate 14 working days after completion of paving, or as directed.

ON PAGE 490, SUBSECTION 675.03.H.7.a – CONFIDENCE POINTS/CONFIDENCE POINT DELIVERABLES

Delete “(current version of Bentley Inroads.dtm files)”.

ON PAGE 491, SUBSECTION 675.03.I.4.a – GRADE VERIFICATION POINTS/CONSTRUCTION TOLERANCES/AREAS WITH SPECIFIED TOLERANCE VALUES

Delete the subsection and replace with the following:

- a. Areas with Specified Tolerance Values.

In constructing the work, meet the given tolerances below or as approved.

| Material / Location | Tolerance |
|-------------------------|-----------|
| Subgrade / Section 200 | ± 0.10 ft |
| Aggregate / Section 300 | ± 0.08 ft |

ON PAGE 494, SUBSECTION 675.03.S.3 – STRUCTURE AND PROCESS SPECIFICATION REQUIREMENTS/BRIDGES

Add the following to the end of the last paragraph:

For PPC deck overlays, survey the bridge deck and approach slabs along profile grade line, along edges of deck, along curb flow lines, and along lane lines. Collect survey information including stations, offsets, and elevations at 1/10 point intervals along each span of the bridge and ends of approach slabs. Collect survey information for the following steps: before grinding, after grinding (before overlay surface preparation begins), and after overlay placement.

Provide survey information to verify cross-slope and profile grade to the Engineer for acceptance. Do not begin next step until survey for the previous step has been accepted.

ON PAGE 495, SUBSECTION 675.04 – METHOD OF MEASUREMENT

Delete the following:

Directed surveying office computations will be measured and paid by force account as specified in 109.03.C.5.

Only hours documented in the diary will be paid on this item.

Directed surveying crew will be measured and paid by force account as specified in 109.03.C.5. Only hours documented in the diary will be paid on this item. Travel time to and from the project site is incidental.

Replace with:

Directed surveying will be measured and paid by force account as specified in 109.03.C.5.

Only authorized hours documented in the diary will be paid.

ON PAGE 495, SUBSECTION 675.05 – BASIS OF PAYMENT

Delete:

| | |
|----------------------------------------------|----|
| Directed Surveying Office Computations | CA |
| Directed Surveying Crew | CA |

Replace with:

| | |
|-------------------------|----|
| Directed Surveying..... | CA |
|-------------------------|----|

ON PAGE 496, SECTION 676 – RECORD OF EXISTING PAVEMENT MARKINGS

Replace section 676 in its entirety with the following:

SECTION 676 – RECORD AND REESTABLISH PAVEMENT MARKINGS

676.01 Description. Record existing pavement markings in order to sufficiently reestablish them in the same location, type, and form after they are covered or removed by the work.

676.02 Materials. Provide materials as specified in:

| | |
|------------------------|-----|
| Pavement Markings..... | 630 |
|------------------------|-----|

676.03 Construction Requirements. Before removing pavement markings, do the following:

1. Propose a method for recording existing pavement markings that is accurate to within 2 inches of the original location.
2. Record existing pavement markings.
3. Submit documentation of existing pavement markings through a diagram and/or video.
4. Receive approval to remove pavement markings.

To reestablish pavement markings, place reference markings on each lane line at no greater than 100 foot intervals on tangent sections and no greater than 50 foot intervals on curves and tapers. Reestablish pavement markings, including broken and dotted line patterns, as shown on the pavement markings standard drawing. Accurately reestablish no-passing zones. Mark the approximate center of word, arrow, symbol, or other markings.

Place pavement markings as specified in 630.03.

676.04 Method of Measurement. The Engineer will measure acceptably completed work by the foot or by the square foot.

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

| Pay Item | Pay Unit |
|-----------------------------------------------|----------|
| Record and Reestablish Pavement Markings..... | FT, SF |

Reference marking materials and other items needed to accomplish the work are incidental.

ON PAGE 501, SUBSECTION 702.02 – POLYMER MODIFIED EMULSIFIED ASPHALTS

Delete AASHTO M 140 and replace with AASHTO M 316.

ON PAGE 501, SUBSECTION 702.03 – EMULSIFIED ASPHALTS

Delete #5 and renumber the list.

ON PAGE 503, SUBSECTION 702.04.1 – ANTI-STRIPPING ADDITIVE

Delete the second and third sentences and replace with:

Determine an amount of anti-stripping additive per ton of asphalt to achieve passing test results and maintain that amount throughout production. If the asphalt mixture requires anti-strip additive, the asphalt binder samples will be tested in accordance with Idaho IT 99.

ON PAGE 505, SUBSECTION 703.02.A – CONCRETE AGGREGATE/GENERAL

Delete the second paragraph and replace:

Do not use limestone for fine or coarse aggregate in concrete wearing surfaces.

Delete the third and fourth paragraphs and replace with:

Perform AASHTO T 380, ASTM C1293, or ASTM C295 testing to determine the potential alkali silica reactivity. The Department will require mitigating measures for aggregates found to be reactive or potentially reactive in accordance with AASHTO T 380, ASTM C1293, or ASTM C295. Potentially reactive aggregates are those with expansion greater than 0.04 percent as determined by ASTM C1293 and AASHTO T 380. If ASTM C295 indicates an aggregate composition containing a percentage of the following materials greater than shown in Table 703.02-2, the Engineer will consider the aggregate potentially reactive.

After determination of potential reactive aggregates, submit mitigation measures for approval. The Contractor's mitigation measures may include the use of fly ash, lithium admixtures, or other approved material. Submit test results from AASHTO T 380, ASTM C1293, or CRD C662 that show the proposed mitigation used with the cement and aggregates will control the potential expansion. Do not use an aggregate source for concrete before approved.

ON PAGE 508, SUBSECTION 703.03 – MICROSURFACING AGGREGATE

In the table, change the method for the Sand Equivalent Test to read "AASHTO T 176 Modified Alternate Method No. 2 Pre-Wet".

ON PAGE 509, SUBSECTION 703.03 – MICROSURFACING AGGREGATE

Add to Table Header with Stockpile Tolerances to read:

Stockpile Tolerance from the Mix Design Gradation

And add the following:

The gradation of the aggregate stockpile must not vary by more than the stockpile tolerance from the mix design gradation while also remaining within the specification gradation band. The percentage of aggregate passing any 2 successive sieves must not change from one end of the specified range to the other end.

ON PAGE 515, SUBSECTION 703.12 – SAMPLING AND TESTING

Delete the last test, AASHTO T 303, and replace with:

Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures AASHTO T 380

ON PAGE 516, SUBSECTION 703.13.4 – AGGREGATE SOURCE MATERIAL QUALITY

Delete the last test, AASHTO T 303, under “Fine Aggregate for Concrete” and replace with:

Potential Alkali Reactivity of Aggregates and Effectiveness of ASR Mitigation Measures AASHTO T 380

ON PAGE 517, SUBSECTION 704.04 – NEOPRENE COMPRESSION SEAL

Delete the 1st paragraph and replace with the following:

704.04 Neoprene Compression Seal. Meet AASHTO M 220 for concrete pavement and AASHTO M 297 for bridges.

Provide a seal adhesive in accordance with the seal manufacturer’s written instructions and appropriate for use with the seal shown on the plans. Where an adhesive lubricant is required, meet ASTM D2835 for concrete pavement and ASTM D4070 for bridges. Where an epoxy adhesive is required, meet ASTM C881, Types I, II, IV, V, Grade 3, Classes B and C.

ON PAGE 523, SUBSECTION 706.19 – POLYPROPYLENE PIPE

Replace this subsection in its entirety with: “Meet ASTM F2764 for corrugated double and triple wall pipe. Limit double wall pipe to 30 inches maximum diameter and triple wall pipe from 30 inches to 60 inches maximum diameters.”

ON PAGE 525, SUBSECTION 707.02 – PAINT FORMULA

Delete “Formula No. 14 Highway Traffic Line Paint, Latex” and replace with “Formula No. 14 Highway Pavement Marking Paint, Waterborne”.

Insert:

Table 707.02-1 – Waterborne Paint Criteria

| Parameter | White | Yellow |
|---------------------------------------------------|----------------------------------------------|-------------|
| Density of Paint lb/gal | Within ± 0.20 lb/gal of qualification sample | |
| Consistency: | | |
| at 122°F (Kreb Units) | 80 minimum | 80 minimum |
| at 77°F (Kreb Units) | 85-95 | 85-95 |
| at 50°F (Kreb Units) | 100 maximum | 100 maximum |
| Total Nonvolatile Solids (%) | 78 minimum | 78 minimum |
| Pigment Solids (%) | 65 maximum | 65 maximum |
| Nonvolatile Vehicle, (%) by weight of the vehicle | 40 minimum | 40 minimum |
| Vehicle Composition | 100% Acrylic Emulsion | |

| | | |
|---------------------------------------------------------|---------------|--------------|
| Pigment Composition (lb/gal) (Rutile TiO ₂) | 1.0 minimum | 0.30 maximum |
| Scrub Resistance (Cycles) | 800 minimum | 800 minimum |
| pH (Standard Units) | 9.8 minimum | 9.8 minimum |
| VOC (grams/Liter) | 150 maximum | 150 maximum |
| Dry Through (Minutes) (Early Washout) | 130 maximum | 130 maximum |
| Static Heat Stability (Kreb Units) | ±7 maximum | ±7 maximum |
| Freeze-Thaw (Kreb Units) | ±5 maximum | ±5 maximum |
| Color (as approved) | 37875 | 33538 |
| Bleeding Ratio | 0.98 minimum | 0.98 minimum |
| Contrast Ratio | 0.95 minimum | 0.90 minimum |
| Directional Reflectance (%) | 90 minimum | 60 minimum |
| Yellowness Index | 0.040 maximum | Not Tested |
| Settling (Inches) | 1/4 maximum | 1/4 maximum |
| Cake Depth (Inches) | 3.5 maximum | 3.5 maximum |
| Skinning | Pass | Pass |
| Flexibility | Pass | Pass |
| Cracking | Pass | Pass |
| No-tracking Time (Sec.) (Vehicle Field Test) | 75 maximum | 75 maximum |

ON PAGE 526, SUBSECTION 708.04 – TIE BARS

Add the following to the end of the first paragraph

Provide epoxy-coated tie bars in accordance with ASTM A775.

ON PAGE 534, SUBSECTION 708.18 – HARDWARE FOR SIGNS

Delete the second specification for Class No. Fe/Zn 25 and replace with:

Grade 5, Fe/Zn 3

ON PAGE 534, SUBSECTION 708.19 – ILLUMINATION POLES AND BASES

Delete the word “Standard” from paragraph 2.

ON PAGE 537, SECTION 708 – METALS

Add the following subsection:

708.32 Mechanical Splices. Provide mechanical splices that meet ASTM A1034.

ON PAGE 543, SUBSECTION 711.04 – RIPRAP

Delete the following from the first sentence: “from an approved source”.

Add the following text and table to the end of Subsection 711.04:

Provide riprap classes sized as shown in the table below:

Table 711.04-2 – Gradation Requirement for Riprap ^(a)

| Class | Nominal Riprap Size, D ₅₀ ^(b) (inches) | Percent of Rock Equal or Smaller, D _x | Range of Intermediate Dimensions ^(c) (inches) |
|------------------|--------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------|
| III | 12 | 100 | 24 ^(d) |
| | | 85 | 15 - 19 |
| | | 50 | 11 - 14 |
| | | 15 | 7 - 11 |
| V | 18 | 100 | 36 ^(d) |
| | | 85 | 23 - 28 |
| | | 50 | 17 - 21 |
| | | 15 | 11 - 16 |
| VII | 24 | 100 | 48 ^(d) |
| | | 85 | 31 - 37 |
| | | 50 | 23 - 28 |
| | | 15 | 14 - 21 |
| VIII | 30 | 100 | 60 ^(d) |
| | | 85 | 39 - 46 |
| | | 50 | 28 - 35 |
| | | 15 | 18 - 26 |
| IX | 36 | 100 | 72 ^(d) |
| | | 85 | 47 - 56 |
| | | 50 | 34 - 42 |
| | | 15 | 22 - 32 |
| X ^(e) | 42 | 100 | 84 ^(d) |
| | | 85 | 54 - 65 |
| | | 50 | 40 - 49 |
| | | 15 | 25 - 37 |

^(a) Riprap class, size, and gradation consistent with FHWA – Hydraulic Engineering Circular No. 23.

^(b) The size for which 50% by weight of the particles are smaller.

^(c) Furnish rock with intermediate dimension (width and thickness) of at least one-third its length (longest axis).

^(d) Maximum intermediate dimension.

^(e) For any riprap larger than Class X, a qualified Engineer will determine the riprap size through an appropriate evaluation and provide a suitable gradation.

ON PAGE 544, SUBSECTION 711.05.B – SEED/RANDOM SAMPLING

Delete the second sentence and replace with:

The Engineer will weigh seed according to size, approximately 616 gram samples for lupine species and 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.

ON PAGE 549, SUBSECTION 711.21 – COMPOST SOCKS

Replace 711.18 with 654.

ON PAGE 550, SUBSECTION 712.02 – RETROREFLECTIVE SHEETING

Change numbers 1 and 2 as follows:

1. Sheet Aluminum and Plywood Signs. Provide Type IV direct applied retroreflective sheeting for signs with white backgrounds. Provide Type XI direct applied retroreflective sheeting for all other background colors. Provide Type XI direct applied retroreflective sheeting for white sign legends.
2. Extruded Aluminum Sign Panels. Provide Type XI direct applied retroreflective sheeting for the background and legend.

ON PAGE 555, SUBSECTION 713.08 – SIGNAL POLES

Delete subsections 2.b and 2.c.

ON PAGE 556, SUBSECTION 713.08 – SIGNAL POLES

Replace “Pedestal” with “Pedestrian” under 3.

ON PAGE 556, SUBSECTION 713.09 – ILLUMINATION POLES

Delete the word “Standard” from 2b.

ON PAGE 560, SUBSECTION 714.05 – BLENDED SECONDARY CEMENTITIOUS MATERIALS

Add the following subsection to 714 SECONDARY CEMENTITIOUS MATERIALS:

714.05 Blended Secondary Cementitious Materials. Provide blended secondary cementitious materials conforming to ASTM C1697. Each cementitious material must be sampled before blending.

ON PAGE 564, SUBSECTION 718.03 – SAMPLES

Delete the second sentence of the third paragraph and replace with:

The Department defines a lot as geotextile rolls within the same consignment or shipment that a manufacturer produced with the same lot number, and product name or designation.

ON PAGE 565, SUBSECTION 718.05 – DRAINAGE GEOTEXTILE PROPERTY REQUIREMENTS

Delete 718.05 and replace with:

718.05 Drainage Geotextile Property Requirements. Provide nonwoven or monofilament woven geotextiles. The Engineer will not accept slit film or slit tape geotextiles for drainage applications. Meet the requirements in Table 718.05-1.

Table 718.05-1 – Drainage Geotextile Criteria

| Geotextile Property | Test Method | Minimum Average Roll Values (in weaker principal direction) |
|---------------------------|-------------|----------------------------------------------------------------|
| Grab Tensile Strength, lb | ASTM D4632 | 180 |
| Puncture Strength, lb | ASTM D6241 | 450 |

Table 718.05-1 – Drainage Geotextile Criteria

| Geotextile Property | Test Method | Minimum Average Roll Values (in weaker principal direction) |
|------------------------------------------------|-------------|----------------------------------------------------------------|
| Apparent Opening Size (AOS), Standard Sieve | ASTM D4751 | #70 or finer |
| Permittivity, sec ⁻¹ | ASTM D4491 | 0.7 |

Note: Strength properties of drainage geotextiles placed on level or near level surfaces (e.g., under drain blankets, on subgrade) must meet those specified in 718.07.

ON PAGE 565, SUBSECTION 718.06 – RIPRAP/EROSION CONTROL GEOTEXTILE PROPERTY REQUIREMENTS

Delete 718.06 and replace with:

718.06 Riprap/Erosion Control Geotextile Property Requirements. Provide nonwoven or monofilament woven geotextiles. The Engineer will not accept slit film or slit tape geotextiles for riprap/erosion control applications, including installation behind gabions. Meet the requirements in Table 718.06-1.

Table 718.06-1 – Riprap/Erosion Geotextile Criteria

| Geotextile Property | Test Method | Minimum Average Roll Values (in weaker principal direction) |
|------------------------------------------------|-------------|----------------------------------------------------------------|
| Grab Tensile Strength, lb | ASTM D4632 | 315 / 200 |
| Grab Elongation, % | ASTM D4632 | <50% / ≥50% |
| Puncture Strength, lb | ASTM D6241 | 600 / 450 |
| Trapezoidal Tear, lb | ASTM D4533 | 110 / 80 |
| Apparent Opening Size (AOS), Standard Sieve | ASTM D4751 | #40 or Finer |
| Permittivity, sec ⁻¹ | ASTM D4491 | 0.7 |
| Ultraviolet (UV) Radiation Stability | ASTM D4355 | 70% Strength Retained @ 150 hours |

^(a) The dual values for strengths for each geotextile type are related to the grab elongation. For geotextiles with elongation which is less than 50%, the first strength values are applied. For geotextiles with elongation which is equal or greater than 50%, the second strength values are applied. Higher strength is required for geotextiles with lower elongation.

ON PAGE 566, SUBSECTION 718.07 – SUBGRADE SEPARATION GEOTEXTILE PROPERTY REQUIREMENTS

Delete 718.07 and replace with:

718.07 Subgrade Separation Geotextile Property Requirements. Provide nonwoven or monofilament woven geotextiles, except only nonwoven geotextile can be used for Type III. The Engineer will not accept slit film or slit tape geotextiles for subgrade separation. Meet the requirements in Table 718.07-1.

Table 718.07-1 – Subgrade Separation Geotextile Criteria

| Geotextile Property | Test Method | Minimum Average Roll Values ^(d) (in weaker principal direction) | | |
|------------------------------------------------|-------------|-------------------------------------------------------------------------------|------------------------|----------------------------|
| | | Type I ^(a) | Type II ^(b) | Type III ^{(b)(c)} |
| Grab Tensile Strength, lb ^(d) | ASTM D4632 | 180 / 110 | 270 / 180 | 270 / 180 |
| Grab Elongation, % ^(d) | ASTM D4632 | < 50% / ≥ 50% | | |
| Puncture Strength, lb ^(d) | ASTM D6241 | 500 / 300 | 600 / 450 | 600 / 450 |
| Trapezoidal Tear Strength, lb ^(d) | ASTM D4533 | 70 / 40 | 100 / 75 | 100 / 75 |
| Apparent Opening Size (AOS), Standard Sieve | ASTM D4751 | #30 or Finer | #40 or Finer | #70 or finer |
| Permittivity, sec ⁻¹ | ASTM D4491 | 0.05 | 0.05 | 0.7 |

^(a) Type I refers to moderate survivability conditions. Moderate survivability is low to moderate ground pressure equipment, 40 psi or less, with 12 to 18 inch initial lift thickness or high ground pressure equipment, greater than 40 psi, with more than 18 inch initial lift thickness.

^(b) Type II and Type III refers to high survivability conditions. High survivability is low to moderate ground pressure equipment with 6 to 12 inch initial lift thickness or high ground pressure equipment with 12 to 18 inch initial lift thickness.

^(c) Type III is used when subgrade separation geotextile will also function in a drainage application.

^(d) The dual values for strengths for each geotextile type are related to the grab elongation. For geotextiles with elongation which is less than 50%, the first strength values are applied. For geotextiles with elongation which is equal or greater than 50%, the second strength values are applied. Higher strength is required for geotextiles with lower elongation.

The subgrade condition is assumed to be cleared of rocks, stumps and large limbs, and graded reasonably smooth. If subgrade preparation or clearing is not as stated, or cover material is angular shot rock, even higher survivability geotextiles may be necessary.

ON PAGE 568, SUBSECTION 720.03 – POLYTETRAFLUOROETHYLENE BRIDGE BEARING PADS

Delete all references to “TFE”.

ON PAGE 570, SUBSECTION 720.07.3.B – RAP TESTING AND TEST FREQUENCY/CATEGORY 2

Delete number 2 and replace with and add:

(2) AASHTO T 335 and ASTM D4791 at a minimum testing frequency of 1 test per 500 tons for the first 2,000 tons and 1 test per 1,000 tons thereafter. Perform at least 6 tests per stockpiles less than 4,000 tons.

(3) AASHTO T 304, AASHTO T 308, and IT 146 at a minimum testing frequency of 1 test per 5,000 tons on a blended composite sample of material obtained at 1,000 ton increments. Perform a minimum of 5 tests per stockpile. Provide test results on a spreadsheet with the mix design submittal and update the spreadsheet, if additional RAP is produced before producing.

ON PAGE 571, SUBSECTION 720.08 – GLASS BEADS USED IN PAVEMENT MARKINGS

Add a new subsection:

720.08 Glass Beads Used in Pavement Markings. Glass beads used in pavement markings will be tested in accordance with Federal Specification TT-B-1325D. Provide glass beads meeting AASHTO M 247, Type 1 and as follows:

1. Glass Beads for Thermoplastic Pavement Markings. Provide beads with moisture resistance and adherence coatings.
2. Glass Beads for Waterborne Pavement Markings. Provide beads with moisture resistance and adherence coatings. Modify Type 1 gradation as follows:

| Microns | U.S. Sieve No. | Percent By Weight, Passing |
|---------|----------------|----------------------------|
| 1,000 | 18 | 100 |
| 850 | 20 | 90 – 100 |
| 425 | 40 | 15 – 35 |
| 300 | 50 | 0 – 5 |
| 180 | 80 | 0 – 2 |



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

March 8, 2021

Regulatory Division

SUBJECT: NWW-2021-00030, S. Higbee Dr. Butte Arm Canal Bridge Replacement Project, ITD Key No. 22431

Mr. Chris Canfield
Idaho Falls Public Works
380 Constitution Way, PO Box 50220
Idaho Falls ID, 83405

Dear Mr. Canfield:

We have determined that your proposed project "S. Higbee Dr. Butte Arm Canal Bridge Replacement Project" is authorized in accordance with Department of Army (DA) **Nationwide Permit (NWP) No. 14: Linear Transportation Projects**. This project is located at the intersection of E. 15th St. and S. Higbee Dr., within Section 19 of Township 2 North, Range 38 East, near latitude 43.484317° N and longitude -112.026115° W, in Bonneville County, in Idaho Falls, Idaho. Please refer to File Number NWW-2021-00030 in all future correspondence with our office regarding this project.

Project activities include the discharge of 102 CY of gravel and rock riprap below the ordinary high-water mark of Butte Arm Canal and within adjacent wetlands to protect the new bridge structure. The project proposes to permanently impact 0.04 acres of Butte Arm Canal and permanently fill 0.003 acres of wetlands. All work shall be done in accordance to the attached drawings, titled; S. Higbee Dr. Bridge replacement project, sheets 1 through 4, dated March 1, 2021.

AUTHORITY

DA permit authorization is necessary because your project would involve the discharge of dredged and/or fill material into Waters of the U.S., including wetlands. This authorization is outlined in Section 404 of the Clean Water Act (33 U.S.C. 1344).

PERMIT CONDITIONS

You must comply with all regional, general, and special conditions for this verification letter to remain valid and to avoid possible enforcement actions. The regional and general permit conditions for *NWP No. 14: Linear Transportation Projects* are available

online at <http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/>. If you are unable to access this website or would prefer a hard copy of the regional and general conditions please notify us and we will provide you a copy. In addition you must also comply with the special conditions listed below.

The following Special Conditions include:

- a. Permittee shall conduct work in the dry, during irrigation off-season, to reduce impacts to waters of the United States.
- b. 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.

WATER QUALITY CERTIFICATION

You must also comply with the conditions detailed in the Section 401 Water Quality Certification (WQC) issued for this project on February 22, 2021, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the water quality certificate and/or the conditions set forth, please contact IDEQ at (208) 528-2650.

COMPLIANCE CERTIFICATION

Further, 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. The enclosed Compliance Certification form is enclosed for your convenience and must be completed and returned to us.

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 18, 2022**, unless the NWP is modified, suspended or revoked. If your project, as permitted under this NWP verification is changed and/or modified, you must contact our office prior to commencing any work activities. In the event you have not completed construction of your project by March 18, 2022, please contact us at least 60-days prior to this date. A new application and verification may be required.

CUSTOMER SERVICE

We actively use feedback to improve our delivery and provide you with the best possible service. Please take our online customer service survey to tell us how we are doing. Follow this link to take the survey: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. If you have questions or if you would like a paper copy of the survey, call our office at 208-433-4464. For more information about the Walla Walla District Regulatory program, visit us online at <http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/>.

If you have any questions or need additional information about this permit, you can contact me at (208)433-4478, by mail at the address in the letterhead, or email at shane.k.skaar@usace.army.mil. For informational purposes, a copy of this letter will be sent to the Idaho Department of Environmental Quality and the Idaho Department of Water Resources.

Sincerely,

A handwritten signature in blue ink that reads "Tracy Peak". The signature is written in a cursive, flowing style.

Tracy Peak, Deputy Chief
Regulatory Division

Enclosure
Transfer of Nationwide Permit Form

TRANSFER OF NATIONWIDE PERMIT

When the structures or work authorized by this Nationwide Permit, **NWW-2021-00030, S. Higbee Dr. Butte Arm Canal Bridge Replacement Project**, 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

COMPLIANCE CERTIFICATION



US Army Corps of Engineers
Walla Walla District



Permit Number: NWW-2021-00030

Name of Permittee: Idaho Falls Public Works (Mr. Chris Canfield)

Date of Issuance: March 8, 2021

Upon completion of the activity authorized by this permit and any mitigation required by the permit, please sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Walla Walla District
Boise Regulatory Office
720 East Park Boulevard, Suite 245
Boise, Idaho 83712-7757

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with all terms and conditions of this permit, the permit is subject to suspension, modification, or revocation and you are subject to an enforcement action by this office.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit. The required mitigation was also completed in accordance with the permit conditions.

Signature of PERMITEE

DATE



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

RECEIVED
MAR 08 2021
LHTAC & T2 CENTER

900 North Skyline, Suite B • Idaho Falls, ID 83402 • (208) 528-2650

Brad Little, Governor
Jess Byrne, Director

February 22, 2021

Chris Canfield
City of Idaho Falls Public Works Department
PO Box 50220
Idaho Falls, Idaho 83405

RE: Idaho 8401 Water Quality Certification for NWW-2021-00030, Higbee Butte Arm Canal and NWW-2021-00031 E 121st S projects

Dear Mr. Canfield:

On December 12, 2020, the Idaho Department of Environmental Quality (DEQ) received a request for a 8401 Water Quality Certification (WQC) from the City of Idaho Falls and the Local Highway Technical Assistance Council for bridge replacement projects in Bonneville County.

DEQ two WQC and began a public comment period on January 20, 2021 through February 10, 2021. DEQ received no comments on either WQC and finalized them.

Enclosed, please find DEQ's final WQCs.

Please do not hesitate to contact me at 208.528.2650 or troy.saffle@deq.idaho.gov with questions or concerns about the WQC process and final permit.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Saffle".

Troy Saffle
Regional WQ Manager
Idaho Falls Regional Office

enclosure

c: Shane Skaar, ACOE
Karissa Nelson, LHTAC
Beth Spelsberg, DEQ (EDMS Link Only)



Idaho Department of Environmental Quality Final §401 Water Quality Certification

February 22, 2021

404 Permit Application Number: 2021-00031/E 121st S Bridge Replacement

Applicant/Authorized Agent: Bonneville County/Karissa Nelson LHTAC
Environmental Engineer

Project Location: 43.38841, -112.02398

Receiving Water Body: Idaho Canal

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, publicly noticed on December 22, 2020, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

Project Description

The proposed project will involve the removal and replacement of a bridge over the Idaho Canal on E 121st S near S 1st E street approximately nine miles south of Idaho Falls, Idaho in Bonneville County. The existing bridge will be removed and replaced with a pre-cast slab bridge that is approximately 41 feet wide to accommodate 12 foot wide lanes of travel and almost 8 foot wide shoulder widths. Impacts to adjacent emergent wetlands are estimated at 287 square feet.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- 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 deemed 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 not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing 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 Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

Receiving Water Body Level of Protection

This project is located on Idaho Canal within the Blackfoot Subbasin. The Idaho Canal is not included in the assessment unit (AU) database maintained by DEQ, or is it included in the National Hydrography Dataset (NHD). The Idaho Canal is a man-made waterway (irrigation canal), not currently designated in sections 110 through 160 of the WQS. It is dewatered each year after the irrigation season.

In Idaho, man-made waterways that are not designated in IDAPA 58.01.02, sections 110-160, are protected for the uses for which they were developed; in this case, agricultural water supply. The Idaho Canal is undesignated, it is not assessed in the most recent Integrated Report, and is presumed to be dewatered during the proposed project. Therefore, DEQ finds Tier I antidegradation protection (IDAPA 58.02.01.052.07) appropriate for the Idaho Canal.

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 shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. The only pollutant of concern for this project is sediment. DEQ does not expect the project to cause or contribute to any exceedances of the Idaho WQS turbidity standard as a result of this project. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria.

There is no available information indicating the presence of any existing beneficial uses other than agricultural water supply during the irrigation season. The proposed project will occur after the irrigation season, and DEQ finds the proposed BMPs, permit conditions, and conditions in this certification will be adequate to maintain and protect agricultural water supply use after the project is complete. Therefore, the permit ensures that the level of water quality necessary to protect the known use is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. DEQ reserves the right to modify, amend, or revoke this certification 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 WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to

- another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. 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.
 5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
 6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
 7. 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 Section 404 permit.
 8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at <https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10>.

Fill Material

1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
2. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

1. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.
2. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
3. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.

4. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. 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.

Pollutants/Toxics

1. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Vegetation Protection and Restoration

1. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
5. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Dredge Material Management

1. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

Management of Hazardous or Deleterious Materials

1. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
2. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
3. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
4. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
5. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
7. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, 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 in such a manner that it will not reach surface or ground waters of the state.
 - 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).
 - Idaho Falls Regional Office: 208-528-2650 / 800-232-4635
 - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

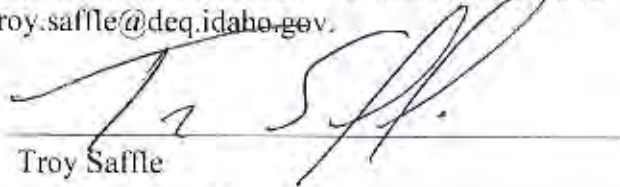
Required Notification

The permittee must notify the Idaho Falls Regional Office, and provide digital photos of the dewatered canal when authorized work begins.

Right to Appeal Final Certification

The final Section 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 Troy Saffle at 208.528.2650 or via email at troy.saffle@deq.idaho.gov.



Troy Saffle

Regional WQ Manager

Idaho Falls Regional Office



Idaho Department of Environmental Quality Final §401 Water Quality Certification

February 22, 2021

404 Permit Application Number: NWW-2021-00030/Higbee Bridge Replacement

Applicant/Authorized Agent: City of Idaho Falls/Karissa Nelson LHTAC
Environmental Engineer

Project Location: 43.48437, -112.02609

Receiving Water Body: Butte Arm Canal

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, publicly noticed on December 22, 2020, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

Project Description

The proposed project involves the removal and replacement of the Higbee Bridge over the Butte Arm Canal in Bonneville County on S Higbee Avenue within the city limits of Idaho Falls, Idaho. The existing bridge will be removed and replaced with a new slab bridge with cast-in-place abutments. The new bridge will be 60 feet wide to accommodate a nearly full roadway section and pedestrian features across the bridge. The new bridge design will prevent stormwater from the structure from entering the canal.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- 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 deemed 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 not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing 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 Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

Receiving Water Body Level of Protection

This project is located on Butte Arm Canal within the American Falls Subbasin. The Butte Arm Canal has not been included in the assessment unit (AU) database maintained by DEQ. It appears as a canal/ditch in the National Hydrography Dataset (NHD). The Butte Arm Canal is a man-made waterway (irrigation canal), not currently designated in sections 110 through 160 of Idaho's Water Quality Standards. It is dewatered each year after the irrigation season.

In Idaho, man-made waterways that are not designated in IDAPA 58.01.02, sections 110-160 are protected for the uses for which they were developed; in this case, agricultural water supply. The Butte Arm canal is undesignated and it is not assessed in the most recent Integrated Report. It is presumed to be dewatered during the proposed project. Therefore, DEQ finds Tier I antidegradation protection (IDAPA 58.02.01.052.07) appropriate for the Butte Arm Canal.

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 shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. The only pollutant of concern for this project is sediment. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria.

There is no available information indicating the presence of any existing beneficial uses other than agricultural water supply during the irrigation season. DEQ finds the proposed permit conditions and conditions in this certification will be adequate to maintain and protect agricultural water supply use after the project is complete. Therefore, the permit ensures that the level of water quality necessary to protect the known use is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. DEQ reserves the right to modify, amend, or revoke this certification 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 WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.

4. 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.
5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
7. 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 Section 404 permit.
8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at <https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10>.

Fill Material

1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
2. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

1. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.
2. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
3. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
4. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.

5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. 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.

Pollutants/Toxics

1. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Vegetation Protection and Restoration

1. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
5. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Dredge Material Management

1. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

Management of Hazardous or Deleterious Materials

1. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
2. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
3. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
4. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
5. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
7. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, 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 in such a manner that it will not reach surface or ground waters of the state.
 - 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).
 - Idaho Falls Regional Office: 208-528-2650 / 800-232-4635
 - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

Required Notification

The permittee must notify the Idaho Falls Regional Office when authorized work begins.

Right to Appeal Final Certification

The final Section 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 Troy Saffle at 208.528.2650 or via email at troy.saffle@deq.idaho.gov.



Troy Saffle
Regional WQ Manager
Idaho Falls Regional Office

NATIONWIDE PERMIT 14

LINEAR TRANSPORTATION: Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge 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 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, 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 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 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) 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; activities requiring a Pre-Construction Notification (PCN) for NWP 14 are **not certified.**

Coeur d'Alene Tribal Lands: DENIED

Shoshone-Bannock Tribal Lands: DENIED

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

REGIONAL CONDITIONS for SPECIFIC NATIONWIDE PERMITS

1. Refer to General Condition 32(b) 1-10 for additional required information .
2. Stream simulation techniques shall be employed on streams where ESA listed fish are present. (Stream simulation design criteria is available at the U.S. Forest Service website at: http://www.stream.fs.fed.us/fishxing/aop_pdfs.html.)
3. The streambed shall be returned to pre-construction contours after construction unless the purpose of the activity is to eliminate a fish barrier and restore the natural substrate and contour.

REGIONAL CONDITIONS, WALLA WALLA DIVISION

Watersheds Requiring Pre-Construction Notification, Specific to Anadromous Fish:

Pre-construction notification (PCN) will be required for the above listed nationwide permits in the geographic area as shown on Figure 1: *Watersheds Requiring Pre-Construction Notification*, dated March 19, 2017 (see pg. 20).

Vegetation Protection & Restoration: Permittee shall avoid and minimize the removal of native vegetation in riparian and wetland areas to the maximum extent practicable. Areas subject to temporary vegetation removal in riparian and wetland areas during construction shall be replanted with appropriate native species by the end of the first growing season following the disturbance except as waived by the District Engineer.

Permittee shall use suitable material to stabilize engineered fills associated with the installation of culverts and other bridge structures. Refer to Nationwide Permit General Condition 6 (suitable material). Permittee shall use appropriate erosion and sediment control measures to ensure stability in and around instream structures.

De-Watering: Discharges for temporary cofferdams and de-watering structures and permittee shall comply with the following conditions:

- 1) Cofferdams shall be constructed of non-erosive material such as concrete jersey barriers, sand or gravel filled 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.
- 2) Diversion channels constructed to bypass flow around the construction site shall be lined with plastic, large rock, or otherwise protected from erosion prior to releasing flows into or through the diversion channel.
- 3) 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.
- 4) Water pipe intakes shall be screened (openings <3/32 inch) to prevent entrainment of fish trapped in the coffered area.
- 5) Fish trapped within the coffered areas shall be collected by electrofishing, seining or dip net 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 followed. http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf
- 6) Temporary stockpiles in waters of the United States shall be removed in their entirety so as not to form a berm or levee parallel to the stream that could confine flows or restrict overbank flow to the floodplain.

Re-Watering: For stream channels which have been dewatered during project construction: Stream channels will be re-watered slowly to minimize a sudden increase in turbidity.

REGIONAL ADDITIONS to the GENERAL CONDITIONS

General Condition #4, Migratory Bird Breeding Areas: The U.S. Fish and Wildlife Service (USFWS) is the primary Federal agency responsible for the conservation and management of migratory bird resources. For additional information contact the US Fish and Wildlife Service (Boise Office 208-387-5243); north Idaho field office (Spokane) at 509-891-6839 or the eastern Idaho field office (Chubbuck) at 208-237-6975.

General Condition #9, Management of Water Flows: To obtain information on State of Idaho definition of high water 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: If the permittee does not have a Best Management Plan (BMP), refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties.

For additional information refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties. Website: <http://www.deq.idaho.gov/media/494058-entire.pdf>.

Use of native vegetation is the preferred method to treat soil erosion and stabilize areas disturbed during construction. Eroded and/or disturbed areas shall be replanted with native vegetation and stabilized until vegetative root mass can become established, unless the District Engineer determines this is not practicable. Non-biodegradable materials, such as chicken or hog wire or plastic netting that may entrap wildlife or pose a safety concern should not be used for soil stabilization.

General Condition #18, Endangered Species: Non-Federal applicants must contact either their local Idaho Department of Fish and Game (IDFG) or the U.S. Fish and Wildlife Service (USFWS) to determine if any listed species or designated critical habitat might be in the vicinity of their project. Applicants shall notify District Engineer of their findings (see County contact numbers below).

Contact USFWS at (509) 893-8009 for *Bonner, Boundary, Kootenai, Shoshone, Benewah* and *Latah* Counties

Contact USFWS at (208) 378-5388 for all other Idaho Counties

General Condition #20, Historic Properties: Applicants must contact the Idaho State Historic Preservation Office at (208) 334-3847 located in Boise, Idaho to determine if their project may affect historic properties listed in the National Register of Historic Places. Applicant shall notify the District Engineer of their findings.

NOTIFICATION PROCEDURES PERTAINING TO CERTAIN NATIONWIDE PERMITS

Select Waters and Wetlands: The Corps will coordinate with the Idaho Department of Fish and Game (IDFG) for activities in the following waters, watersheds and wetlands that require notification and are authorized:

- 1) Waters: Henry's Fork of the Snake River and its tributaries; South Fork Snake River and its tributaries; Big Lost River upstream of the US 93 crossing south of Leslie; East Fork Big Lost River; Boise River upstream of Arrow Rock Reservoir; Salmon River and its tributaries, St. Joe River; Priest River; Big Wood River.
- 2) River Basins and Watersheds: Beaver-Camas Creeks and Mud Lake Basin; Medicine Lodge Creek and Crooked Creek; Kootenai River; Middle and South Fork Clearwater River.
- 3) The following HUC 12 sub-watersheds:
Big Sand Creek-Palouse River (170601080102); Rock Creek-Palouse River (170601080110); Upper Lolo Creek (170603060201); Musselshell Creek (170603060202); Eldorado Creek (170603060203); Middle Lolo Creek (170603060204); Lower Lolo Creek (170603060205); East Fork Potlatch River (170603060801); West

Fork Potlatch River-Potlatch River(170603060802); and Hog Meadow Creek-Potlatch River (17060306902).

- 4) **Wetlands identified in Idaho Department of Fish and Game, Wetland Conservation Strategy as Class I, Class II and Reference Habitat Sites.** (Idaho Department of Fish and Game (IDFG) Wetland Conservation Strategies have been developed for the Henrys Fork Basin, Northern Idaho, Big Wood River, Southeast Idaho, East-Central Idaho and Snake River Basin, Middle and Western Snake River and Tributaries, and the Upper Snake River-Pottneuf Damages, Weiser River Basin, and West-Central Mountain Valley, and adjacent wetlands, Closed basins of Beaver-Camas Creek, Medicine Lodge Creek, Palouse River and lower Clearwater River sub-basins, Middle Fork and South Fork Clearwater Basins and Camas Prairie in northern Idaho. Refer to the internet site at <http://fishandgame.idaho.gov/content/page/wetlands-publications-idaho-natural-heritage-program#reports>.)
- 5) **Wetlands identified in the Idaho Wetland Conservation Prioritization Plan-2012.** (Murphy, L., J. Miller and A. Schmidt. 2012. [https://parksandrec.idaho.gov/sites/default/files/uploads/documents/SCORTP_Update_4008x%20830WetlandUsePriorityPlan%20\(Part%201\)%20compressed1.pdf](https://parksandrec.idaho.gov/sites/default/files/uploads/documents/SCORTP_Update_4008x%20830WetlandUsePriorityPlan%20(Part%201)%20compressed1.pdf).)

GENERAL CONDITIONS

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 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.

*See Regional Addition

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.

***See Regional Addition**

To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction 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.

12. Soil Erosion and Sediment Controls.

***See Regional Addition**
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 Fills.

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. The permittee 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 NWP activity may cause more than minimal adverse

effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

***See Regional Addition**

(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 the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, 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 designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat 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. In cases where the non-Federal applicant has identified listed species or critical habitat 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 critical habitat, or until ESA section 7 consultation 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 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 applicant 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 world wide 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 their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts 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.

***See Regional Addition**

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, 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. 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 to 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, which may include background research, consultation, oral history interviews, sample field investigation, and 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 the 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. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and 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 to historic properties or that NHPA section 106 consultation has been completed.

(d) 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.

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you 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 NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 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 in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined 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) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since 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. Restored riparian areas should consist of native species. 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 NWPs, 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)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the

impact site and the number of credits to be provided.

(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 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.

Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe 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)). 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 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 prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-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 any required compensatory mitigation. The success 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 work 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 work 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 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 is not authorized by NWP until the appropriate Corps office issues the section 408 permission 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 critical habitat 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. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. 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) 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. For single and complete linear projects, 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. 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 wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, 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;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat 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 activity that requires 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 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 the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through

(10) of this general condition. 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 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 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) 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 (iv) 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 email, 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 email 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, including the need for mitigation to ensure 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 of 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.

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

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, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for 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.

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

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.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

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.

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 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.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

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. 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 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. The loss of stream bed includes the acres or linear feet of stream bed that is filled or excavated as a result of the regulated activity. 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.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR part 328.3(c)(4). 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: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR part 328.3(c)(6)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

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.

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 waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

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 project: The term “single and complete project” is defined at 33 CFR part 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 project must have independent utility (see definition). For linear projects, a “single and complete project” is 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 waterbody several times at separate and distant locations, each crossing is considered a single and complete project. 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.

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. 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 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 wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR part 328.3(c)(4) and 33 CFR part 328.3(d), respectively. 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, which is defined at 33 CFR part 328.3(c)(7).

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 jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States under 33 CFR part 328.3(a)(1)-(5), that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR part 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

DEFINITIONS, REGIONAL ADDITIONS

Alkaline Wetlands: wetlands on alkaline and or saline soils found where evaporation far exceeds precipitation; sites range from sloped seeps and springs (most common) to drainages or pond and playa margins; flooding and saturation varies, but high groundwater is typical and vegetation is salt tolerant.

REFERENCE: Cowardin, L. M., Carter, F.C Golet, and E.T. LaRoe. 1979 Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC

Forested Wetlands: Wetlands characterized by woody vegetation that is 6 meters tall or taller; They are located where moisture is relatively abundant, particularly along rivers and in the mountains and normally possess an overstory of trees and an understory of young trees or shrubs and an herbaceous layer.

REFERENCE: Classification of Wetlands and Deepwater Habitats of the United States, Mr. Lewis M. Cowardin; Office of Biological Services; Fish & Wildlife Services; 1979

Invasive Species: Species of plants not native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

REFERENCE: Executive Order No. 13112; U.S. Department of Agriculture National Invasive Species Information Center

Kettle: A steep sided, usually basin or bowl shaped hole or depression, commonly without surface drainage, in glacial drift deposits, often containing a lake or swamp.

REFERENCE: Bates, Robert L. & Jackson, Julia A.; Glossary of Geology, American Geological Institute; Falls Church; 1980

Native Species: Species that occurs naturally in a particular region, state, ecosystem and habitat without direct or indirect human actions.

REFERENCE: Federal Native Plant Conservation Committee; 1994

Peatland: Wetlands in cold and persistently saturated settings with at least 30 cm of peat accumulation: fen peatlands form on slopes with groundwater discharge and on floating anchored mats in kettle ponds, subalpine lakes or valley lakeshores; as peat accumulates, ridges or mounds may form; they often support specially adapted mosses and plants.

REFERENCE: Bursik, R.J. and Moseley, R.K.; Ecosystem Conservation Strategy for Idaho Panhandle Peatlands; Cooperative project between Idaho Panhandle National Forest and Idaho Department of Fish & Game; Conservation Data Center; Boise 28 pp plus Appendix; 1995

Playas: Shallow, unpredictably, and temporarily flooded precipitation filled pools formed on hardpan soils with a clay or cemented layer, or on shallow soils over bedrock; vegetation is typically sparse and often salt tolerant, but playas may support endemic plants and invertebrates.

REFERENCE: Tiner, R.W., H.C. Bergquist, G.P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Select Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA.

Spring-fed Wetlands: Wetlands supported by surface discharge of groundwater, often occurring on gentle to steep slopes, but also including upwellings in flat basins

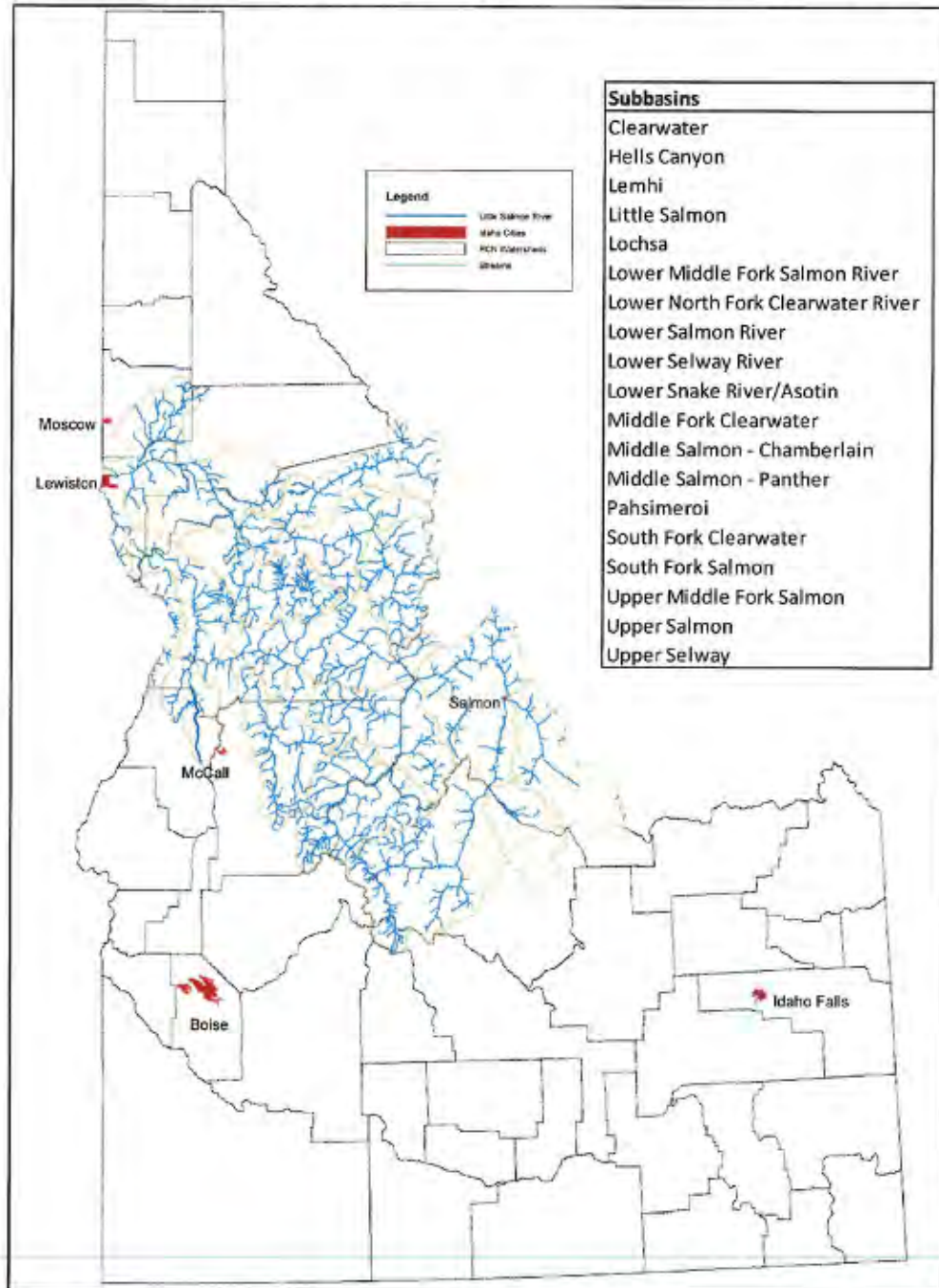
REFERENCE: Sada, D.W., Williams, J.E., Silvey, J.C., Halford, A., Ramakka, J., Summers, P., Lewis, L. 2001 Riparian area management. A guide to managing, restoring, and conserving springs in the western United States. Technical Reference 1737-17. Denver, CO: Bureau of Land Management. BLM/ST/ST-01/001+1737.

Vernal Pools: Precipitation-filled seasonal wetlands inundated during periods when temperature is sufficient for plant growth, followed by a brief waterlogged-terrestrial stage and culminating in extreme desiccating soil conditions of extended duration.

REFERENCE: Keely, J.E. & Zedler, P.H.; Characterization and Global Distribution of Vernal Pools; Pp 1-14 in C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren Jr., and R. Ornduff (Editors); Ecology, Conservation, and Management of Vernal Pool Ecosystems (Proceedings from Conference, 1996); California Native Plant Society, Sacramento, CA; 1998.



Figure 1. Watersheds Requiring Pre-Construction Notification



19 March 2017



Figure 2. U.S. Fish and Wildlife Field Office Coverage.

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 (8½"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

FOR AGENCY USE ONLY

| | | | |
|--------------------------------------------|----------------|----------------------------------------------------------|----------------|
| USACE NWW- | Date Received: | <input type="checkbox"/> Incomplete Application Returned | Date Returned: |
| Idaho Department of Water Resources No. | Date Received: | <input type="checkbox"/> Fee Received DATE: | Receipt No.: |
| 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: Chris Canfield, PE | | | | Name: Justin Schwalbe, PE | | | |
| Company: Idaho Falls Public Works | | | | Company: HW Lochner | | | |
| Mailing Address: 380 Constitution Way, PO Box 50220 | | | | Mailing Address: 3071 E. Franklin Road, Suite 303 | | | |
| City: Idaho Falls | | State: ID | Zip Code: 83405 | City: Meridian | | State: ID | Zip Code: 83642 |
| Phone Number (include area code): (208) 612-8259 | | E-mail: ccanfield@idahofallsidaho.gov | | Phone Number (include area code): (208)336-2983 | | E-mail: jschwalbe@hwlochner.com | |
| 3. PROJECT NAME or TITLE: S Higbee Dr, Butte Arm Canal Br, Idaho Falls | | | | 4. PROJECT STREET ADDRESS: N/A | | | |
| 5. PROJECT COUNTY: Bonneville | | 6. PROJECT CITY: Idaho Falls | | 7. PROJECT ZIP CODE: 83404 | | 8. NEAREST WATERWAY/WATERBODY: Butte Arm Canal | |
| 9. TAX PARCEL ID#: N/A | | 10. LATITUDE: 43.4843 LONGITUDE: -112.02613 | | 11a. 1/4: SE | | 11b. 1/4: SE | |
| | | | | 11c. SECTION: 19 | | 11d. TOWNSHIP: 2N | |
| | | | | | | 11e. RANGE: 3KE | |
| 12a. ESTIMATED START DATE: Fall 2021 | | 12b. ESTIMATED END DATE: Spring 2022 | | 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 Pocatello, take I-15 NB to exit 116. Turn east onto US Highway 26 (Sunnyside Rd) and head approximately 3.1 miles to S Holmes Ave. Turn north onto S Holmes Ave and head north 1.0 mile to E 17th St. Turn west onto E 17th St and head 0.12 miles to S Higbee Ave. Turn north onto S. Higbee Ave and head north 0.12 miles to the project location. Figure 2 attached is a vicinity map. | | | | | | | |
| 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 the attached document to describe the project purpose and need. | | | | | | | |

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 the attached document to describe the activities.

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 the attached document to describe alternatives considered to avoid/minimize/mitigate impacts.

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 the attached document to describe the mitigation plan.

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

Dirt or Topsoil: _____ cubic yards
Dredged Material: _____ cubic yards
Clean Sand: _____ cubic yards
Clay: _____ cubic yards
Gravel, Rock, or Stone: 101.6 cubic yards
Concrete: _____ cubic yards
Other (describe): _____ : _____ cubic yards
Other (describe): _____ : _____ cubic yards

TOTAL: _____ 101.6 cubic yards

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

Filling: _____ acres _____ sq ft. _____ 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: _____ acres _____ sq ft. 116.6 cubic yards
Draining: _____ acres _____ sq ft. _____ cubic yards
Other: Riprap _____ : _____ acres 120 sq ft. _____ cubic yards

TOTALS: _____ acres 120 sq ft. 116.6 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:
None known.

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: N/A 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

BMP's to minimize impacts on water quality will include:
 1. Bridge construction will occur during the winter irrigation shutdown while no flow is in the canal.
 2. No hydrologic changes will be made to the canal.
 3. Permanent BMP's include riprap and geotextile used for scour countermeasures.
 4. Temporary BMP's include fiber wattles.

 A Pollution Prevention Plan (PPP) will be prepared prior to construction. The PPP will document erosion, sediment and pollution controls (as mentioned above) to be implemented, inspection methods and schedules, as well as maintenance plans. All other wetland areas (such as may occur in or near proposed sources, staging areas, wastesites, etc.) will be retained and protected.

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 |
|--------------------------------------------|--------------------|---------------------------|------------------------------------------------------------------------------------------|------------------------------|
| Remove & Replace Bridge | Butte Arm Canal | Intermittent | Remove existing bridge, relocate waterline, install new bridge, abutments and riprap. | 102 |
| TOTAL STREAM IMPACTS (Linear Feet): | | | | 102 |

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) |
|---------------------------------------------|--------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------|
| Construct Riprap | Emergent (Wetland 1) | 0-ft (Parallel) | Install new riprap along bank | 59 SF |
| Construct Riprap | Emergent (Wetland 2) | 0-ft (Parallel) | Install new riprap along bank | 61 SF |
| TOTAL WETLAND IMPACTS (Square Feet): | | | | 120 |

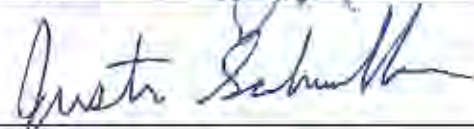
29. ADJACENT PROPERTY OWNERS NOTIFICATION REQUIREMENT: Provide contact information of ALL adjacent property owners below:

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Renee Hendricks Mailing Address: 1501 S. Higbee Ave City: Idaho Falls State: ID Zip Code: 83404 Phone Number (include area code): (208) 522-7707 E-mail: N/A | Name: Jonnie Sue Fields Davis Mailing Address: 614 N Bellin Rd City: Idaho Falls State: ID Zip Code: 83402 Phone Number (include area code): N/A E-mail: N/A |
| Name: Terry Gohr Mailing Address: 1457 S. Higbee Ave City: Idaho Falls State: ID Zip Code: 83404 Phone Number (include area code): 208-206-1394 E-mail: tegohr@aol.com | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |

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:  Date: 2/11/21

Signature of Agent:  Date: 2/9/2021

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".

S Higbee Dr, Butte Arm Canal Br, Idaho Falls
Project No: A022(431), Key No: 22431

Joint Application for Permits
Additional Information
February 2021

BLOCK 15: PROJECT PURPOSE AND NEED

This bridge replacement is part of the South Idaho Bridge Bundle project. The purpose of the project is to replace eight local bridges, scattered throughout Southern Idaho, that have exceeded their useful life. The bridge replacements are intended to maintain similar alignments and stay within the existing right-of-way. The project is being funded through an FHWA Competitive Highway Bridge Program (CHBP) grant and local sponsor matching

The **purpose** of this project is to remove and replace the deteriorating single-span bridge structure (Bridge Key 31335) over Butte Arm Canal on S. Higbee Avenue with a new similar sized structure that meets current design standards for bridge loading. All project improvements are to stay within the City of Idaho Falls and the Butte Arm Canal existing right-of-way.

The **need** for this project is to address the structurally deficient, deteriorating bridge structure and associated safety concerns. Built in 1957, the existing Structure Condition (NBI Item 67) is "2 Intolerable – Replace" according to the latest inspection report. The design load for the existing bridge was an H-15 truck and is weight restricted to a 5-Ton axle limit. Additionally, there is significant girder spalling with extensive exposure, corrosion, and some section loss in girder web reinforcing.

BLOCK 16 – DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT

Proposed Activities:

- Remove the existing S Higbee Dr, Butte Arm Canal Bridge.
- Relocate an existing 6-inch asbestos waterline, built in 1948 that runs north and south within S. Higbee Ave crossing under the structure and canal.
- Construct a single span structure that will be 52-feet wide and 42-feet long out-to-out.
- Construct bank protection and scour countermeasures using riprap.
- Reconstruct S. Higbee Ave approximately 120 feet south and north of the proposed bridge that will mimic the existing roadway condition and from back of sidewalk to back of sidewalk is anticipated to be 60 feet, allowing space for two 12-foot travel lanes, two 4.5-foot shoulders, two 2.5-foot curb and gutters, two 5-foot landscaped park strips, and two 6-foot sidewalks. The two 5-foot park strips will be eliminated over the structure and the sidewalk will angle inward at each end of the structure similar to the existing condition.
- Reconstruct the intersection of S. Higbee Avenue and E 15th Street and extend approximately 110-feet to the west along E 15th Street to ensure positive drainage away from the intersection.

Specific work activities that take place in wetlands and waters of the US are shown on Figures 3 through 4 and described below:

1. Demo existing bridge. This includes removing the existing 36-foot long and 50.2-foot wide structure including abutments and wingwalls. Equipment to demo the bridge will include track-mounted excavators and haul trucks. BMP's that will be used during installation will include fiber wattles. Demolition will occur during the winter irrigation shutdown while no flow is in the canal. Where practical, work will occur from the top of bank to minimize impacts to the channel.
2. Remove and replace the existing 6-inch asbestos waterline under the existing structure and canal on the eastside within the canal. Equipment to remove and replace the waterline will include track-mounted excavators and haul trucks. BMP's that will be used during installation will include fiber wattles. This will occur during the winter irrigation shutdown while no flow is in the canal.
3. Construction of the new bridge. This includes construction of GRS abutments and wingwalls within the canal. Equipment to install the new bridge will include track-mounted excavators and haul trucks. BMP's that will be used during installation will include fiber wattles. Bridge construction will occur during the winter irrigation shutdown while no flow is in the canal. Where practical, work will occur from the top of bank to minimize impacts to the channel. No hydrologic changes will be made to the canal.
4. Construct riprap. This includes constructing two riprap pads along the face of the abutments and at the edge of the banks near the ends of the structure and wingwalls to provide scour countermeasures. Equipment to install the riprap will include track-mounted excavators and haul trucks. BMP's that will be used during installation will include fiber wattles. This will occur during the winter irrigation shutdown while no flow is in the canal. Where practical, work will occur from the top of bank to minimize impacts to the channel.
5. All staging and material stockpiling will take place within previously disturbed areas outside of the canal limits.
6. All borrow sources for the project will be provided from contractor commercial sources. Disposal locations will be located out of the project limits.

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

Construction will occur during the winter irrigation shutdown while no flow is in the canal. Best Management Practices will be implemented and maintained to ensure minimization of impacts to waters and wetlands. In addition, the wetlands delineated will be identified on construction plans and delineated in the field prior to construction.

The project will avoid and minimize on-site activity impacts by conducting work from atop the banks when practical. Track and rubber tired equipment will be used during construction along with fiber wattles. During the conceptual design phase, structure concepts were explored that met the safety and improvement goals while avoiding, to the extents practical, waters of the US and wetlands.

BLOCK 18 – PROPOSED MITIGATION STATEMENT OR PLAN

The new bridge will be located at the place of the existing structure and all areas temporarily impacted during construction (i.e. removal of the existing structure components) will be re-contoured and restored to match pre-existing contours and elevations. Impact avoidance measures and BMPs described in this application will ensure that impacts to the Butte Arm Canal are minimized. To minimize impacts to waters of the US and wetlands, work within the canal is to be completed during winter irrigation shutdown. The use of track and rubber tired equipment and using fiber wattles will also be instituted.

Wetlands impacted by the project will be mitigated and it is anticipated that the original functions and values lost will be restored. A total of 120 square feet/0.003 acres of wetlands will be permanently impacted by the project. Mitigation will not be required by the USACE as impacts are less than 0.1 acres; however, the FHWA, in accordance with 23 CFR 777 – Mitigation of Impacts to Wetlands and Natural Habitat, will require mitigation. The loss of 0.003 acres of wetlands and associated functions will be compensated through compensatory mitigation at a ratio of 1:1 acres of wetland impact to acres of in-kind wetland creation. The project will be mitigated for by funding a portion of the Rainey Creek stream restoration project located in Swan Valley Idaho in Bonneville County being completed by the U.S. Forest Service (USFS) Caribou-Targhee National Forest.



Figure 1 -Block 10

S Higbee Dr, Butte Arm Canal Br, Idaho Falls
 Bonneville County, Idaho
 Project No. A022(431)
 Key No. 22431

Title: S. Higbee Dr. bridge replacement project
 File No. : NWW-2021-00030
 Waterway: Butte Arm Canal
 Proposed activity: Bridge replacement
 Sheet 1 of 4 Date: March 1, 2021

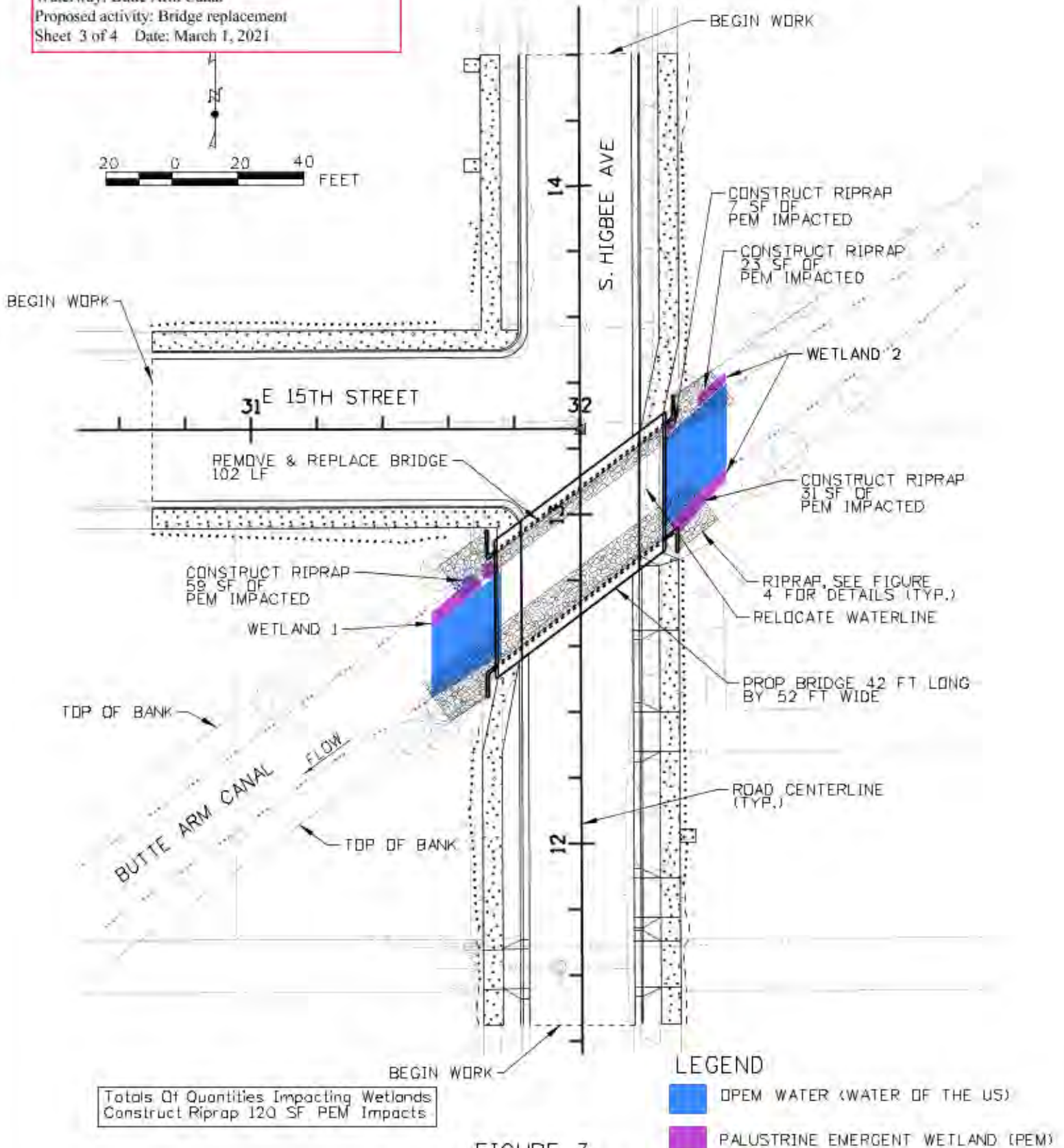


Figure 2 - Vicinity Map, Block 14
 S Higbee Dr, Butte Arm Canal Br, Idaho Falls
 Bonneville County, Idaho
 Project No. A022(431)
 Key No. 22431

Title: S. Higbee Dr. bridge replacement project
 File No. : NWW-2021-00030
 Waterway: Butte Arm Canal
 Proposed activity: Bridge replacement
 Sheet 2 of 4 Date: March 1, 2021

Title: S. Higbee Dr, bridge replacement project
 File No. : NWW-2021-00030
 Waterway: Butte Arm Canal
 Proposed activity: Bridge replacement
 Sheet 3 of 4 Date: March 1, 2021

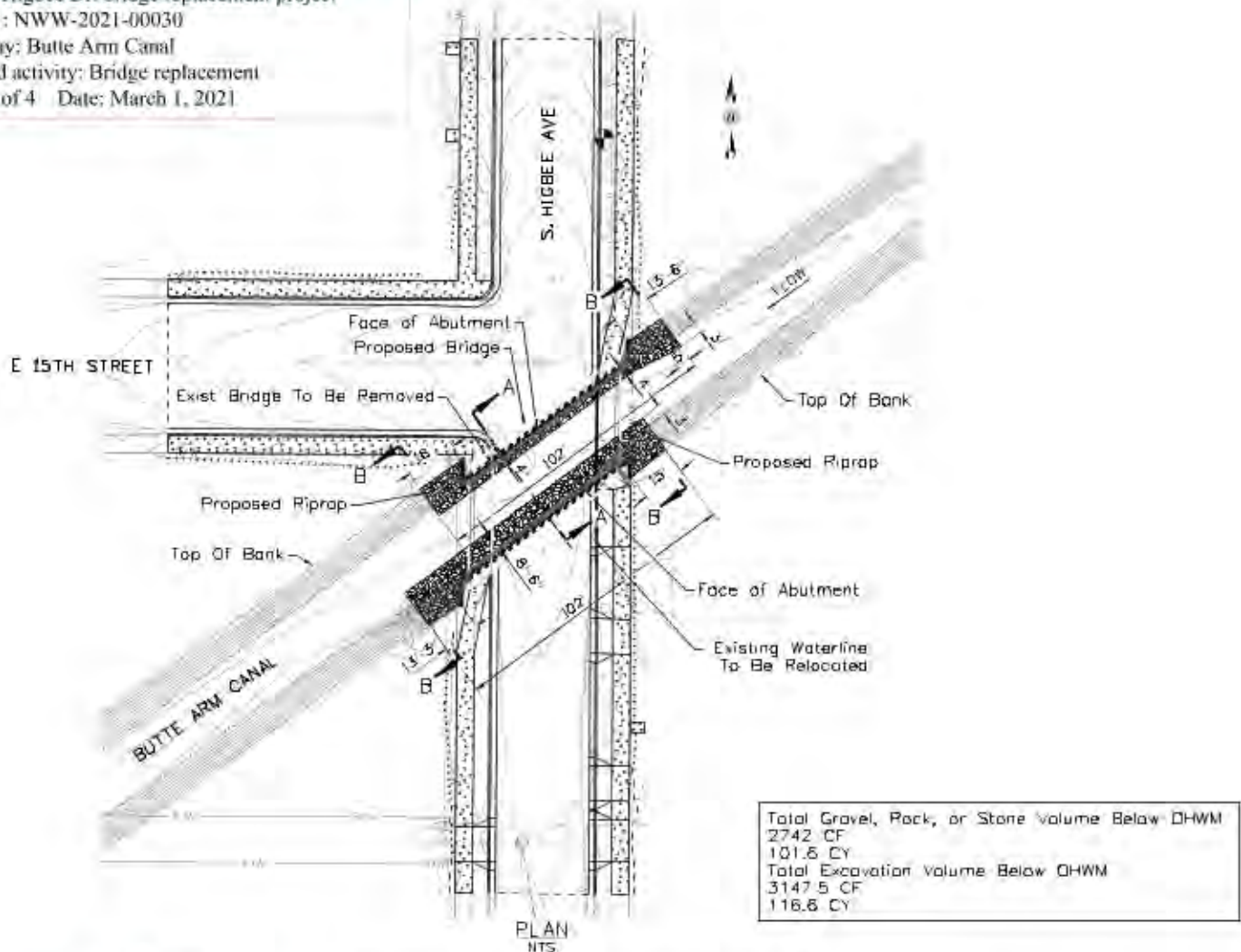
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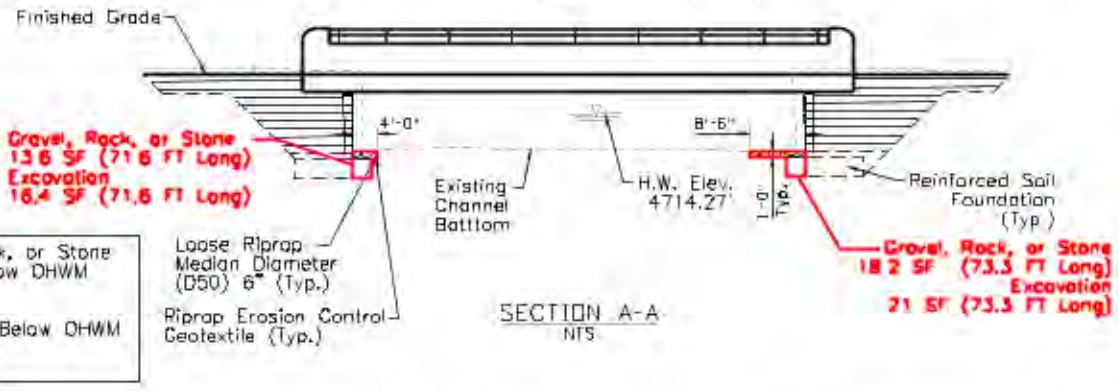
Totals Of Quantities Impacting Wetlands
 Construct Riprap 120 SF PEM Impacts

FIGURE 3
 BLOCK 27 AND BLOCK 28
 PROJECT IMPACTS TO WATERS OF US AND WETLANDS
 S HIGBEE DR, BUTTE ARM CANAL BR, IDAHO FALLS
 PROJECT NO. A022(431)
 KEY NO. 22431

Title: S. Higbee Dr. bridge replacement project
 File No. : NWW-2021-00030
 Waterway: Butte Arm Canal
 Proposed activity: Bridge replacement
 Sheet 4 of 4 Date: March 1, 2021



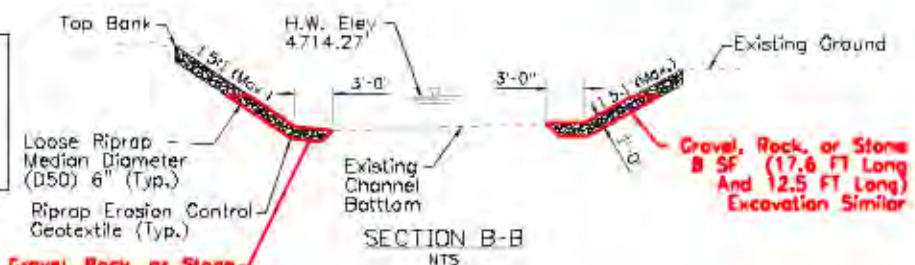
Total Gravel, Rock, or Stone Volume Below DHWM
 2742 CF
 101.6 CY
 Total Excavation Volume Below DHWM
 3147.5 CF
 116.6 CY



Gravel, Rock, or Stone
 Volume Below DHWM
 2308 CF
 85.5 CY
 Excavation Below DHWM
 2713.5 CF
 100.5 CY

Gravel, Rock, or Stone
 182 SF (73.3 FT Long)
 Excavation
 21 SF (73.3 FT Long)

Gravel, Rock, or Stone
 Volume Below DHWM
 434 CF
 16.1 CY
 Excavation Below DHWM
 434 CF
 16.1 CY



Gravel, Rock, or Stone
 6.8 SF (10.8 FT Long
 And 17.8 FT Long)
 Excavation Similar

Gravel, Rock, or Stone
 8 SF (17.6 FT Long
 And 12.5 FT Long)
 Excavation Similar

FIGURE 4
 BLOCK 27 AND BLOCK 28
 PROJECT IMPACTS TO WATERS OF US AND WETLANDS
 S HIGBEE DR, BUTTE ARM CANAL BR, IDAHO FALLS
 PROJECT NO. A022(431)
 KEY NO. 22431



**Your Safety • Your Mobility
Your Economic Opportunity**

Pollution Prevention Plan Idaho Transportation Department (ITD)

ITD 2788 (Rev. 04-18)
itd.idaho.gov



Instructions

The Pollution Prevention Plan (PPP) is a requirement for ITD projects which do not have coverage under the National Pollutant Discharge Elimination System (NPDES) 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 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 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.

Multiple operators may share the same PPP, but make sure that responsibilities are clearly described, and that all signatory requirements are met.

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 meet the requirements of Sections 107.17 and 212 of the Standard Specifications for Highway Construction and 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 Narrative Site Information

| | | | | |
|-----------------------------------------------|--------------------------------------------|---------------------|----------------------|-------------------|
| Key Number 22431 | Project Name Higbee Br, Idaho Falls | | | |
| Location/Address S Higbee Ave | | City Idaho Falls | County Bonneville | Zip Code 83404 |
| Beginning Milepost (if applicable) 100.824 | Ending Milepost (if applicable) 100.887 | | | |

Operator(s)**Local Highway Technical Assistance Council** Choose an item.

| | | | | |
|--------------------------------------|------------------------------------|---------------------------------|----------------------------|-------------------|
| LHTAC Contact Name Karissa Nelson | | Title Environmental Engineer | | |
| Office Address 3330 Grace Street | | City Boise | County Ada | Zip Code 83642 |
| Telephone Number 208-344-0565 | E-mail Address khardy@lhtac.org | | Fax Number 208-344-0789 | |

Local Sponsor Choose an item.

| | | | | |
|--------------------------------------------------------------|-------------------------------------------------|--------------------------------|----------------------------|-------------------|
| Organization Name Idaho Falls Public Works | | Contact Name Chris Canfield | | |
| Organization Address 380 Constitution Way | | City Idaho Falls | State ID | Zip Code 83402 |
| Telephone Number 208-612-8250 208-612-8259 direct line | E-mail Address CCanfield@idahofallsidaho.gov | | Fax Number 208-612-8570 | |

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 | | Fax Number | |

Estimated Project Start Date: (mm/dd/yyyy)**Estimated Project End Date: (mm/dd/yyyy)**

Section 1 - Project/Site Information**Location Information**

| | | | |
|------------------------------------------------------|----------------------|----------------------------------------------------------------|--|
| Project/Site Name S Higbee Dr, Butte Arm Canal Br | | Project Street/Location/Milepost/Route MP 100.824 – 100.887 | |
| City Idaho Falls | County Bonneville | ZIP Code 83404 | |

Contact Information/Responsible Parties**Prime Contractor**

| | | | | |
|------------------------------------------------------------------|----------------|------|------------|----------|
| Company/Organization Name | | | | |
| Company/Organization Address | | City | State | Zip Code |
| Telephone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site) | | | | |

Project Manager(s) or Site Supervisor(s)

| | | | | |
|---------------------------------------------------------------------------------------------------|----------------|------------------------------|------------|----------|
| Company/Organization Name | | Manager/Supervisor's Name(s) | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site, insert area of control for each) | | | | |

PPP Preparer Information (Contractor)

| | | | | |
|------------------------------|----------------|-----------------|-------|----------|
| Company/Organization Name | | Preparer's Name | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | | |

LHTAC Resident Engineer Information

| | | |
|--------------------------------|-------------------------------------|----------------------------|
| Engineer's Name Matt Koster | | |
| Address 3330 Grace Street | City Boise | Zip Code 83703 |
| Cell Phone Number | E-mail Address mkoster@lhtac.org | Fax Number 208 344 0789 |

General Scope of Work or Project Description

Replace the existing single span, multi-lane deteriorated bridge structure over Butte Arm Canal on S. Higbee Avenue. Roadway improvements are limited to approximately 120 feet south and 170 feet north of the bridge on Higbee Ave and approximately 100 feet of E 15th St. Roadway improvements will include curb & gutter, landscaped park strips, and 6-foot sidewalks.

Activity Description by Responsible Party

To add more rows, hit Tab in the last cell of the table.

| Name and Contact Information for Subcontractor | Area of Subcontractor Controls/Work Performed |
|------------------------------------------------|-----------------------------------------------|
| | |
| | |
| | |
| | |

Soils, Slopes, Vegetation, Existing Drainage Patterns, Climate

| |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil Type(s) Bannock loam and similar soils |
| Slopes - Describe existing slopes and any changes due to construction activities 0 to 2% |
| Drainage Patterns - Describe existing drainage patterns and note any changes due to construction Well drained soils, developed drainage to Butte Arm Canal. |
| Existing Vegetation Developed, low to medium intensity |
| Climate/Rainfall Patterns – Select amount that applies Semi-Arid (10"-20" annual rainfall) |

Construction Site Estimates

The following are estimates of the project disturbance. Show acreage to the nearest 0.25 acre
 Project site area to be disturbed – 0.75 acres
 Off-site waste sites to be disturbed - 0 acres
 Off-site borrow/source sites to be disturbed - 0 acres
 Staging Area to be disturbed - 0 acres
 Total project disturbed area – 0.75 acres

Receiving Waters

| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Describe receiving surface waters (if applicable) Butte Arm Canal |
| Describe receiving storm sewer systems (if applicable) and note MS4 areas None. |
| List immediate downstream water bodies (water bodies that are connected or would receive a direct discharge from the Project) that have been listed as impaired for sediment or waters subject to TMDLs by the Idaho Department of Environmental Quality (IDEQ) under Section 303(d) of the CWA Unknown. |

Site Features and Sensitive Areas that Require Protection

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide a description of any unique features (such as wetlands) that require protection (if applicable) 0.003 acres of wetlands will be impacted and mitigated in kind advance wetland creation. |
| If applicable, describe measures to protect these unique features Disturbance will be limited to the immediate riparian areas of the bridge reconstruction. Work from atop the banks when practical, track and rubber tired equipment will be used. |

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
- Any industrial stormwater discharges other than from project construction
- 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

Use the table below to identify all potential pollutants and sources, other than sediment, to stormwater runoff

| Trade Name Material | Stormwater Pollutants | Location or N/A |
|---------------------------|---------------------------------|-----------------|
| Fuels and/or Lubricants | Petroleum Distillates | Bridge site |
| Hydraulic Oils | Mineral Oil | Bridge site |
| Asphalts | Petroleum Distillates | Bridge site |
| Concrete/Curing Compounds | pH | Bridge site |
| Anti-freeze | Glycol, Heavy Metals | Bridge site |
| Paints | Organic Chemicals, VOCs | N/A |
| Fertilizers | Nutrients-Nitrogen, Phosphorous | N/A |
| Sanitary Toilets | Bacteria, Viruses, Parasites | Bridge site |
| | | |

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

| BMPs | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------------|------------------------------------|-------------------------------------|------------------------------------------------------------------------|
| Preservation of Existing / Natural Vegetation | - SD SPECS (201 and 202) - EC-2 | <input checked="" type="checkbox"/> | Date October 1, 2021 Location (Stations or MP) MP 100.824 – 100.887 |

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. Existing vegetated buffers (including preserving mature vegetation and trees) shall be utilized to minimize stormwater erosion potential and down slope movement to any watershed, water feature (including irrigation amenities or domestic water sources), or area susceptible to stormwater or surface water movement. The vegetated buffers shall consist of areas of undisturbed vegetation including grasses, shrubs, woody plants, and trees that are located between the traversed roadway section and the existing swales, ditches, canals, wetlands, and intermittent/perennial streams or rivers that are located within ITD right-of-way. The vegetated buffers shall be left undisturbed throughout the project life and act as permanent erosion and sediment control BMPs to ensure short and long-term slope stability.

Phase Construction Activity

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|------------------------------------------|--------------------------|-----------------------------------|
| Scheduling and Sequencing of Construction Activities | - SD SPECS (108, 205, and 212) - EC-1 | <input type="checkbox"/> | Date Location (Stations or MP) |

The specific scheduling and sequencing of construction activities are required to be outlined by the Contractor and become a permanent part of the PPP. Records must be maintained as part of the PPP and shall include dates and durations when major activities occur (i.e. soil disturbing activities); dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures have been initiated and are obtained. Scheduling and sequencing of construction activities including the CMP Schedule shall be documented in this PPP by the Contractor. Describe major phases of construction in the spaces provided here:

Phase I

-
-

Phase II

-
-

Repeat as needed for additional Phases

Control Stormwater Flowing Onto and Through the Project

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Coffer and Tarp Dams / Water Filled Bladders/ Aprons | - SD SPECS (210 and 501) - EC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains | - SD SPECS (212 and 706) - SD Drawings (P-1-A) - EC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes / Berms | - SD SPECS (205, 209, and 212) - SD Drawings P-1-F and P-1-E - SC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Clear Water Diversion | - SD SPECS (N/A) - NS-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Stabilize Soils and Protect Slopes

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------|-------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Hydraulically Applied Erosion Control Products | - SD SPECS (212, 621, and 711) - EC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Hydroseeding | - SD SPECS (621 and 711) - EC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Soil Binders | - SD SPECS (212) - EC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Straw Mulch | - SD SPECS (212, 621, and 711) - EC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wood Mulch | - SD SPECS (212, 621, and 711) - EC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------|
| | | | Quantity of BMP |
| Geotextiles, Plastic Covers, and Erosion Control Blanket | - SD SPECS (212, 621, and 711) - EC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (212 and 621) - EC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dust Control | - SD SPECS (104, 106, 107, 205, 212, 621, and 711) - EC-13 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 72 MG |
| Wind Erosion Control | - SD SPECS (205 and 212) - EC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Lawn Construction (Sodded) | SD SPECS (651) | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 4467 SF |

Protect Storm Drain Inlets

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------|-----------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
| Inlet/Outlet Protection | - SD SPECS (212, 640, 711, and 718) - SC-6 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 6 |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Perimeter Controls and Sediment Barriers

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------|------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------|
| Gravel Bag Barrier | - SD SPECS (212) - SC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sandbag Barrier | - SD SPECS (212) - SC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Silt Fence | - SD SPECS (212 and 718) - SC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sediment Retention Fiber Rolls | - SD SPECS (N/A) - SC-8 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 45 |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----|------------------|--------------------------|------------------------------------------------------------------------|
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Retain Sediment On-Site

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Sediment-Desilting Basin | - SD SPECS (212) - SD Drawings (P-1-C, P-1-D, P-4-A) - SC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Stabilized Construction Exits and Temporary Haul Roads

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|--------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------|
| Street Sweeping and Vacuuming | - SD SPECS (N/A) - SC-4 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP100.824-100.887 Quantity of BMP 1 LS |
| Temporary Construction Entrances | - SD SPECS (104, 205, and 212) - SD Drawings (P-1-F) - SC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Roads | - SD SPECS (104, 107, 205, and 212) - SC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Entrance Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) -SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Stream Crossing | - SD SPECS (602) - NS-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Insert any required additional text or tables here

Section 3 - Good Housekeeping BMPs

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 Resident Engineer 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.

The following are material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. For the purposes of this plan and for any ITD projects, **Hazardous Material** is defined as “any material that poses harmful risks to human health and/or the environment. Includes any hazardous or toxic substance, waste, pollutant, or chemical regulated under the CAA, CWA, TSCA, and/or RCRA; a pollutant or contaminant as any substance likely to cause death, disease, abnormalities, etc. (CERCLA Sec. 101(33)); or those listed in 40 CFR 302. For ITD purposes, petroleum, lead paint, asbestos, and other substances will be considered hazardous materials, as identified in the scope of work”.

- An effort will be made to store only enough product required to complete the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure that minimizes contact with stormwater
- Products will be kept in their original containers with the original manufacturer’s label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturer’s recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials
- Tanks containing fuel will have secondary containment installed to contain any spilled material

Material Handling and Waste Management in Staging Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------|
| Staging and Materials Site Management | - SD SPECS (107) - SD Drawings (P-1-D, P-3-E, and P-5-A) - WM-1 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Solid Waste Management | - SD SPECS (N/A) - WM-6 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Concrete Curing | - SD SPECS (N/A) - NS-12 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Material and Equipment Use Over Water | - SD SPECS (N/A) - NS-13 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Concrete Finishing | - SD SPECS (N/A) - NS-14 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Structure Demolition-Removal Over or Adjacent to Water | - SD SPECS (N/A) - NS-15 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Material Delivery and Storage | - SD SPECS (N/A) - WM-2 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Material Use | - SD SPECS (N/A) - WM-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Stockpile Management | - SD SPECS (N/A) - WM-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Solid and source site materials, excess materials, hazardous materials, vehicle equipment and maintenance, sanitary waste management, and waste in general shall be managed at designated staging and waste areas. Staging and waste areas should be located a minimum of 150-ft away from any water feature (including irrigation amenities or domestic water sources) or areas susceptible to stormwater or surface water movement.

Solid and source site materials, include but are not limited to, dedicated asphalt or concrete plants (where the manufacturing of asphalt or concrete will occur on-site), gravel pits, stockpiles, source sites, general construction materials, and excess materials. The Contractor shall use an approved licensed solid waste management company. The Contractor shall reuse and recycle trash, source materials, construction materials, and construction debris unless it is not usable. If it is not usable or cannot be recycled it will be considered solid waste. All solid waste materials, with the exception of source materials, will be collected and disposed of in a securely lidded dumpster and shall be covered and secured at night and during all precipitation events. Any leaky solid waste dumpster must be exchanged or replaced within 24-hours of confirmation. Collection and proper disposal of all leaking materials shall be the responsibility of the Contractor.

The Contractor shall arrange an adequate solid waste disposal schedule to ensure that there is adequate solid waste disposal capacity on-site at all times and that dumpsters do not overflow and are emptied on a regular basis. All solid waste materials shall be removed from the project site throughout the duration and after the project is completed. Solid waste materials shall not be buried, burned, or discharged from the site.

Designate Washout Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------|------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
| Liquid Waste Management | - SD SPECS (N/A) - WM-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Concrete Waste Management | - SD SPECS (N/A) - SD Drawings (P-5-B) - WM-9 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 1 |
| Entrance/Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) - SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Concrete waste procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or to watercourses. A wash station may also be required to prevent transporting noxious weeds and contaminated soils from a contaminated site to an uncontaminated site or road surface.

Covering or containing hazardous materials or washing contaminated equipment may be required. All vehicle and equipment cleaning and maintenance shall occur in a designated staging site/area and include a water pollution control

equipment wash down area that shall have secondary containment and protection through the use of berms or other erosion and sediment controls or BMPs to reduce or eliminate discharges of pollutants.

The Contractor shall avoid mixing excess amounts of fresh concrete or cement mortar on-site. Storage of dry and wet materials associated with concrete should be located a minimum of 150-ft upslope of any water feature (including irrigation amenities or domestic water sources) or area susceptible to stormwater or surface water movement. The Contractor shall **Never** dispose of concrete, grout, or cement mortar washout into a watershed, water feature, or area susceptible to stormwater or surface water movement. Wash out concrete transit mixers only in designated washout areas. The Contractor shall design a temporary concrete washout station (s) as per ITD Standard Drawing P-5-B. All hardened concrete, grout, or cement mortar waste, including waste generated during equipment cleaning and QA/QC testing, shall be collected and transported to an approved licensed solid waste disposal/processing or recycling site by the Contractor.

Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------|-----------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
| Vehicle and Equipment Fueling | - SD SPECS (N/A) - SD Drawings (P-5-E) - NS-9 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 1 |
| Vehicle and Equipment Maintenance | - SD SPECS (N/A) - NS-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pile Driving Operations | - SD SPECS (N/A) - NS-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

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 Resident Engineer.

| Fueling and/or Maintenance Activity | Practices to be Implemented to Control Spills and/or Exposure to Stormwater |
|-------------------------------------|-----------------------------------------------------------------------------|
| | |
| | |
| | |

| | |
|--|--|
| | |
|--|--|

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

Sanitary Waste BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|-----------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
| Sanitary-Septic Waste Management | - SD SPECS (N/A) - WM-10 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 Quantity of BMP 1 |

Sanitary and Septic Waste procedures and practices are used to minimize or eliminate the discharge of construction site sanitary/septic waste materials to the storm drain system or to watercourses. Sanitary/septic waste management practices are implemented on all construction sites that use temporary or portable sanitary/septic waste systems. Temporary portable toilets from an approved licensed sanitary waste company shall be used during the duration of the project and maintained and cleaned as needed. Portable toilets shall be located at designated staging areas and have secondary containment in case of a leak, spill, or discharge. All sanitary waste will be collected from the portable units a minimum once per week. Placement and removal of all portable toilets shall be the responsibility of the Contractor.

Contaminated Soil BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Contaminated Soil Management | - SD SPECS (N/A) - WM-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Prior to construction or soil disturbance, ITD shall inspect the site for physical contamination. During the construction phase, if the Contractor detects evidence of contamination, or encounters leaks, spills, or discharges are detected, contaminated soils and water should be contained and held for testing whenever contamination is suspected. Any specific contaminant known to exist or that is discovered on site and which has contaminated soil or has the potential to contaminate soil and/or drainages or water features (including irrigation amenities or domestic water sources) shall be reported to the Resident Engineer immediately. The Resident Engineer will coordinate clean-up of contaminated soils with the Idaho Communications Center (Statecom) at 1-800-632-8000.

Allowable Non-Stormwater Discharge Management and Equipment/Vehicle Washing

Non-stormwater (dust control water, water used in road grading, irrigation drainage, springs or ground water dewatering, etc) may combine with stormwater and be present in the discharge at this site. All water shall be treated in the same manner as stormwater runoff. The same BMPs used in this PPP for stormwater runoff shall be implemented to reduce non-stormwater impacts and limit non-stormwater discharges. The use of soap, solvents, and degreasers is specifically prohibited for cleaning use. Uncontaminated water discharge from dust control, dust abatement activities, and water used in road grading or excavation activities and compaction shall not reach waters of the United States.

The following incidental non-stormwater from the sources marked below may combine with stormwater and be present in the discharge at this site.

- Hydrant or Water Line Flushing
- Vehicle Wash-Down Water
- Dust Control Water
- Irrigation Drainage (including landscape)
- Spring or Groundwater
- Air Conditioner Condensate

- Uncontaminated Foundation or Footing Drains
- Pavement or Building Wash Water
- Uncontaminated Excavation Dewatering (without detergents)
- Potable Water
- No Known Non-Stormwater Sources Apparent

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 |
|-------------------------------------------|----------------------------------------------------------------------------|
| Hydrant or Water Line Flushing | Direct discharge into storm drains and prevent erosion |
| Dust Control Water | Do not saturate soil to the point of runoff |
| Irrigation Drainage (including landscape) | Irrigation drainage shall not occur until permanent sod has been laid down |
| | |

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

Non-Stormwater BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------|------------------------------------------------|-------------------------------------|------------------------------------------------------------------------|
| Water Conservation Practices | - SD SPECS (106 and 205) - NS-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Dewatering Operations | - SD SPECS (N/A) - NS-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Paving and Grinding Operations | - SD SPECS (203) - NS-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Potable Water-Irrigation Management | - SD SPECS (N/A) - NS-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Vehicle and Equipment Cleaning | - SD SPECS (N/A) - SD Drawings () - NS-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Freeze Reduction | - SD SPECS (N/A) - NS-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Snow Management | - SD SPECS (N/A) - EC-15 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Snow Accumulation Management | - SD SPECS (N/A) - EC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Spill Prevention and Control BMPs

All ITD projects shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and ITD Incident Management Plan. In addition, a project Spill Plan shall be provided by the Contractor, and should be

included in **Appendix B**. The ITD BMPs listed below also contain guidance on waste management, spill prevention and control, and cleanup.

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------------|----------------------------|-------------------------------------|------------------------------------------------------------------------|
| Spill Prevention and Control | - SD SPECS (N/A) - WM-5 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.824-100.887 |
| Hazardous Waste Management | - SD SPECS (N/A) - WM-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Illicit Connection-Illegal Discharge Detection and Reporting | - SD SPECS (N/A) - NS-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Per 40 CFR 112, if petroleum products stored at the construction site aggregate 1,320 gallons or more, a Spill Prevention, Control, and Countermeasure Plan (SPCC) plan will be required.

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 per ITD PPP requirements. 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 | Implementation Schedule |
|-----------------------------------------|-----------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Channel Protection - Check Dams | - SD SPECS (212) - SD Drawings (P-2-B) - PC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sheet Flow to Buffers | - SD SPECS (N/A) - PC-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Flexible Liners | - SD SPECS (212 and 624) - SD Drawings (P-2-A and P-2-C) - PC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Rigid Channel Liners | - SD SPECS (209 and 623) - SD Drawings (P-2-D) - PC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes and Berms | - SD SPECS (205, 209, and 212) - SD Drawings (P-1-E and P-1-F) - PC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dry Swale | - SD SPECS (N/A) - PC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------|
| Wet Swale | - SD SPECS (N/A) - PC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geosynthetics | - SD SPECS (640 and 718) - PC-8 | <input checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 415 SY |
| Surface Sand Filter | - SD SPECS (N/A) - PC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Subsurface Sand Filter | - SD SPECS (N/A) - PC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Perimeter Sand Filter | - SD SPECS (N/A) - PC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Organic Filter | - SD SPECS (N/A) - PC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Sand Filter | - SD SPECS (N/A) - PC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Bioretention | - SD SPECS (N/A) - PC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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 checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 6 |
| Interceptor Ditches | - SD SPECS (208 and 209) - PC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Retaining Walls | - SD SPECS (210 and 512) - PC-17 | <input checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 2 |
| Stormwater Basins | - SD SPECS (205 and 212) - SD Drawings (P-1-C and P-4-A) - PC-18 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Basin with Micropool | - SD SPECS (N/A) - PC-19 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wet Basin | - SD SPECS (N/A) - PC-20 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------|
| Wet Extended Detention Basin | - SD SPECS (N/A) - PC-21 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Shallow Wetland | - SD SPECS (N/A) - PC-22 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Shallow Wetland | - SD SPECS (N/A) - PC-23 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pond Wetland System | - SD SPECS (N/A) - PC-24 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Wetland | - SD SPECS (N/A) - PC-25 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sediment Control Box | - SD SPECS (605 and 609) - SD Drawings (E-6-A-F, P-1-H, P-3-A, P-3-B, and P-3-D) - PC-26 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Trench | - SD SPECS (N/A) - PC-27 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Basin | - SD SPECS (N/A) - PC-28 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains - Chutes - Flumes | - SD SPECS (208, 212, 409, 606, 607, and 609) - SD Drawings (D-1-A, D-1-B, and P-2-D) - PC-29 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Rock Armor / Mulch – Turf Reinforced Mat | - SD SPECS (N/A) - PC-30 | <input type="checkbox"/> | Date to be Implemented Location(Stations or MP) Quantity of BMP |
| Serrations / Roughening | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-31 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Terraces / Benching | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-32 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Topsoil Management | - SD SPECS (213 and 711.09) - PC-33 | <input checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 83 CY |
| Vegetation-Seeding | - SD SPECS (621, 711.05, 711.12, 711.06) - PC-34 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------------------|----------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------|
| Vegetation-Planting | - SD SPECS (620 and 711.06) - PC-35 | <input checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 10 Each |
| Water Quality Inlet / Oil Grit Separator | - SD SPECS (N/A) - PC-36 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP 2 |
| Street Sweeping | - SD SPECS (N/A) - PC-37 | <input checked="" type="checkbox"/> | Date to be Implemented Location(Stations or MP)MP 100.824-100.887 Quantity of BMP 66 hrs |
| Deep Sump Catch Basin | - SD SPECS (N/A) - PC-38 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| On-line Storage in Storm Drain Network (Vaults) | - SD SPECS (N/A) - PC-39 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Porous Pavements | - SD SPECS (N/A) - PC-40 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Proprietary Manufactured Systems | - SD SPECS (N/A) - PC-41 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Section 5 - Inspection and Maintenance Requirements

Inspections

- Contractor shall inspect and maintain all structural and non-structural control measures for functionality as required by the contract
- Conduct inspections using the inspection and corrective action log form in the Appendix
- Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**

All BMP deficiencies identified during the inspection, or any inadequacies related to the PPP, must be corrected as soon as possible but never later than 7 days after the inspection.

Maintaining an Updated PPP Plan

Changes to the PPP must be documented and may include any one of the following:

- Construction methods
- Operation methods
- Design of the project (including civil plan sheets)

In the field change orders
Maintenance or inspection procedures
Staging sites
Material source sites/stockpile sites
Disposal/excess material/waste sites
Haul roads, temporary roads, and locations where vehicles travel and enter or exit staging areas and construction sites
Implementation and maintenance of BMPs
Stormwater discharge locations
Sequencing/scheduling changes
Impacts to wetlands or sensitive areas
Changes in personnel

All of these can result in the need for additional BMPs, and therefore a PPP update.

The sole objective of all modifications is to keep the PPP concurrent to existing on-the-ground conditions and to eliminate erosion and sediment impacts, as well as other pollutant impacts that could potentially result from the project. All modifications to the PPP shall be documented in **Appendix C** through the completion of inspections reports that shall serve as the corrective action log on this project.

Section 6 - Recordkeeping

Low Erosivity Waiver

If this PPP is being prepared in lieu of a Stormwater Pollution Prevention Plan based on the applicability of obtaining a Low Erosivity Waiver for the project, a copy of ITD, the Contractor, and any applicable local entity filing for a Low Erosivity Waiver (LEW) should be included in **Appendix D**. Guidance on the applicability of the LEW on your project can be found at the following website: <http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm>

Attention should be given to the expirations date on the LEW.

Inspections

Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**.

Section 7 - Certification and Notification

| | | | |
|-------------------------------------------------------|---------------------------------------|-----------|---------------|
| LHTAC Representative's Printed Name Karissa Nelson | Title LHTAC Environmental Engineer | 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 – Basic Spill Prevention and Control Plan Language

In addition to all the erosion and sediment control BMPs, non-stormwater BMPs, and good housekeeping BMPs discussed in the this PPP plan, the minimum following information will be provided by the Contractor for Spill Prevention and Cleanup:

- 1) Contact information for Contractor's designated Spill Coordinator for the project. This person must have authority to mobilize equipment, personnel, and materials in the event of a spill or discharge.
- 2) Documentation of training and/or education on spill response and cleanup.
- 3) Description of the location and content of spill kits on the project site.

Appendix C – Executed Inspection Reports/Corrective Action Log

Appendix D – Low Erosivity Waivers (if applicable)

Appendix E – 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 | |



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Pollution Prevention Plan Idaho Transportation Department (ITD)

ITD 2788 (Rev. 04-18)
itd.idaho.gov



Instructions

The Pollution Prevention Plan (PPP) is a requirement for ITD projects which do not have coverage under the National Pollutant Discharge Elimination System (NPDES) 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 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 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.

Multiple operators may share the same PPP, but make sure that responsibilities are clearly described, and that all signatory requirements are met.

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 meet the requirements of Sections 107.17 and 212 of the Standard Specifications for Highway Construction and 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 Narrative Site Information

| | | | |
|--------------------------------------------|-----------------------------------------------------------|-------------------|-------------------|
| Key Number 22597 | Project Name W Carson St, Portneuf River Br, Pocatello | | |
| Location/Address 799-701 Riverside Dr | City Pocatello | County Bannock | Zip Code 83204 |
| Beginning Milepost (if applicable) 0.01 | Ending Milepost (if applicable) 0.05 | | |

Operator(s)**Local Highway Technical Assistance Council** Choose an item.

| | | | |
|--------------------------------------|-------------------------------------|---------------------------------|-------------------|
| LHTAC Contact Name Karissa Nelson | | Title Environmental Engineer | |
| Office Address 3330 Grace Street | City Boise | County Ada | Zip Code 83642 |
| Telephone Number 208-344-0565 | E-mail Address knelson@lhtac.org | Fax Number 208-344-0789 | |

Local Sponsor Choose an item.

| | | | |
|------------------------------------------------------|----------------------------------------|----------------------------|-------------------|
| Organization Name City of Pocatello | | Contact Name Art DaRosa | |
| Organization Address 911 N 7 th Avenue | City Pocatello | State ID | Zip Code 83201 |
| Telephone Number 208-234-6163 | E-mail Address adarosa@pocatello.us | Fax Number | |

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 | Fax Number | |

Estimated Project Start Date: (mm/dd/yyyy)**Estimated Project End Date: (mm/dd/yyyy)**

Section 1 - Project/Site Information**Location Information**

| | | | |
|-----------------------------------------------------|-------------------|----------------------------------------------------------|--|
| Project/Site Name W Carson St, Portneuf River Br | | Project Street/Location/Milepost/Route MP 0.01 – 0.05 | |
| City Pocatello | County Bannock | ZIP Code 83204 | |

Contact Information/Responsible Parties**Prime Contractor**

| | | | | |
|------------------------------------------------------------------|----------------|------|------------|----------|
| Company/Organization Name | | | | |
| Company/Organization Address | | City | State | Zip Code |
| Telephone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site) | | | | |

Project Manager(s) or Site Supervisor(s)

| | | | | |
|---------------------------------------------------------------------------------------------------|----------------|------------------------------|------------|----------|
| Company/Organization Name | | Manager/Supervisor's Name(s) | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site, insert area of control for each) | | | | |

PPP Preparer Information (Contractor)

| | | | | |
|------------------------------|----------------|-----------------|-------|----------|
| Company/Organization Name | | Preparer's Name | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | | |

LHTAC Resident Engineer Information

| | | |
|--------------------------------|-------------------------------------|----------------------------|
| Engineer's Name Matt Koster | | |
| Address 3330 Grace Street | City Boise | Zip Code 83703 |
| Cell Phone Number | E-mail Address mkoster@lhtac.org | Fax Number 208 344 0789 |

General Scope of Work or Project Description

Replace the existing single span, multi-lane deteriorated bridge structure over the Portneuf River. Approximately 50-feet of roadway on either end of the bridge will be paved along with the replacement of the curb and gutter and sidewalk.

Activity Description by Responsible Party

To add more rows, hit Tab in the last cell of the table.

| Name and Contact Information for Subcontractor | Area of Subcontractor Controls/Work Performed |
|------------------------------------------------|-----------------------------------------------|
| | |
| | |
| | |
| | |

Soils, Slopes, Vegetation, Existing Drainage Patterns, Climate

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil Type(s) Hondoho and similar soils: 50 percent; Arbone and similar soils: 45 percent |
| Slopes - Describe existing slopes and any changes due to construction activities 4 to 12% |
| Drainage Patterns - Describe existing drainage patterns and note any changes due to construction Well drained soils, developed drainage to Portneuf River. |
| Existing Vegetation Developed, open space, low, and medium intensity |
| Climate/Rainfall Patterns – Select amount that applies Semi-Arid (10"-20" annual rainfall) |

Construction Site Estimates

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

Project site area to be disturbed – 0.5 acres

Off-site waste sites to be disturbed - 0 acres

Off-site borrow/source sites to be disturbed - 0 acres

Staging Area to be disturbed - 0 acres

Total project disturbed area – 0.5 acres

Receiving Waters

| |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Describe receiving surface waters (if applicable) Portneuf River |
| Describe receiving storm sewer systems (if applicable) and note MS4 areas Portneuf River and Pocatello MS4 storm water collection system |
| List immediate downstream water bodies (water bodies that are connected or would receive a direct discharge from the Project) that have been listed as impaired for sediment or waters subject to TMDLs by the Idaho Department of Environmental Quality (IDEQ) under Section 303(d) of the CWA Portneuf River |

Site Features and Sensitive Areas that Require Protection

| |
|------------------------------------------------------------------------------------------------------------------|
| Provide a description of any unique features (such as wetlands) that require protection (if applicable) None. |
| If applicable, describe measures to protect these unique features N/A |

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
- Any industrial stormwater discharges other than from project construction
- 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

Use the table below to identify all potential pollutants and sources, other than sediment, to stormwater runoff

| Trade Name Material | Stormwater Pollutants | Location or N/A |
|---------------------------|---------------------------------|-----------------|
| Fuels and/or Lubricants | Petroleum Distillates | Bridge site |
| Hydraulic Oils | Mineral Oil | Bridge site |
| Asphalts | Petroleum Distillates | Bridge site |
| Concrete/Curing Compounds | pH | Bridge site |
| Anti-freeze | Glycol, Heavy Metals | Bridge site |
| Paints | Organic Chemicals, VOCs | N/A |
| Fertilizers | Nutrients-Nitrogen, Phosphorous | N/A |
| Sanitary Toilets | Bacteria, Viruses, Parasites | Bridge site |
| | | |

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

| BMPs | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------------|------------------------------------|-------------------------------------|---------------------------------------------------------------|
| Preservation of Existing / Natural Vegetation | - SD SPECS (201 and 202) - EC-2 | <input checked="" type="checkbox"/> | Date June 1, 2022 Location (Stations or MP) MP 0.01 – 0.05 |

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. Existing vegetated buffers (including preserving mature vegetation and trees) shall be utilized to minimize stormwater erosion potential and down slope movement to any watershed, water feature (including irrigation amenities or domestic water sources), or area susceptible to stormwater or surface water movement. The vegetated buffers shall consist of areas of undisturbed vegetation including grasses, shrubs, woody plants, and trees that are located between the traversed roadway section and the existing swales, ditches, canals, wetlands, and intermittent/perennial streams or rivers that are located within ITD right-of-way. The vegetated buffers shall be left undisturbed throughout the project life and act as permanent erosion and sediment control BMPs to ensure short and long-term slope stability.

Phase Construction Activity

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|------------------------------------------|--------------------------|-----------------------------------|
| Scheduling and Sequencing of Construction Activities | - SD SPECS (108, 205, and 212) - EC-1 | <input type="checkbox"/> | Date Location (Stations or MP) |

The specific scheduling and sequencing of construction activities are required to be outlined by the Contractor and become a permanent part of the PPP. Records must be maintained as part of the PPP and shall include dates and durations when major activities occur (i.e. soil disturbing activities); dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures have been initiated and are obtained. Scheduling and sequencing of construction activities including the CMP Schedule shall be documented in this PPP by the Contractor. Describe major phases of construction in the spaces provided here:

Phase I

-
-

Phase II

-
-

Repeat as needed for additional Phases

Control Stormwater Flowing Onto and Through the Project

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Coffer and Tarp Dams / Water Filled Bladders/ Aprons | - SD SPECS (210 and 501) - EC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains | - SD SPECS (212 and 706) - SD Drawings (P-1-A) - EC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes / Berms | - SD SPECS (205, 209, and 212) - SD Drawings P-1-F and P-1-E - SC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Clear Water Diversion | - SD SPECS (N/A) - NS-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Stabilize Soils and Protect Slopes

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Hydraulically Applied Erosion Control Products | - SD SPECS (212, 621, and 711) - EC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Hydroseeding | - SD SPECS (621 and 711) - EC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Soil Binders | - SD SPECS (212) - EC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Straw Mulch | - SD SPECS (212, 621, and 711) - EC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------|
| Wood Mulch | - SD SPECS (212, 621, and 711) - EC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geotextiles, Plastic Covers, and Erosion Control Blanket | - SD SPECS (212, 621, and 711) - EC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (212 and 621) - EC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dust Control | - SD SPECS (104, 106, 107, 205, 212, 621, and 711) - EC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wind Erosion Control | - SD SPECS (205 and 212) - EC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Lawn Construction (Sodded) | - SD SPECS (651) | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 -0.05 Quantity of BMP 367 SF |

Protect Storm Drain Inlets

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------|-----------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|
| Inlet/Outlet Protection | - SD SPECS (212, 640, 711, and 718) - SC-6 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 2 |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Perimeter Controls and Sediment Barriers

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------|------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------|
| Gravel Bag Barrier | - SD SPECS (212) - SC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sandbag Barrier | - SD SPECS (212) - SC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Silt Fence | - SD SPECS (212 and 718) - SC-7 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 385 |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------|----------------------------|--------------------------|---------------------------------------------------------------------------------|
| Sediment Retention Fiber Rolls | - SD SPECS (N/A) - SC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP 241 feet |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Retain Sediment On-Site

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Sediment-Desilting Basin | - SD SPECS (212) - SD Drawings (P-1-C, P-1-D, P-4-A) - SC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Stabilized Construction Exits and Temporary Haul Roads

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------|
| Street Sweeping and Vacuuming | - SD SPECS (N/A) - SC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Construction Entrances | - SD SPECS (104, 205, and 212) - SD Drawings (P-1-F) - SC-11 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP MP 0.01 – 0.05 Quantity of BMP 2 |
| Temporary Roads | - SD SPECS (104, 107, 205, and 212) - SC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Entrance Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) -SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Stream Crossing | - SD SPECS (602) - NS-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Insert any required additional text or tables here

Section 3 - Good Housekeeping BMPs

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 Resident Engineer 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.

The following are material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. For the purposes of this plan and for any ITD projects, **Hazardous Material** is defined as “any material that poses harmful risks to human health and/or the environment. Includes any hazardous or toxic substance, waste, pollutant, or chemical regulated under the CAA, CWA, TSCA, and/or RCRA; a pollutant or contaminant as any substance likely to cause death, disease, abnormalities, etc. (CERCLA Sec. 101(33)); or those listed in 40 CFR 302. For ITD purposes, petroleum, lead paint, asbestos, and other substances will be considered hazardous materials, as identified in the scope of work”.

- An effort will be made to store only enough product required to complete the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure that minimizes contact with stormwater
- Products will be kept in their original containers with the original manufacturer’s label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturer’s recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials
- Tanks containing fuel will have secondary containment installed to contain any spilled material

Material Handling and Waste Management in Staging Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------|
| Staging and Materials Site Management | - SD SPECS (107) - SD Drawings (P-1-D, P-3-E, and P-5-A) - WM-1 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Solid Waste Management | - SD SPECS (N/A) - WM-6 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Concrete Curing | - SD SPECS (N/A) - NS-12 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Material and Equipment Use Over Water | - SD SPECS (N/A) - NS-13 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Concrete Finishing | - SD SPECS (N/A) - NS-14 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Structure Demolition-Removal Over or Adjacent to Water | - SD SPECS (N/A) - NS-15 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Material Delivery and Storage | - SD SPECS (N/A) - WM-2 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Material Use | - SD SPECS (N/A) - WM-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Stockpile Management | - SD SPECS (N/A) - WM-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Solid and source site materials, excess materials, hazardous materials, vehicle equipment and maintenance, sanitary waste management, and waste in general shall be managed at designated staging and waste areas. Staging and waste areas should be located a minimum of 150-ft away from any water feature (including irrigation amenities or domestic water sources) or areas susceptible to stormwater or surface water movement.

Solid and source site materials, include but are not limited to, dedicated asphalt or concrete plants (where the manufacturing of asphalt or concrete will occur on-site), gravel pits, stockpiles, source sites, general construction materials, and excess materials. The Contractor shall use an approved licensed solid waste management company. The Contractor shall reuse and recycle trash, source materials, construction materials, and construction debris unless it is not usable. If it is not usable or cannot be recycled it will be considered solid waste. All solid waste materials, with the exception of source materials, will be collected and disposed of in a securely lidded dumpster and shall be covered and secured at night and during all precipitation events. Any leaky solid waste dumpster must be exchanged or replaced within 24-hours of confirmation. Collection and proper disposal of all leaking materials shall be the responsibility of the Contractor.

The Contractor shall arrange an adequate solid waste disposal schedule to ensure that there is adequate solid waste disposal capacity on-site at all times and that dumpsters do not overflow and are emptied on a regular basis. All solid waste materials shall be removed from the project site throughout the duration and after the project is completed. Solid waste materials shall not be buried, burned, or discharged from the site.

Designate Washout Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------|------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|
| Liquid Waste Management | - SD SPECS (N/A) - WM-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Concrete Waste Management | - SD SPECS (N/A) - SD Drawings (P-5-B) - WM-9 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |
| Entrance/Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) - SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Concrete waste procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or to watercourses. A wash station may also be required to prevent transporting noxious weeds and contaminated soils from a contaminated site to an uncontaminated site or road surface.

Covering or containing hazardous materials or washing contaminated equipment may be required. All vehicle and equipment cleaning and maintenance shall occur in a designated staging site/area and include a water pollution control

equipment wash down area that shall have secondary containment and protection through the use of berms or other erosion and sediment controls or BMPs to reduce or eliminate discharges of pollutants.

The Contractor shall avoid mixing excess amounts of fresh concrete or cement mortar on-site. Storage of dry and wet materials associated with concrete should be located a minimum of 150-ft upslope of any water feature (including irrigation amenities or domestic water sources) or area susceptible to stormwater or surface water movement. The Contractor shall **Never** dispose of concrete, grout, or cement mortar washout into a watershed, water feature, or area susceptible to stormwater or surface water movement. Wash out concrete transit mixers only in designated washout areas. The Contractor shall design a temporary concrete washout station (s) as per ITD Standard Drawing P-5-B. All hardened concrete, grout, or cement mortar waste, including waste generated during equipment cleaning and QA/QC testing, shall be collected and transported to an approved licensed solid waste disposal/processing or recycling site by the Contractor.

Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------|-----------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|
| Vehicle and Equipment Fueling | - SD SPECS (N/A) - SD Drawings (P-5-E) - NS-9 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |
| Vehicle and Equipment Maintenance | - SD SPECS (N/A) - NS-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pile Driving Operations | - SD SPECS (N/A) - NS-11 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

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 Resident Engineer.

| Fueling and/or Maintenance Activity | Practices to be Implemented to Control Spills and/or Exposure to Stormwater |
|-------------------------------------|-----------------------------------------------------------------------------|
| | |
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| | |
|--|--|

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

Sanitary Waste BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|-----------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|
| Sanitary-Septic Waste Management | - SD SPECS (N/A) - WM-10 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |

Sanitary and Septic Waste procedures and practices are used to minimize or eliminate the discharge of construction site sanitary/septic waste materials to the storm drain system or to watercourses. Sanitary/septic waste management practices are implemented on all construction sites that use temporary or portable sanitary/septic waste systems. Temporary portable toilets from an approved licensed sanitary waste company shall be used during the duration of the project and maintained and cleaned as needed. Portable toilets shall be located at designated staging areas and have secondary containment in case of a leak, spill, or discharge. All sanitary waste will be collected from the portable units a minimum once per week. Placement and removal of all portable toilets shall be the responsibility of the Contractor.

Contaminated Soil BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Contaminated Soil Management | - SD SPECS (N/A) - WM-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Prior to construction or soil disturbance, ITD shall inspect the site for physical contamination. During the construction phase, if the Contractor detects evidence of contamination, or encounters leaks, spills, or discharges are detected, contaminated soils and water should be contained and held for testing whenever contamination is suspected. Any specific contaminant known to exist or that is discovered on site and which has contaminated soil or has the potential to contaminant soil and/or drainages or water features (including irrigation amenities or domestic water sources) shall be reported to the Resident Engineer immediately. The Resident Engineer will coordinate clean-up of contaminated soils with the Idaho Communications Center (Statecom) at 1-800-632-8000.

Allowable Non-Stormwater Discharge Management and Equipment/Vehicle Washing

Non-stormwater (dust control water, water used in road grading, irrigation drainage, springs or ground water dewatering, etc) may combine with stormwater and be present in the discharge at this site. All water shall be treated in the same manner as stormwater runoff. The same BMPs used in this PPP for stormwater runoff shall be implemented to reduce non-stormwater impacts and limit non-stormwater discharges. The use of soap, solvents, and degreasers is specifically prohibited for cleaning use. Uncontaminated water discharge from dust control, dust abatement activities, and water used in road grading or excavation activities and compaction shall not reach waters of the United States.

The following incidental non-stormwater from the sources marked below may combine with stormwater and be present in the discharge at this site.

- Hydrant or Water Line Flushing
- Vehicle Wash-Down Water
- Dust Control Water
- Irrigation Drainage (including landscape)
- Spring or Groundwater

- Air Conditioner Condensate
- Uncontaminated Foundation or Footing Drains
- Pavement or Building Wash Water
- Uncontaminated Excavation Dewatering (without detergents)
- Potable Water
- No Known Non-Stormwater Sources Apparent

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

Non-Stormwater BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------|------------------------------------------------|-------------------------------------|--------------------------------------------------------------------|
| Water Conservation Practices | - SD SPECS (106 and 205) - NS-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Dewatering Operations | - SD SPECS (N/A) - NS-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Paving and Grinding Operations | - SD SPECS (203) - NS-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Potable Water-Irrigation Management | - SD SPECS (N/A) - NS-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Vehicle and Equipment Cleaning | - SD SPECS (N/A) - SD Drawings () - NS-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Freeze Reduction | - SD SPECS (N/A) - NS-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Snow Management | - SD SPECS (N/A) - EC-15 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Snow Accumulation Management | - SD SPECS (N/A) - EC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Spill Prevention and Control BMPs

All ITD projects shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and ITD Incident Management Plan. In addition, a project Spill Plan shall be provided by the Contractor, and should be

included in **Appendix B**. The ITD BMPs listed below also contain guidance on waste management, spill prevention and control, and cleanup.

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------------|----------------------------|-------------------------------------|--------------------------------------------------------------------|
| Spill Prevention and Control | - SD SPECS (N/A) - WM-5 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 |
| Hazardous Waste Management | - SD SPECS (N/A) - WM-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Illicit Connection-Illegal Discharge Detection and Reporting | - SD SPECS (N/A) - NS-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Per 40 CFR 112, if petroleum products stored at the construction site aggregate 1,320 gallons or more, a Spill Prevention, Control, and Countermeasure Plan (SPCC) plan will be required.

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 per ITD PPP requirements. 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 | Implementation Schedule |
|-----------------------------------------|-----------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Channel Protection - Check Dams | - SD SPECS (212) - SD Drawings (P-2-B) - PC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sheet Flow to Buffers | - SD SPECS (N/A) - PC-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Flexible Liners | - SD SPECS (212 and 624) - SD Drawings (P-2-A and P-2-C) - PC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Rigid Channel Liners | - SD SPECS (209 and 623) - SD Drawings (P-2-D) - PC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes and Berms | - SD SPECS (205, 209, and 212) - SD Drawings (P-1-E and P-1-F) - PC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dry Swale | - SD SPECS (N/A) - PC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------|
| Wet Swale | - SD SPECS (N/A) - PC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geosynthetics | - SD SPECS (640 and 718) - PC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Surface Sand Filter | - SD SPECS (N/A) - PC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Subsurface Sand Filter | - SD SPECS (N/A) - PC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Perimeter Sand Filter | - SD SPECS (N/A) - PC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Organic Filter | - SD SPECS (N/A) - PC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Sand Filter | - SD SPECS (N/A) - PC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Bioretention | - SD SPECS (N/A) - PC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Interceptor Ditches | - SD SPECS (208 and 209) - PC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Retaining Walls | - SD SPECS (210 and 512) - PC-17 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |
| Stormwater Basins | - SD SPECS (205 and 212) - SD Drawings (P-1-C and P-4-A) - PC-18 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Basin with Micropool | - SD SPECS (N/A) - PC-19 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wet Basin | - SD SPECS (N/A) - PC-20 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Wet Extended Detention Basin | - SD SPECS (N/A) - PC-21 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Shallow Wetland | - SD SPECS (N/A) - PC-22 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Shallow Wetland | - SD SPECS (N/A) - PC-23 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pond Wetland System | - SD SPECS (N/A) - PC-24 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Wetland | - SD SPECS (N/A) - PC-25 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sediment Control Box | - SD SPECS (605 and 609) - SD Drawings (E-6-A-F, P-1-H, P-3-A, P-3-B, and P-3-D) - PC-26 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Trench | - SD SPECS (N/A) - PC-27 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Basin | - SD SPECS (N/A) - PC-28 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains - Chutes - Flumes | - SD SPECS (208, 212, 409, 606, 607, and 609) - SD Drawings (D-1-A, D-1-B, and P-2-D) - PC-29 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Rock Armor / Mulch – Turf Reinforced Mat | - SD SPECS (N/A) - PC-30 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Serrations / Roughening | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-31 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Terraces / Benching | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-32 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Topsoil Management | - SD SPECS (213 and 711.09) - PC-33 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (621, 711.05, 711.12, 711.06) - PC-34 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------------------|----------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------|
| Vegetation-Planting | - SD SPECS (620 and 711.06) - PC-35 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 367 SF of Sod |
| Water Quality Inlet / Oil Grit Separator | - SD SPECS (N/A) - PC-36 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 0.01 – 0.05 Quantity of BMP 1 |
| Street Sweeping | - SD SPECS (N/A) - PC-37 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Deep Sump Catch Basin | - SD SPECS (N/A) - PC-38 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| On-line Storage in Storm Drain Network (Vaults) | - SD SPECS (N/A) - PC-39 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Porous Pavements | - SD SPECS (N/A) - PC-40 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Proprietary Manufactured Systems | - SD SPECS (N/A) - PC-41 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Section 5 - Inspection and Maintenance Requirements

Inspections

- Contractor shall inspect and maintain all structural and non-structural control measures for functionality as required by the contract
- Conduct inspections using the inspection and corrective action log form in the Appendix
- Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**

All BMP deficiencies identified during the inspection, or any inadequacies related to the PPP, must be corrected as soon as possible but never later than 7 days after the inspection.

Maintaining an Updated PPP Plan

Changes to the PPP must be documented and may include any one of the following:

- Construction methods
- Operation methods
- Design of the project (including civil plan sheets)

In the field change orders
Maintenance or inspection procedures
Staging sites
Material source sites/stockpile sites
Disposal/excess material/waste sites
Haul roads, temporary roads, and locations where vehicles travel and enter or exit staging areas and construction sites
Implementation and maintenance of BMPs
Stormwater discharge locations
Sequencing/scheduling changes
Impacts to wetlands or sensitive areas
Changes in personnel

All of these can result in the need for additional BMPs, and therefore a PPP update.

The sole objective of all modifications is to keep the PPP concurrent to existing on-the-ground conditions and to eliminate erosion and sediment impacts, as well as other pollutant impacts that could potentially result from the project. All modifications to the PPP shall be documented in **Appendix C** through the completion of inspections reports that shall serve as the corrective action log on this project.

Section 6 - Recordkeeping

Low Erosivity Waiver

If this PPP is being prepared in lieu of a Stormwater Pollution Prevention Plan based on the applicability of obtaining a Low Erosivity Waiver for the project, a copy of ITD, the Contractor, and any applicable local entity filing for a Low Erosivity Waiver (LEW) should be included in **Appendix D**. Guidance on the applicability of the LEW on your project can be found at the following website: <http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm>

Attention should be given to the expirations date on the LEW.

Inspections

Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**.

Section 7 - Certification and Notification

| | | | |
|-------------------------------------------------------|---------------------------------------|-----------|---------------|
| LHTAC Representative's Printed Name Karissa Nelson | Title LHTAC Environmental Engineer | 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 – Basic Spill Prevention and Control Plan Language

In addition to all the erosion and sediment control BMPs, non-stormwater BMPs, and good housekeeping BMPs discussed in this PPP plan, the minimum following information will be provided by the Contractor for Spill Prevention and Cleanup:

- 1) Contact information for Contractor's designated Spill Coordinator for the project. This person must have authority to mobilize equipment, personnel, and materials in the event of a spill or discharge.
- 2) Documentation of training and/or education on spill response and cleanup.
- 3) Description of the location and content of spill kits on the project site.

Appendix C – Executed Inspection Reports/Corrective Action Log

Appendix D – Low Erosivity Waivers (if applicable)

Appendix E – 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 | |



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

April 26, 2021

WALLA WALLA DISTRICT
REGULATORY DIVISION

**SUBJECT: NWW-2021-00021, St. Charles Creek Bridge Replacement Project,
ITD Key No: 22598**

Mr. Scott Esquibel
Bear Lake County
30 N. Main, P.O. Box 190
Paris, Idaho 83261

Dear Mr. Esquibel:

We have determined that your proposed project "St. Charles Creek Bridge Replacement Project" is authorized in accordance with Department of Army (DA) Nationwide Permit (NWP) No. 14: Linear Transportation Projects. This project is located near the intersection of Minnetonka Cave Rd. and Jericho Loop, within Section 15 of Township 15 South, Range 43 East, near latitude 42.121402° N and longitude -111.407785° W, in Bear Lake County, near St. Charles, Idaho. Please refer to File Number NWW-2021-00021 in all future correspondence with our office regarding this project.

Project activities include the discharge of 13.5 cubic yards of riprap below the ordinary high water mark of St. Charles Creek, including adjacent wetlands, to armor the constructed abutments and wing walls of a new bridge. The project also entails 3 cubic yards of fill within wetlands to regrade the roadway approach for the new bridge. The project proposes the permanent loss of 0.0023 acres of wetlands and the permanent impact to 0.02 acres of St. Charles Creek. All work shall be done in accordance to the attached drawings, titled "St. Charles Creek bridge replacement project, sheets 1 through 4", dated March 12, 2021.

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).

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.

The following Special Conditions include:

a. 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.

You must also comply with the conditions detailed in the attached individual Section 401 Water Quality Certification (WQC) issued for this project on March 1, 2021, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ directly at 208-236-6160, Pocatello Regional Office.

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.

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.

This verification is valid until March 18, 2022, 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 18, 2022, please contact us at least 60-days prior to this date. A new application and verification may be required.

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

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

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

Walla Walla District Regulatory. For more information about the Walla Walla District Regulatory program, you can visit us online³.

If you have any questions or need additional information about this permit authorization, you can contact Shane Skaar by phone at (208) 433-4478, by mail at the address in the letterhead, or email at shane.k.skaar@usace.army.mil. For informational purposes, a copy of this letter has been sent to the Idaho Department of Water Quality, the Idaho Department of Water Resources.

Sincerely,



Tracy Peak, Deputy Chief
Regulatory Division

Enclosures

Transfer of Nationwide Permit Form

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

TRANSFER OF NATIONWIDE PERMIT

When the structures or work authorized by this Nationwide Permit, **NWW-2021-00021**, **St. Charles Creek Bridge Replacement Project**, 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

NATIONWIDE PERMIT 14

LINEAR TRANSPORTATION: Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge 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 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, 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 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 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) 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; activities requiring a Pre-Construction Notification (PCN) for NWP 14 are **not certified**.

Coeur d'Alene Tribal Lands: DENIED

Shoshone-Bannock Tribal Lands: DENIED

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

REGIONAL CONDITIONS for SPECIFIC NATIONWIDE PERMITS

1. Refer to General Condition 32(b) 1-10 for additional required information .
2. Stream simulation techniques shall be employed on streams where ESA listed fish are present. (Stream simulation design criteria is available at the U.S. Forest Service website at: http://www.stream.fs.fed.us/fishxing/aop_pdfs.html.)
3. The streambed shall be returned to pre-construction contours after construction unless the purpose of the activity is to eliminate a fish barrier and restore the natural substrate and contour.

REGIONAL CONDITIONS, WALLA WALLA DIVISION

Watersheds Requiring Pre-Construction Notification, Specific to Anadromous Fish:

Pre-construction notification (PCN) will be required for the above listed nationwide permits in the geographic area as shown on Figure 1: *Watersheds Requiring Pre-Construction Notification*, dated March 19, 2017 (see pg. 20).

Vegetation Protection & Restoration: Permittee shall avoid and minimize the removal of native vegetation in riparian and wetland areas to the maximum extent practicable. Areas subject to temporary vegetation removal in riparian and wetland areas during construction shall be replanted with appropriate native species by the end of the first growing season following the disturbance except as waived by the District Engineer.

Permittee shall use suitable material to stabilize engineered fills associated with the installation of culverts and other bridge structures. Refer to Nationwide Permit General Condition 6 (suitable material). Permittee shall use appropriate erosion and sediment control measures to ensure stability in and around instream structures.

De-Watering: Discharges for temporary cofferdams and de-watering structures and permittee shall comply with the following conditions:

- 1) Cofferdams shall be constructed of non-erosive material such as concrete jersey barriers, sand or gravel filled 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.
- 2) Diversion channels constructed to bypass flow around the construction site shall be lined with plastic, large rock, or otherwise protected from erosion prior to releasing flows into or through the diversion channel.
- 3) 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.
- 4) Water pipe intakes shall be screened (openings <3/32 inch) to prevent entrainment of fish trapped in the coffered area.
- 5) Fish trapped within the coffered areas shall be collected by electrofishing, seining or dip net 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 followed. http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf
- 6) Temporary stockpiles in waters of the United States shall be removed in their entirety so as not to form a berm or levee parallel to the stream that could confine flows or restrict overbank flow to the floodplain.

Re-Watering: For stream channels which have been dewatered during project construction: Stream channels will be re-watered slowly to minimize a sudden increase in turbidity.

REGIONAL ADDITIONS to the GENERAL CONDITIONS

General Condition #4, Migratory Bird Breeding Areas: The U.S. Fish and Wildlife Service (USFWS) is the primary Federal agency responsible for the conservation and management of migratory bird resources. For additional information contact the US Fish and Wildlife Service (Boise Office 208-387-5243); north Idaho field office (Spokane) at 509-891-6839 or the eastern Idaho field office (Chubbuck) at 208-237-6975.

General Condition #9, Management of Water Flows: To obtain information on State of Idaho definition of high water 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: If the permittee does not have a Best Management Plan (BMP), refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties.

For additional information refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties. Website: <http://www.deq.idaho.gov/media/494058-entire.pdf>.

Use of native vegetation is the preferred method to treat soil erosion and stabilize areas disturbed during construction. Eroded and/or disturbed areas shall be replanted with native vegetation and stabilized until vegetative root mass can become established, unless the District Engineer determines this is not practicable. Non-biodegradable materials, such as chicken or hog wire or plastic netting that may entrap wildlife or pose a safety concern should not be used for soil stabilization.

General Condition #18, Endangered Species: Non-Federal applicants must contact either their local Idaho Department of Fish and Game (IDFG) or the U.S. Fish and Wildlife Service (USFWS) to determine if any listed species or designated critical habitat might be in the vicinity of their project. Applicants shall notify District Engineer of their findings (see County contact numbers below).

Contact USFWS at (509) 893-8009 for *Bonner, Boundary, Kootenai, Shoshone, Benewah* and *Latah* Counties

Contact USFWS at (208) 378-5388 for all other Idaho Counties

General Condition #20, Historic Properties: Applicants must contact the Idaho State Historic Preservation Office at (208) 334-3847 located in Boise, Idaho to determine if their project may affect historic properties listed in the National Register of Historic Places. Applicant shall notify the District Engineer of their findings.

NOTIFICATION PROCEDURES PERTAINING TO CERTAIN NATIONWIDE PERMITS

Select Waters and Wetlands: The Corps will coordinate with the Idaho Department of Fish and Game (IDFG) for activities in the following waters, watersheds and wetlands that require notification and are authorized:

- 1) Waters: Henry's Fork of the Snake River and its tributaries; South Fork Snake River and its tributaries; Big Lost River upstream of the US 93 crossing south of Leslie; East Fork Big Lost River; Boise River upstream of Arrow Rock Reservoir; Salmon River and its tributaries, St. Joe River; Priest River; Big Wood River.
- 2) River Basins and Watersheds: Beaver-Camas Creeks and Mud Lake Basin; Medicine Lodge Creek and Crooked Creek; Kootenai River; Middle and South Fork Clearwater River.
- 3) The following HUC 12 sub-watersheds:
Big Sand Creek-Palouse River (170601080102); Rock Creek-Palouse River (170601080110); Upper Lolo Creek (170603060201); Musselshell Creek (170603060202); Eldorado Creek (170603060203); Middle Lolo Creek (170603060204); Lower Lolo Creek (170603060205); East Fork Potlatch River (170603060801); West

Fork Potlatch River-Potlatch River(170603060802); and Hog Meadow Creek-Potlatch River (17060306902).

- 4) **Wetlands identified in Idaho Department of Fish and Game, Wetland Conservation Strategy as Class I, Class II and Reference Habitat Sites.** (Idaho Department of Fish and Game (IDFG) Wetland Conservation Strategies have been developed for the Henrys Fork Basin, Northern Idaho, Big Wood River, Southeast Idaho, East-Central Idaho and Spokane River Basin, Middle and Western Snake River and tributaries, and the Upper Snake River–Portneuf Drainage, Weiser River Basin, and West Central Mountain Valleys and adjacent wetlands. Closed basins of Beaver-Camas Creeks, Medicine Lodge Creek, Palouse River and lower Clearwater River sub-basins, Middle Fork and South Fork Clearwater Basins and Camas Prairie in northern Idaho. Refer to the internet site at: <http://fishandgame.idaho.gov/content/page/wetlands-publications-idaho-natural-heritage-program#reports>)
- 5) **Wetlands identified in the Idaho Wetland Conservation Prioritization Plan-2012.** (Murphy, C., J. Miller and A. Schmidt. 2012. [https://parksandrecreation.idaho.gov/sites/default/files/uploads/documents/SCORTP/Update/Apdx%20.%20Wetlands%Priority%Plan%20\(Part%20I\)%Compressed1.pdf](https://parksandrecreation.idaho.gov/sites/default/files/uploads/documents/SCORTP/Update/Apdx%20.%20Wetlands%Priority%Plan%20(Part%20I)%Compressed1.pdf))

GENERAL CONDITIONS

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 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.

**See Regional Addition*

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.

*See Regional Addition

To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction 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.

12. Soil Erosion and Sediment Controls.

*See Regional Addition
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 Fills.

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. The permittee 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 NWP activity may cause more than minimal adverse

effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

**See Regional Addition*

(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 the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, 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 designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat 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. In cases where the non-Federal applicant has identified listed species or critical habitat 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 critical habitat, or until ESA section 7 consultation 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 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 applicant 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 world wide 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 their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts 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.

***See Regional Addition**

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, 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. 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 to 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, which may include background research, consultation, oral history interviews, sample field investigation, and 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 the 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. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and 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 to historic properties or that NHPA section 106 consultation has been completed.

(d) 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.

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you 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 NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 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 in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined 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) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since 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. Restored riparian areas should consist of native species. 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 NWPs, 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)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the

impact site and the number of credits to be provided.

(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 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.

Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe 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)). 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 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 prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-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 any required compensatory mitigation. The success 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 work 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 work 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 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 is not authorized by NWP until the appropriate Corps office issues the section 408 permission 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 critical habitat 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. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. 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) 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. For single and complete linear projects, 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. 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 wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, 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;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat 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 activity that requires 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 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 the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through

(10) of this general condition. 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 NWPs 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 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) 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 (iv) 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 email, 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 email 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 NWPs, including the need for mitigation to ensure 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 of 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.

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

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, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for 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.

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

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.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

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.

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 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.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

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. 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 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. The loss of stream bed includes the acres or linear feet of stream bed that is filled or excavated as a result of the regulated activity. 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.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR part 328.3(c)(4). 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: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR part 328.3(c)(6)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

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.

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 waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

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 project: The term “single and complete project” is defined at 33 CFR part 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 project must have independent utility (see definition). For linear projects, a “single and complete project” is 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 waterbody several times at separate and distant locations, each crossing is considered a single and complete project. 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.

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. 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 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 wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR part 328.3(c)(4) and 33 CFR part 328.3(d), respectively. 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, which is defined at 33 CFR part 328.3(c)(7).

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's, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States under 33 CFR part 328.3(a)(1)-(5), that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR part 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

DEFINITIONS, REGIONAL ADDITIONS

Alkaline Wetlands: wetlands on alkaline and or saline soils found where evaporation far exceeds precipitation; sites range from sloped seeps and springs (most common) to drainages or pond and playa margins; flooding and saturation varies, but high groundwater is typical and vegetation is salt tolerant.

REFERENCE: Cowardin, L. M., Carter, F.C Golet, and E.T. LaRoe. 1979 Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC

Forested Wetlands: Wetlands characterized by woody vegetation that is 6 meters tall or taller; They are located where moisture is relatively abundant, particularly along rivers and in the mountains and normally possess an overstory of trees and an understory of young trees or shrubs and an herbaceous layer.

REFERENCE: Classification of Wetlands and Deepwater Habitats of the United States, Mr. Lewis M. Cowardin; Office of Biological Services; Fish & Wildlife Services; 1979

Invasive Species: Species of plants not native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

REFERENCE: Executive Order No. 13112; U.S. Department of Agriculture National Invasive Species Information Center

Kettle: A steep sided, usually basin or bowl shaped hole or depression, commonly without surface drainage, in glacial drift deposits, often containing a lake or swamp.

REFERENCE: Bates, Robert L. & Jackson, Julia A.; Glossary of Geology, American Geological Institute; Falls Church; 1980

Native Species: Species that occurs naturally in a particular region, state, ecosystem and habitat without direct or indirect human actions.

REFERENCE: Federal Native Plant Conservation Committee; 1994

Peatland: Wetlands in cold and persistently saturated settings with at least 30 cm of peat accumulation: fen peatlands form on slopes with groundwater discharge and on floating anchored mats in kettle ponds, subalpine lakes or valley lakeshores; as peat accumulates, ridges or mounds may form; they often support specially adapted mosses and plants.

REFERENCE: Bursik, R.J. and Moseley, R.K.; Ecosystem Conservation Strategy for Idaho Panhandle Peatlands; Cooperative project between Idaho Panhandle National Forest and Idaho Department of Fish & Game; Conservation Data Center; Boise 28 pp plus Appendix; 1995

Playas: Shallow, unpredictably, and temporarily flooded precipitation filled pools formed on hardpan soils with a clay or cemented layer, or on shallow soils over bedrock; vegetation is typically sparse and often salt tolerant, but playas may support endemic plants and invertebrates.

REFERENCE: Tiner, R.W., H.C. Bergquist, G.P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Select Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA.

Spring-fed Wetlands: Wetlands supported by surface discharge of groundwater, often occurring on gentle to steep slopes, but also including upwellings in flat basins

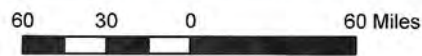
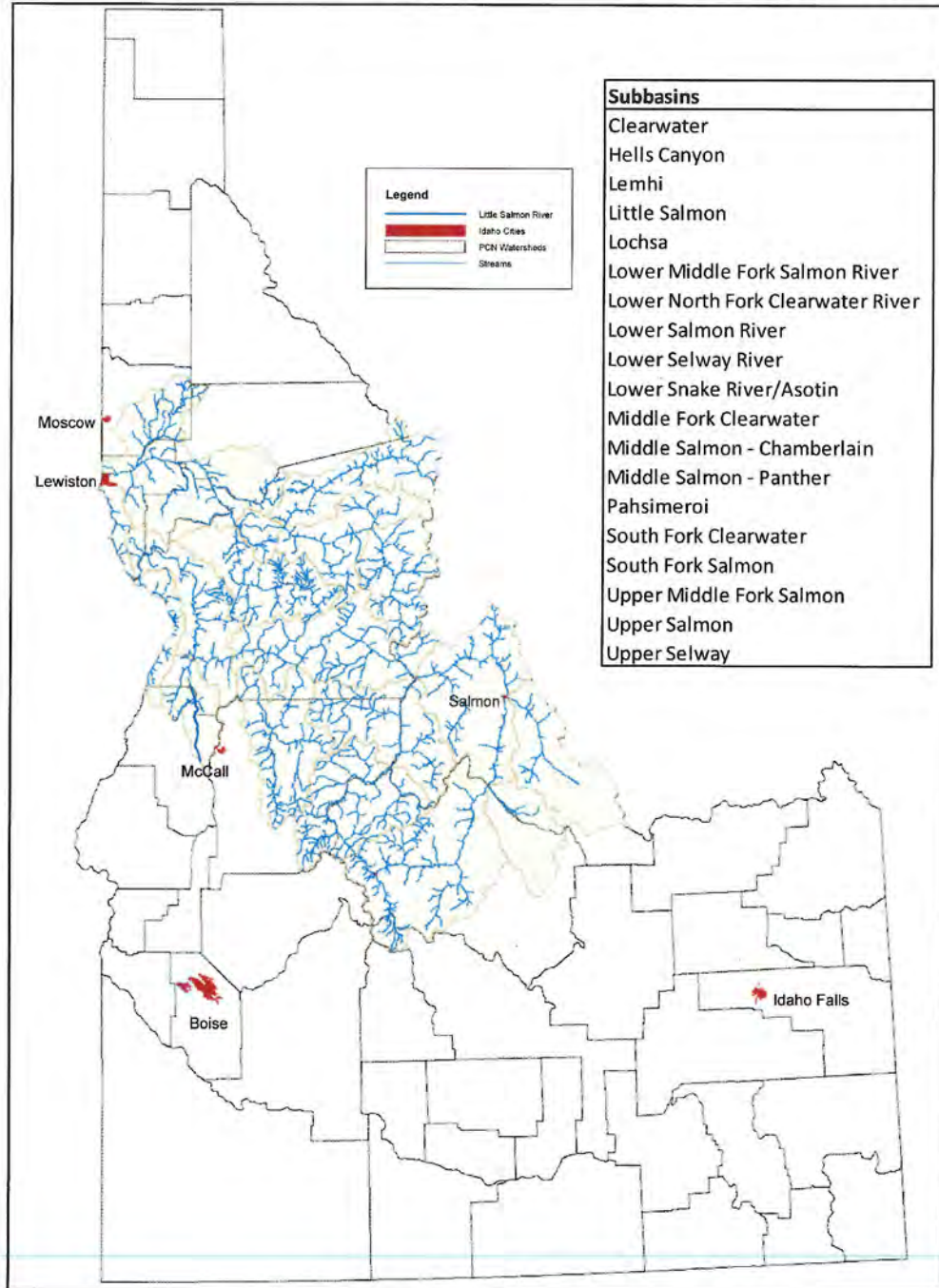
REFERENCE: Sada, D.W., Williams, J.E., Silvey, J.C., Halford, A., Ramakka, J., Summers, P., Lewis, L. 2001 Riparian area management. A guide to managing, restoring, and conserving springs in the western United States. Technical Reference 1737-17. Denver, CO: Bureau of Land Management. BLM/ST/ST-01/001+1737.

Vernal Pools: Precipitation-filled seasonal wetlands inundated during periods when temperature is sufficient for plant growth, followed by a brief waterlogged-terrestrial stage and culminating in extreme desiccating soil conditions of extended duration.

REFERENCE: Keely, J.E. & Zedler, P.H.; Characterization and Global Distribution of Vernal Pools; Pp 1-14 in C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren Jr., and R. Ornduff (Editors); Ecology, Conservation, and Management of Vernal Pool Ecosystems (Proceedings from Conference, 1996); California Native Plant Society, Sacramento, CA; 1998.



Figure 1. Watersheds Requiring Pre-Construction Notification



19 March 2017

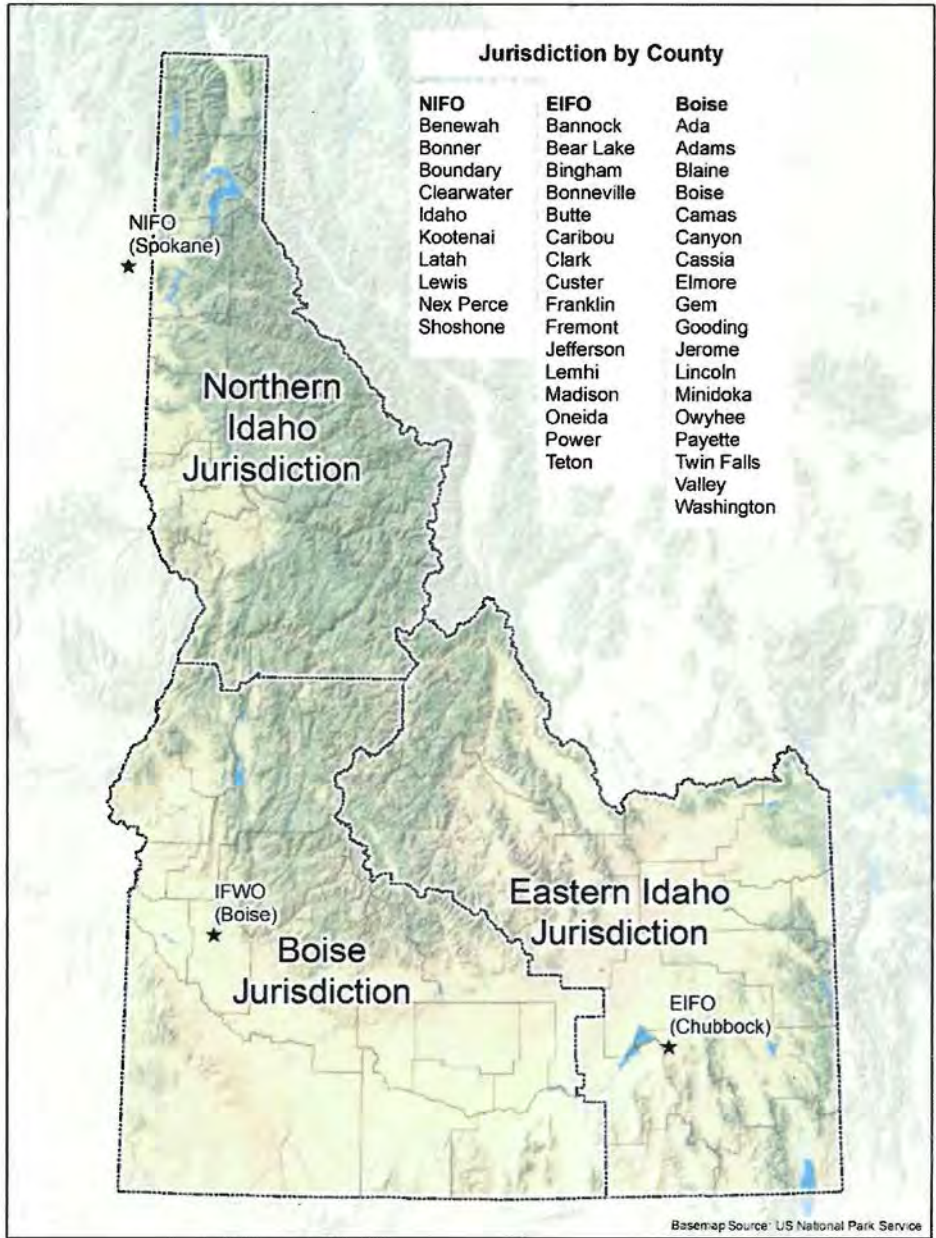
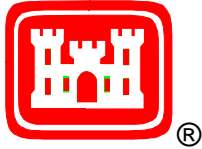
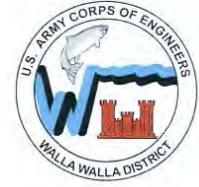


Figure 2. U.S. Fish and Wildlife Field Office Coverage.

COMPLIANCE CERTIFICATION



US Army Corps of Engineers
Walla Walla District



Permit Number: NWW-2021-00021

Name of Permittee: Bear Lake County

Date of Issuance: April 26, 2021

Upon completion of the activity authorized by this permit and any mitigation required by the permit, please sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Walla Walla District
Boise Regulatory Office
720 East Park Blvd., Suite 245
Boise, Idaho 83712-7757

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with all terms and conditions of this permit, the permit is subject to suspension, modification, or revocation and you are subject to an enforcement action by this office.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit. The required mitigation was also completed in accordance with the permit conditions.

Signature of PERMITEE

DATE

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 (8½"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

FOR AGENCY USE ONLY

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

INCOMPLETE APPLICATIONS MAY NOT BE PROCESSED

| | | | | | | | |
|-----------------------------------------------------|--|--------------------------------------------|--------------------|-----------------------------------------------------|--|-----------------------------------------|--------------------|
| 1. CONTACT INFORMATION - APPLICANT Required: | | | | 2. CONTACT INFORMATION - AGENT: | | | |
| Name: Scott Esquibel | | | | Name: Brandon Keller | | | |
| Company: Bear Lake County | | | | Company: Keller Associates, Inc. | | | |
| Mailing Address: 30 N Main, P.O. Box 190 | | | | Mailing Address: 131 SW 5th Ave., Suite A | | | |
| City: Paris | | State: ID | Zip Code: 83261 | City: Meridian | | State: ID | Zip Code: 83642 |
| Phone Number (include area code): (208) 637-9031 | | E-mail: sesquibel@bearlakecounty.id.gov | | Phone Number (include area code): (208) 813-7600 | | E-mail: bkeller@kellerassociates.com | |

| | | | | | | | | |
|------------------------------------------------------------------------|--|----------------------------------------------------------|--|---------------------------------------------------------------|-----------|----------------------------------------------------|-----------------------|--------------------|
| 3. PROJECT NAME or TITLE: A022(598), St Charles Creek Br, Bear Lake Co | | | | 4. PROJECT STREET ADDRESS: Minnetonka Cave Rd. & Jericho Loop | | | | |
| 5. PROJECT COUNTY: Bear Lake County | | 6. PROJECT CITY: St Charles | | 7. PROJECT ZIP CODE: | | 8. NEAREST WATERWAY/WATERBODY: St Charles Creek | | |
| 9. TAX PARCEL ID#: | | 10. LATITUDE: 42° 7'17.01"N LONGITUDE: 111°24'27.99"W | | 11a. 1/4: | 11b. 1/4: | 11c. SECTION: 15 | 11d. TOWNSHIP: 15S | 11e. RANGE: 43E |

| | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------|--|----------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 12a. ESTIMATED START DATE: 2021 | | 12b. ESTIMATED END DATE: 2023 | | 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.

St. Charles Creek Bridge is in Bear Lake County, on Jericho Loop Road at milepost 100.05, approximately 0.9 miles west of St. Charles, ID.

15. PURPOSE and NEED: Commercial Industrial Public Private 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 attached 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 attached 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 attached 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.

Wetlands impacted by the project will be mitigated and it is anticipated that the original functions and values lost will be restored. A total of 100 square feet/0.0023 acres of wetlands will be permanently impacted by the project. Mitigation will not be required by the USACE as impacts are less than 0.1 acres; however, the FHWA, in accordance with 23 CFR 777 – Mitigation of Impacts to Wetlands and Natural Habitat, will require mitigation. The loss of 0.0023 acres of wetlands and associated functions will be compensated through compensatory mitigation at a ratio of 1:1 acres of wetland impact to acres of in-kind wetland creation. The project will be mitigated for by funding a portion of the Rainey Creek stream restoration project located in Swan Valley Idaho in Bonneville County being completed by the U.S. Forest Service (USFS) Caribou-Targhee National Forest.

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

Dirt or Topsoil: _____ cubic yards
 Dredged Material: _____ cubic yards
 Clean Sand: _____ cubic yards
 Clay: _____ cubic yards
 Gravel, Rock, or Stone: 13.5 cubic yards
 Concrete: _____ cubic yards
 Other (describe): _____ : _____ cubic yards
 Other (describe): _____ : _____ cubic yards

TOTAL : _____ 13.5 cubic yards

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

Filling: 0.0020 acres 88 sq ft. 2.94 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: _____ acres _____ sq ft. _____ cubic yards
 Draining: _____ acres _____ sq ft. _____ cubic yards
 Other: RIPRAP : 0.0003 acres 12 sq ft. 0.44 cubic yards

TOTALS: 0.0023 acres 100 sq ft. 3.38 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:

NA

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: 20.4~ 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

See attached narrative.

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 |
|--------------------------------------------|--------------------|---------------------------|-----------------------------------------|------------------------------|
| | See attached. | | | |
| | | | | |
| | | | | |
| TOTAL STREAM IMPACTS (Linear Feet): | | | | 0 |

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) |
|---------------------------------------------|--------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------|
| Erosion Control | Palustrine Scrub Shrub | 0 | Place Riprap | 12 |
| Fill | Palustrine Scrub Shrub | 37 | Roadway daylight | 88 |
| | | | | |
| TOTAL WETLAND IMPACTS (Square Feet): | | | | 100 |


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

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Linda Arnell Mailing Address: 441 Jefferson St City: Montpelier State: ID Zip Code: 83254 Phone Number (include area code): 208-847-0770 E-mail: lindabest1@yahoo.com | Name: Logan River LLC Mailing Address: 376 E 400 S Suite 120 City: Salt Lake City State: UT Zip Code: 84111 Phone Number (include area code): 208-230-7234 E-mail: |
| Name: Conrad E Michaelson Mailing Address: PO Box 67 City: Saint Charles State: ID Zip Code: 83272 Phone Number (include area code): 435-757-0527 E-mail: | Name: The Bunderson Family LLC C/O Becky Wilde Mailing Address: 315 S 830 E City: Smithfield State: UT Zip Code: 84335 Phone Number (include area code): 435-563-3209 E-mail: ikn4moose@hotmail.com |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |

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:  Date: 2-11-2021

Signature of Agent:  Date: 2-10-2021

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".

St Charles Creek Br, Bear Lake Co
Project No: A022(598), Key No: 22598

Joint Application for Permits
Additional Information
February 2020



File Location: 220030/SIBB/22598/Concept

BLOCK 15 - PROJECT PURPOSE & NEED

The **purpose** of the project is to replace the load posted, deteriorated bridge structure (Bridge Key 22253) over St. Charles Creek on Jericho Loop Road. The proposed bridge will have a greater span and skew to better align with the creek. It is anticipated that the new bridge will be approximately 34 feet in length (clear span) and approximately 23 feet in width (curb-to-curb) with an 18-degree skew. Minor realignment of the existing approaches will be required to meet roadway geometric standards and constructability needs.

The **need** for this project is to address the deteriorating bridge structure and extend the span to push the abutments beyond the channel limits to minimize potential for future scouring. The existing bridge crosses St. Charles Creek and provides an essential travel way for agriculture, tourism, emergency vehicles, and local traffic. Farmers use the bridge to access land and move heavy, slow farm equipment. The alternative is to use US-89 which is heavily trafficked and significantly more dangerous for the slower moving farm equipment. The bridge provides a route to the Minnetonka Cave for thousands of tourists each year. Access to Green Canyon and St. Charles Canyon via Jericho Loop is an often-used shortcut by recreational users. The canyons provide multiple campgrounds and large trail systems. In addition, emergency vehicles use Jericho Loop to serve residences or as an alternative to US-89 when dealing with fires or medical emergencies.

BLOCK 16 - DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT

The 2019 Bridge Inspection Report (See TS&L Report Appendix D) rates the condition of the superstructure and deck as poor (4) and the substructure as critical (2). It rates the overall structure as intolerable and suggests that it be replaced. The inspection report indicates that no signs of decay in the timbers were observed, however, the timber deck is separating and bowing at various locations. The northwest corner of the bridge has settled 14 inches and is causing torsional forces to act on the bridge. This is due to scour and undermining at the northwest corner which has been armored by way of large riprap placement. The abutments and wingwalls are showing signs of weathering and checking, but no significant signs of decay or deterioration was observed.

Due to the age and deteriorating condition of the existing bridge, retrofit options were not considered as feasible alternatives. Replacement of the bridge is recommended. Replacement of the structure will need to accommodate the existing roadway typical section and ITD hydraulic freeboard requirements. Any bridge replacement will need to accommodate the LVRG and be designed for HL-93 design vehicle loading. In consideration of structure types, the span length is too long for a single culvert structure and would not be advantageous hydraulically to install a multiple, side-by-side culvert type structure. Box and stiff leg culvert type structures are typically limited to spans less than 25 feet.

Given these constraints, the design width, skew, and span requirements of the structure, a bridge alternative is better suited to meet the conditions of this project than a culvert type structure. Replacement of the bridge will be required.

Activity 1 – The Contractor will clear and grub vegetation including wetlands for access in association with construction needs, and to place erosion and sediment controls.

Activity 2 – The project is planned for full closure with detours during construction. The Contractor will demolish and remove the existing structure, which includes the existing bridge abutments and concrete wingwalls. All debris will be removed from the creek bed and be disposed of by the Contractor. Excavation for the new bridge abutments and riprap blanket will then take place. Structural fill and geotextile fabric will be placed for the new abutment/footing.

Activity 3 – Geotextile fabric, structural fill, and concrete for the new abutments will be placed and the excavation will be backfilled. Riprap will be placed around the abutments, followed by placement of the voided slab deck. Construction will occur during low-flow season; however, if dewatering is needed, wells will be drilled and the water will be pumped into a temporary lined basin.

Activity 4 – The roadway approaches to the bridge will be compacted and the road surface paved.

Typical Construction Equipment:

- Excavator
- Backhoe
- Loader
- Dump Truck(s)
- Crane
- Skidsteer
- Compaction Plate

There are no Section 10 waterways in the project area.

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

The existing concrete bridge was built in 1950 and has significant deterioration in the deck and girders. The latest bridge inspection report indicates that the Deck (NBI Item 58) and Superstructure (NBI Item 59) are rated 4 - Fair and Substructure (NBI Item 60) rated as a 2 – Critical. This alternative is not recommended because deterioration is likely to become severe and the bridge will have to be closed. The Do Nothing alternative does not address the needs of the project and is not recommended.

An important consideration in the alternative analysis is the construction schedule. The structure must be constructed during a non-peak traffic season if a single lane closure is used (mid-September – mid-December or March – May), which gives an available construction window of approximately three months.

In addition, BMPs described in section 26b of this application will further minimize impacts from the project on the St Charles Creek.

BLOCK 26B - BEST MANAGEMENT PRACTICES (BMP'S)

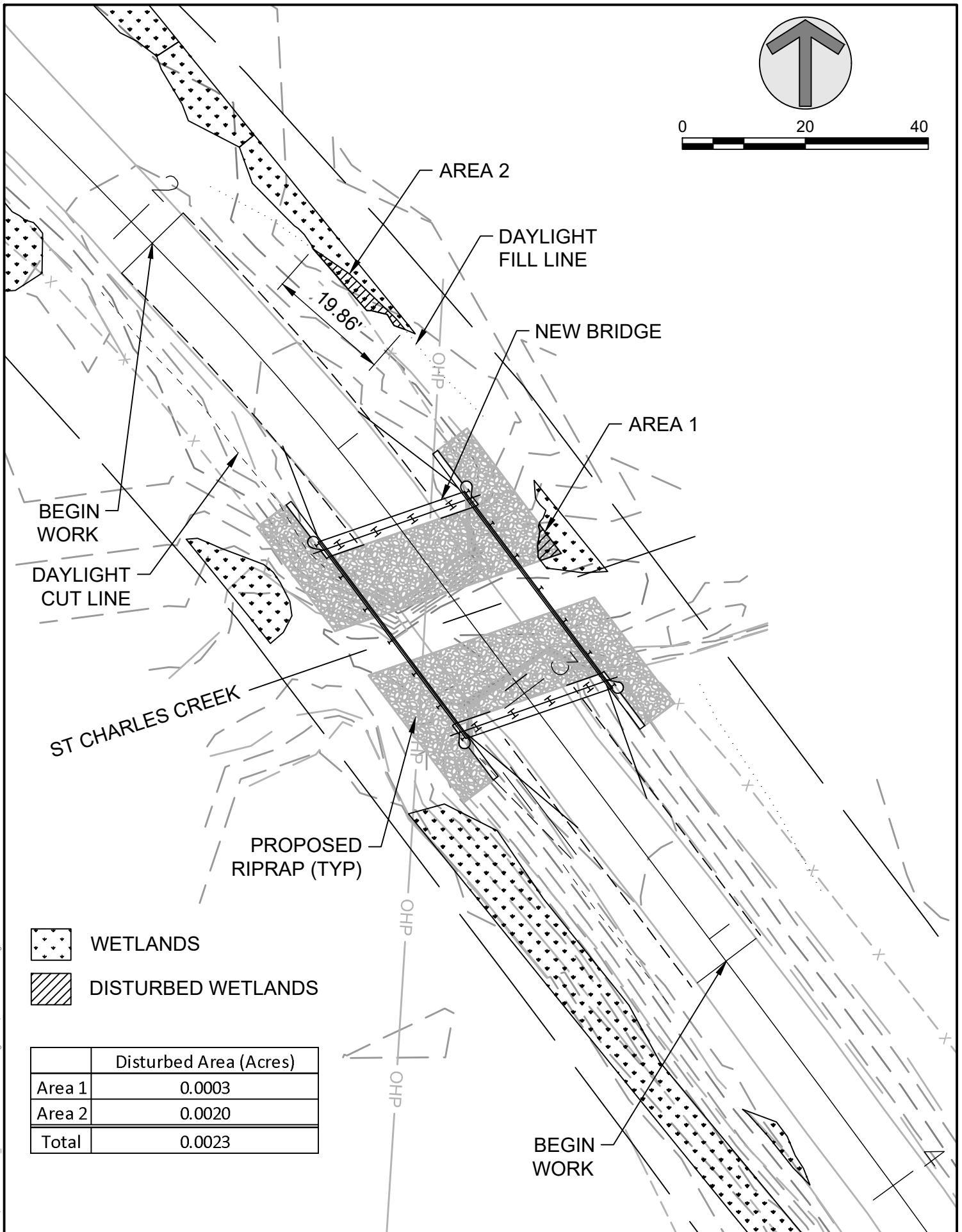
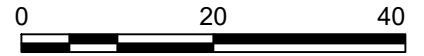
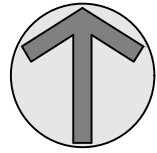
The Idaho Transportation Department's (ITD) BMPs Best Management Practices will be utilized on the project.

The attached plan (See Figures 1 & 2) shows the effect the project will have on the hydraulic characteristics and surface flows of the St Charles Creek. The bridge alignment and impacts to St Charles Creek are shown on the figures. Dust Control, Gravel Bag Barrier, Silt Fence and Fiber Wattles will be used throughout the project to limit the amount of sediments entering the river. The sediment controlling BMP's will be in-place before construction begins and will be maintained throughout construction of the bridge.

A Pollution Prevention Plan (PPP) will be prepared prior to construction. The PPP will document erosion, sediment and pollution controls to be implemented, inspection methods and schedules, as well as maintenance plans. All other wetland areas (such as may occur in or near proposed sources, staging areas, waste sites, etc.) will be retained and protected.

BLOCK 27 – LIST EACH IMPACT TO STREAM, RIVER, LAKE, RESERVOIR, INCLUDING SHORELINE

| Activity | Water Body | Intermittent or Perennial | Description of Impact and Dimensions | Impact Length Linear Feet |
|--------------------------------------------|-------------------|----------------------------------|-------------------------------------------------------------------|----------------------------------|
| New bridge abutments/Riprap | St Charles Creek | Perennial | riprap & concrete abutments 25.33'x3' each | 37.33' |
| New pile foundations (4 per abutment) | St Charles Creek | Perennial | piles driven into surface, 25.33' (length of abutments) | 25.33' |
| Existing Structure removal | St Charles Creek | Perennial | wingwall/riprap/abutment removal and bank rehabilitation; 82'x12' | 25' |
| New Wing Walls | St Charles Creek | Perennial | Precast concrete walls, 1' width (4 walls) | 2' |
| Total Stream Impacts (Linear Feet)* | | | | 37.33' |



WETLANDS



DISTURBED WETLANDS

| | Disturbed Area (Acres) |
|--------|------------------------|
| Area 1 | 0.0003 |
| Area 2 | 0.0020 |
| Total | 0.0023 |

J:\220030 515B122598 - Bear Lake Co. - ENV\RO\04 - Permit\Working\22598 - Bear Lake -04.dwg DATE: 01/15/2021 TIME: 09:26:50 AM

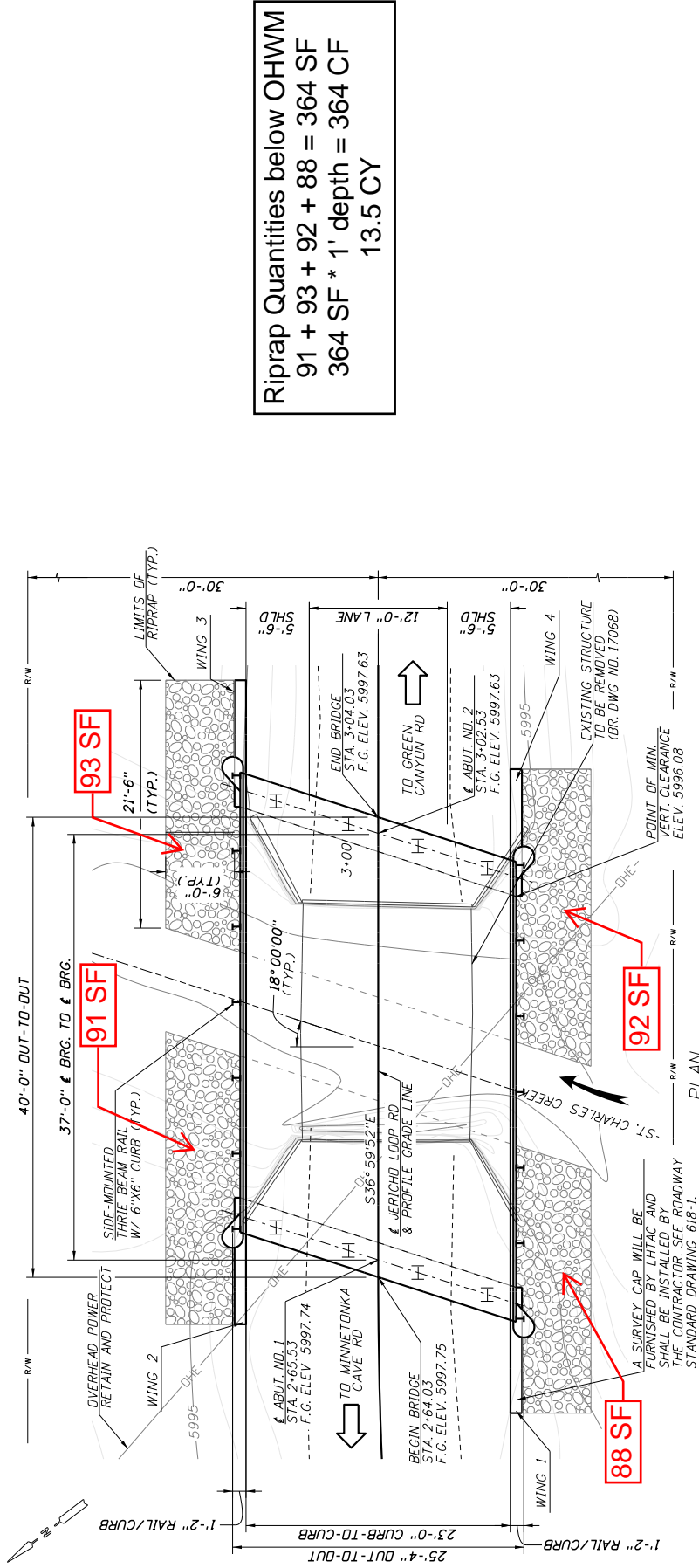


ST CHARLES CREEK BRIDGE

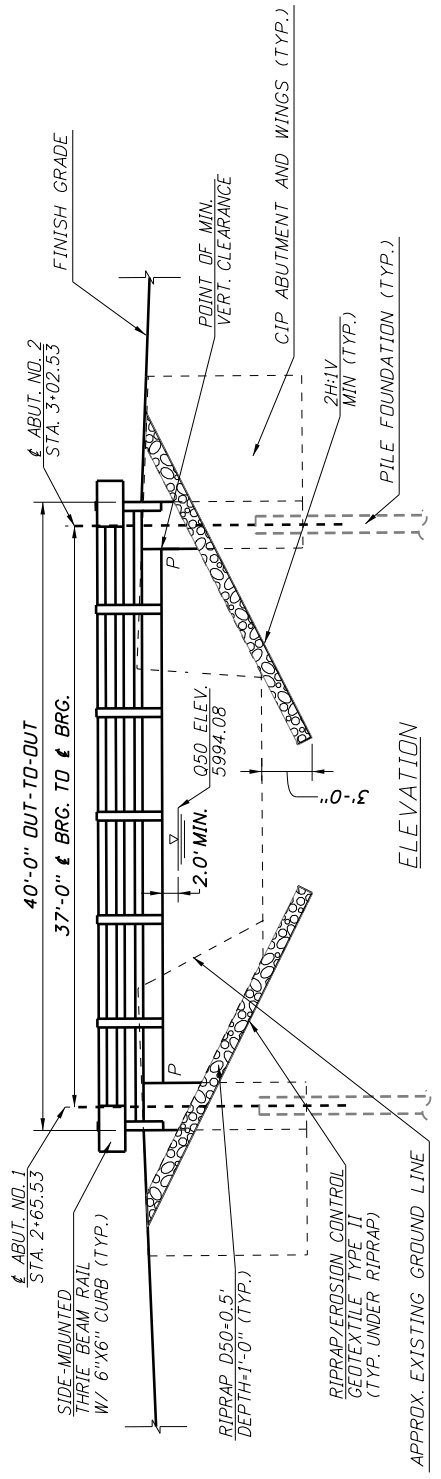
Wetland Delineation

PROJECT NO:
KN 22598

FIGURE NO:
1



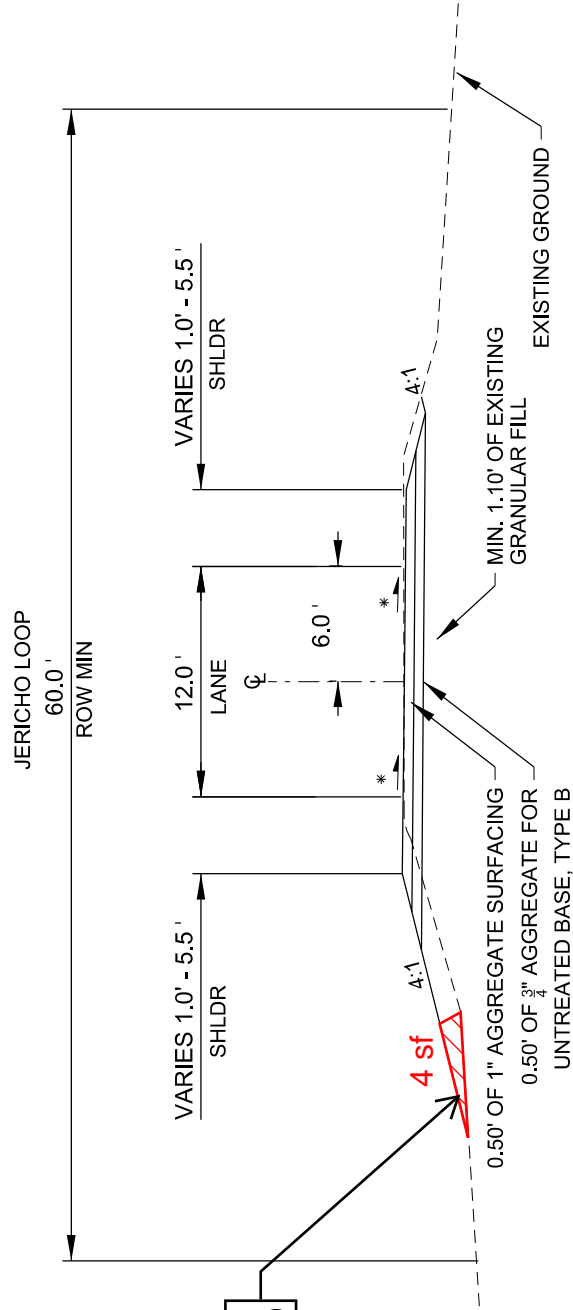
Riprap Quantities below OHWM
 91 + 93 + 92 + 88 = 364 SF
 364 SF * 1' depth = 364 CF
 13.5 CY



ST CHARLES CREEK BRIDGE

CONSTRUCTION IMPACTS

Common Fill Quantities within Wetlands
4 SF * 19.86 LF = 79.44 CF
2.94 CY



DISTURBED WETLAND
(SEE FIGURE 1 - AREA 2)

TYPICAL SECTION

STA. 2+34.00 - STA. 2+64.03
 STA. 3+04.03 - STA. 3+08.22
 STA. 3+26.00 - STA. 3+34.00

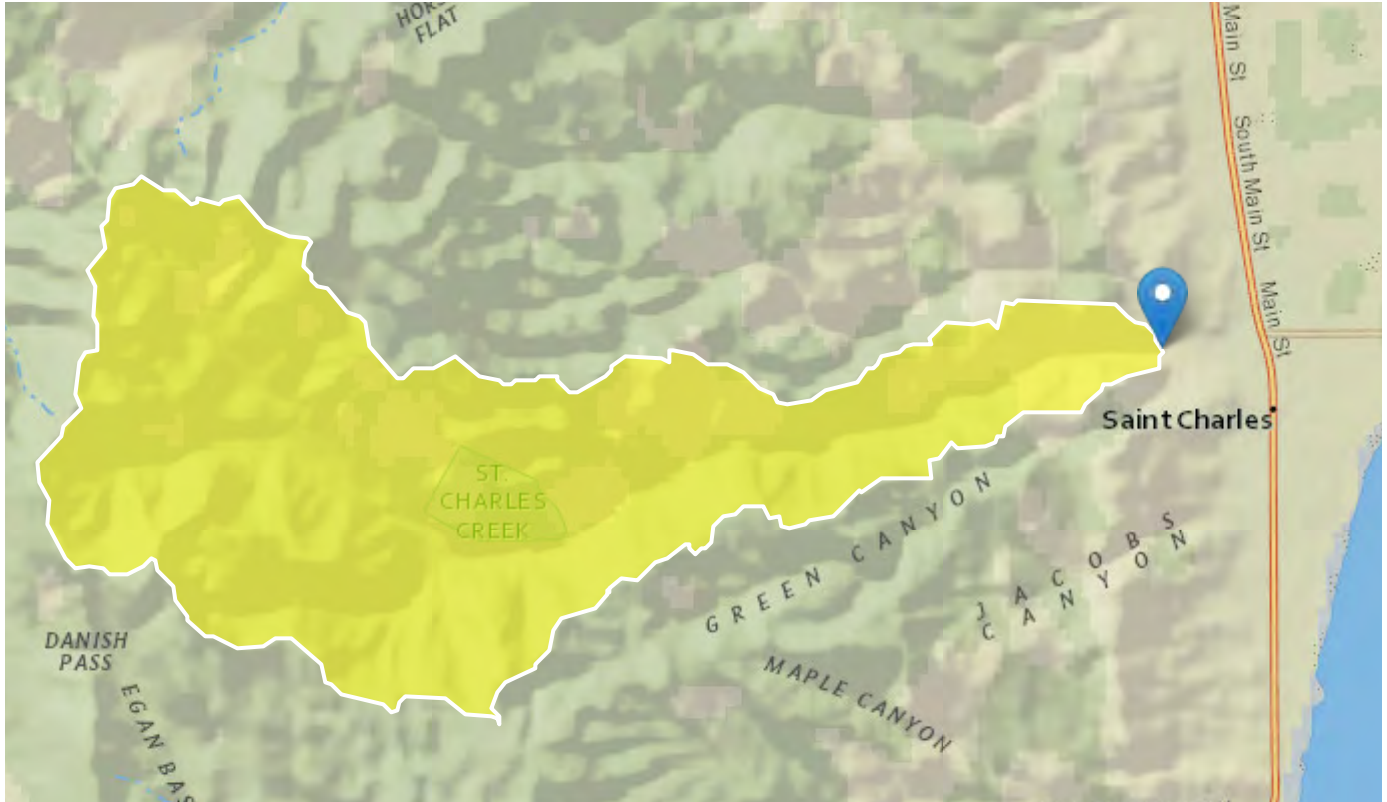
StreamStats Report

Region ID: ID

Workspace ID: ID20201221202639654000

Clicked Point (Latitude, Longitude): 42.12139, -111.40788

Time: 2020-12-21 13:27:01 -0700



Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------|
| AG_OF_DA | Agricultural Land in Percentage of Drainage Area (Idaho Logistic Regression Equations SIR 2006-5035) | | percent |
| BSLDEM10M | Mean basin slope computed from 10 m DEM | 38 | percent |
| BSLDEM30M | Mean basin slope computed from 30 m DEM | 34.9 | percent |
| CSL1085LFP | Change in elevation divided by length between points 10 and 85 percent of distance along the longest flow path to the basin divide, LFP from 2D grid | | feet per mi |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|
| CSL10_85 | Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known | | feet per mi |
| DRNAREA | Area that drains to a point on a stream | 20.35 | square miles |
| DV_OF_DA | Developed Land in Percentage of Drainage Area (Idaho Logistic Regression Equations SIR 2006-5035 | | percent |
| ELEV | Mean Basin Elevation | 7660 | feet |
| ELEVMAX | Maximum basin elevation | | feet |
| FOREST | Percentage of area covered by forest | 49 | percent |
| IMPNLCD01 | Percentage of impervious area determined from NLCD 2001 impervious dataset | | percent |
| LAKEAREA | Percentage of Lakes and Ponds | | percent |
| LC01DEV | Percentage of land-use from NLCD 2001 classes 21-24 | | percent |
| LC11FOREST | Percentage of forest from NLCD 2011 classes 41-43 | | percent |
| MINBELEV | Minimum basin elevation | | feet |
| NFSL30_10M | Percent area with north-facing slopes greater than 30 percent from 10-meter NED. | 26 | percent |
| NFSL30_30M | Percent area with north-facing slopes greater than 30 percent from 30-meter DEM. | 25 | percent |
| PRECIP | Mean Annual Precipitation | 34.3 | inches |
| PRECPRI10 | Basin average mean annual precipitation for 1981 to 2010 from PRISM | | inches |
| RELIEF | Maximum - minimum elevation | | feet |
| SLOP30_10M | Percent area with slopes greater than 30 percent from 10-meter NED | 67 | percent |
| SLOP30_30M | Percent area with slopes greater than 30 percent from 30-meter DEM. | 62.5 | percent |
| SLOP50 | Slopes Greater Than 50 Percent as percent of drainage area | | percent |
| VOLCANIC | Percent of drainage area as surficial volcanic rocks as defined in SIR 2006-5035 | | percent |

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Application Version: 4.4.0



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way Suite 300 • Pocatello, ID 83204 • (208) 236-6160
www.deq.idaho.gov

Brad Little, Governor
John H. Tippetts, Director

March 1, 2021

Karissa Nelson, Environmental Engineer
Bear Lake County/ LHTAC
3330 Grace Street,
Boise, ID 83703

**RE: Idaho §401 Water Quality Certification for NWW-2021-00021, St. Charles Creek
Bridge Replacement**

Dear Ms. Nelson:

On December 30, 2020, the Idaho Department of Environmental Quality (DEQ) received a request for a §401 Water Quality Certification (WQC) from Bear Lake County/LHTAC for a bridge replacement project in Bear lake County.

DEQ two WQC and began a public comment period on January 25, 2021, through February 24, 2021

DEQ received no comments on the WQC and finalized them.

Enclosed, please find DEQ's final WQC.

Please do not hesitate to contact me at 208.236.6150 or matthew.schenk@deq.idaho.gov with questions or concerns about the WQC process and final permit.

Thank you.

Sincerely,

A handwritten signature in blue ink that reads "Matthew Schenk".

Matthew Schenk
Water Quality Analyst III
Pocatello Regional Office



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

March 1, 2021

404 Permit Application Number: NWW-2021-00021

Applicant/Authorized Agent: Bear Lake County/Karissa Nelson LHTAC
Environmental Engineer

Project Location: 42.12174, -111.40817, Jericho Loop Road

Receiving Water Body: St Charles Creek

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, publicly noticed on December 30, 2020, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Project Description

The project proposes to replace a bridge over St Charles Creek along Jericho Loop road in Bear Lake County. The project is located approximately one mile northwest of St. Charles, Idaho. The proposed project will include the placement of a 40 foot long by 24 foot wide single span bridge that may require up to 150 feet of approach work on either end of the project area to meet roadway geometry standards.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- 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 deemed 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 not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing 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 Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

Receiving Water Body Level of Protection

This project is located on St Charles Creek within the Bear Lake Subbasin assessment unit (AU) ID16010201BR016_03b (St Charles Creek - Snowslide Canyon to Little Creek). This AU has the following designated beneficial uses: cold water aquatic life and salmonid spawning as well as the presumed use of primary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

The AU potentially impacted by the project is currently assessed as fully supporting beneficial uses of cold water aquatic life and secondary contact recreation. The salmonid spawning use is currently in category 5 of Idaho's most recently approved Integrated Report. Category 5 AUs are those that have an identified impairment and are not meeting applicable water quality standards. These waters make up the state's 303(d) list and an EPA-approved total maximum daily load is required. The identified impairment for the third order St. Charles Creek AU is temperature based on stream water temperature data collected in 2001.

The only pollutant of concern associated with this project is sediment. However, sediment is not relevant to recreational uses since sediment will not degrade water quality necessary to support

recreation uses, and it is therefore unnecessary for DEQ to conduct a Tier II analysis for the recreation use.

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 shall be maintained and protected. The numeric and narrative criteria in the WQS 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 shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses. The project will not affect stream temperature and will not impact the salmonid spawning designated use.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures 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 Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.

2. DEQ reserves the right to modify, amend, or revoke this certification 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 WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. 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.
5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
7. 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 Section 404 permit.
8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at <https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10>.

Fill Material

1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
2. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

1. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.

2. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
3. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
4. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. 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.

Turbidity

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). *Any violation of this standard must be reported to the DEQ regional office immediately.*
2. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).

3. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity.
4. Turbidity monitoring must be conducted, recorded, and reported as described below. Monitoring must occur each day during project implementation when project activities may result in turbidity increases above background levels. *A properly and regularly calibrated turbidimeter is required.*

In-water Work

1. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the state. If this is not practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.
2. Construction affecting the bed or banks shall take place only during periods of low flow.
3. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
 - a. Temporary crossings must be perpendicular to channels and located in areas with the least impact. The temporary crossings must be supplemented with clean gravel or treated with other mitigation methods at least as effective in reducing impacts. Temporary crossings must be removed as soon as possible after the project is completed or the crossing is no longer needed.
4. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
5. Activities in spawning areas must be avoided to the maximum extent practicable.
6. Work in waters of the state shall be restricted to areas specified in the application.
7. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
8. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
9. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
10. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Dredge Material Management

1. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

Right to Appeal Final Certification

The final Section 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 Matt Schenk at 208.236.6160 or via email at matthew.schenk@deq.idaho.gov.



Bruce Olenick
Regional Administrator
Pocatello Regional Office

WEBSITE POSTING INFORMATION

(For internal DEQ use only and to be removed from 401 certification prior to posting)

County: Bear Lake

ACOE Permit Application Number: NWW-2021-00021

Project Description: St Charles Creek Bridge Replacement

ACOE Nationwide Permit Number: 14

Applicant's Name: Local Highway Technical Assistance Council/Karissa Nelson

Impacted Water Body: St Charles Creek

Public Comment Period Duration: 21-Day



Your Safety • Your Mobility
Your Economic Opportunity

Pollution Prevention Plan

Idaho Transportation Department (ITD)

ITD 2788 (Rev. 04-18)
itd.idaho.gov



Instructions

The Pollution Prevention Plan (PPP) is a requirement for ITD projects which do not have coverage under the National Pollutant Discharge Elimination System (NPDES) 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 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 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.

Multiple operators may share the same PPP, but make sure that responsibilities are clearly described, and that all signatory requirements are met.

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 meet the requirements of Sections 107.17 and 212 of the Standard Specifications for Highway Construction and 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 Narrative Site Information

| | | | | |
|------------------------------------------|---------------------------------------------------|--------------------|---------------------|-------------------|
| Key Number 22598 | Project Name St Charles Creek Br, Bear Lake Co | | | |
| Location/Address 673-681 Jericho Loop | | City St Charles | County Bear Lake | Zip Code 83272 |
| Beginning Milepost (if applicable) | Ending Milepost (if applicable) | | | |

Operator(s)**Local Highway Technical Assistance Council 5**

| | | | | |
|--------------------------------------|-------------------------------------|---------------------------------|----------------------------|-------------------|
| LHTAC Contact Name Karissa Nelson | | Title Environmental Engineer | | |
| Office Address 3330 Grace Street | | City Boise | County Ada | Zip Code 83642 |
| Telephone Number 208-344-0565 | E-mail Address knelson@lhtac.org | | Fax Number 208-344-0789 | |

Local Sponsor Choose an item.

| | | | | |
|-------------------------------------------------|---------------------------------------------------|--------------------------------|-------------|-------------------|
| Organization Name Bear Lake County | | Contact Name Scott Esquibel | | |
| Organization Address 30 N Main, P.O. Box 190 | | City Paris | State ID | Zip Code 83261 |
| Telephone Number 208-945-2212 | E-mail Address sesquibel@bearlakecounty.id.gov | | Fax Number | |

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 | | Fax Number | |

Estimated Project Start Date: (mm/dd/yyyy)**Estimated Project End Date: (mm/dd/yyyy)**

Section 1 - Project/Site Information**Location Information**

| | | | |
|------------------------------------------|---------------------|----------------------------------------------------------------|--|
| Project/Site Name St Charles Creek Br | | Project Street/Location/Milepost/Route 673-681 Jericho Loop | |
| City St Charles | County Bear Lake | ZIP Code 83272 | |

Contact Information/Responsible Parties**Prime Contractor**

| | | | | |
|------------------------------------------------------------------|----------------|------|------------|----------|
| Company/Organization Name | | | | |
| Company/Organization Address | | City | State | Zip Code |
| Telephone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site) | | | | |

Project Manager(s) or Site Supervisor(s)

| | | | | |
|---------------------------------------------------------------------------------------------------|----------------|------------------------------|------------|----------|
| Company/Organization Name | | Manager/Supervisor's Name(s) | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site, insert area of control for each) | | | | |

PPP Preparer Information (Contractor)

| | | | | |
|------------------------------|----------------|-----------------|-------|----------|
| Company/Organization Name | | Preparer's Name | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | | |

LHTAC Resident Engineer Information

| | | |
|--------------------------------|-------------------------------------|----------------------------|
| Engineer's Name Matt Koster | | |
| Address 3330 Grace Street | City Boise | Zip Code 83703 |
| Cell Phone Number | E-mail Address mkoster@lhtac.org | Fax Number 208 344 0789 |

General Scope of Work or Project Description

Replace the single lane bridge over St Charles Creek. Approximately 100 feet of gravel roadway on either end of the bridge will be reconstructed and retaining walls will be required on the southwest side of the roadway.

Activity Description by Responsible Party

To add more rows, hit Tab in the last cell of the table.

| Name and Contact Information for Subcontractor | Area of Subcontractor Controls/Work Performed |
|------------------------------------------------|-----------------------------------------------|
| | |
| | |
| | |
| | |

Soils, Slopes, Vegetation, Existing Drainage Patterns, Climate

| |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil Type(s) Marshdale, occasionally flooded, and similar soils: 45 percent; Bloomcreek and similar soils: 30 percent; Minor components: 15 percent |
| Slopes - Describe existing slopes and any changes due to construction activities 0 to 3%; embankment slopes are up to 2:1 in the vicinity of the bridge |
| Drainage Patterns - Describe existing drainage patterns and note any changes due to construction Poorly to somewhat poorly drained soils, natural drainage to the southeast follows natural channels to Bear Lake. |
| Existing Vegetation Woody and herbaceous wetlands, hay/pasture, and developed open space |
| Climate/Rainfall Patterns – Select amount that applies Semi-Arid (10"-20" annual rainfall) |

Construction Site Estimates

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

Project site area to be disturbed – 0.25 acres

Off-site waste sites to be disturbed - 0 acres

Off-site borrow/source sites to be disturbed - 0 acres

Staging Area to be disturbed - 0 acres

Total project disturbed area – 0.25 acres

Receiving Waters

| |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Describe receiving surface waters (if applicable) St. Charles Creek |
| Describe receiving storm sewer systems (if applicable) and note MS4 areas None. |
| List immediate downstream water bodies (water bodies that are connected or would receive a direct discharge from the Project) that have been listed as impaired for sediment or waters subject to TMDLs by the Idaho Department of Environmental Quality (IDEQ) under Section 303(d) of the CWA Little Creek |

Site Features and Sensitive Areas that Require Protection

| |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide a description of any unique features (such as wetlands) that require protection (if applicable) 0.001 acres of wetlands will be impacted and mitigated by offsite mitigation. |
| If applicable, describe measures to protect these unique features Disturbance will be limited to the immediate riparian areas of the bridge reconstruction. |

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
- Any industrial stormwater discharges other than from project construction
- 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

Use the table below to identify all potential pollutants and sources, other than sediment, to stormwater runoff

| Trade Name Material | Stormwater Pollutants | Location or N/A |
|---------------------------|---------------------------------|-----------------|
| Fuels and/or Lubricants | Petroleum Distillates | Bridge site |
| Hydraulic Oils | Mineral Oil | Bridge site |
| Asphalts | Petroleum Distillates | N/A |
| Concrete/Curing Compounds | pH | Bridge site |
| Anti-freeze | Glycol, Heavy Metals | Bridge site |
| Paints | Organic Chemicals, VOCs | N/A |
| Fertilizers | Nutrients-Nitrogen, Phosphorous | N/A |
| Sanitary Toilets | Bacteria, Viruses, Parasites | Bridge site |
| | | |

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

| BMPs | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------------|------------------------------------|-------------------------------------|----------------------------------------------------------------|
| Preservation of Existing / Natural Vegetation | - SD SPECS (201 and 202) - EC-2 | <input checked="" type="checkbox"/> | Date June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |

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. Existing vegetated buffers (including preserving mature vegetation and trees) shall be utilized to minimize stormwater erosion potential and down slope movement to any watershed, water feature (including irrigation amenities or domestic water sources), or area susceptible to stormwater or surface water movement. The vegetated buffers shall consist of areas of undisturbed vegetation including grasses, shrubs, woody plants, and trees that are located between the traversed roadway section and the existing swales, ditches, canals, wetlands, and intermittent/perennial streams or rivers that are located within ITD right-of-way. The vegetated buffers shall be left undisturbed throughout the project life and act as permanent erosion and sediment control BMPs to ensure short and long-term slope stability.

Phase Construction Activity

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|------------------------------------------|--------------------------|-----------------------------------|
| Scheduling and Sequencing of Construction Activities | - SD SPECS (108, 205, and 212) - EC-1 | <input type="checkbox"/> | Date Location (Stations or MP) |

The specific scheduling and sequencing of construction activities are required to be outlined by the Contractor and become a permanent part of the PPP. Records must be maintained as part of the PPP and shall include dates and durations when major activities occur (i.e. soil disturbing activities); dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures have been initiated and are obtained. Scheduling and sequencing of construction activities including the CMP Schedule shall be documented in this PPP by the Contractor. Describe major phases of construction in the spaces provided here:

Phase I

-
-

Phase II

-
-

Repeat as needed for additional Phases

Control Stormwater Flowing Onto and Through the Project

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------|
| Coffer and Tarp Dams / Water Filled Bladders/ Aprons | - SD SPECS (210 and 501) - EC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains | - SD SPECS (212 and 706) - SD Drawings (P-1-A) - EC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes / Berms | - SD SPECS (205, 209, and 212) - SD Drawings P-1-F and P-1-E - SC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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 checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 1 |
| Clear Water Diversion | - SD SPECS (N/A) - NS-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Stabilize Soils and Protect Slopes

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------|------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------|
| Hydraulically Applied Erosion Control Products | - SD SPECS (212, 621, and 711) - EC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Hydroseeding | - SD SPECS (621 and 711) - EC-7 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 0.08 Acres |
| Soil Binders | - SD SPECS (212) - EC-8 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 0.08 Acres |
| Straw Mulch | - SD SPECS (212, 621, and 711) - EC-9 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 0.08 Acres |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------------------------------|---------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Wood Mulch | - SD SPECS (212, 621, and 711) - EC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geotextiles, Plastic Covers, and Erosion Control Blanket | - SD SPECS (212, 621, and 711) - EC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (212 and 621) - EC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dust Control | - SD SPECS (104, 106, 107, 205, 212, 621, and 711) - EC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wind Erosion Control | - SD SPECS (205 and 212) - EC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Protect Storm Drain Inlets

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------|-----------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Inlet/Outlet Protection | - SD SPECS (212, 640, 711, and 718) - SC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Perimeter Controls and Sediment Barriers

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------|------------------------------------|--------------------------|------------------------------------------------------------------------|
| Gravel Bag Barrier | - SD SPECS (212) - SC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sandbag Barrier | - SD SPECS (212) - SC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Silt Fence | - SD SPECS (212 and 718) - SC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------|----------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Sediment Retention Fiber Rolls | - SD SPECS (N/A) - SC-8 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 293 feet |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Retain Sediment On-Site

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Sediment-Desilting Basin | - SD SPECS (212) - SD Drawings (P-1-C, P-1-D, P-4-A) - SC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Stabilized Construction Exits and Temporary Haul Roads

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|--------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Street Sweeping and Vacuuming | - SD SPECS (N/A) - SC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Construction Entrances | - SD SPECS (104, 205, and 212) - SD Drawings (P-1-F) - SC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Roads | - SD SPECS (104, 107, 205, and 212) - SC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Entrance Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) -SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Stream Crossing | - SD SPECS (602) - NS-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Insert any required additional text or tables here

Section 3 - Good Housekeeping BMPs

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 Resident Engineer 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.

The following are material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. For the purposes of this plan and for any ITD projects, **Hazardous Material** is defined as “any material that poses harmful risks to human health and/or the environment. Includes any hazardous or toxic substance, waste, pollutant, or chemical regulated under the CAA, CWA, TSCA, and/or RCRA; a pollutant or contaminant as any substance likely to cause death, disease, abnormalities, etc. (CERCLA Sec. 101(33)); or those listed in 40 CFR 302. For ITD purposes, petroleum, lead paint, asbestos, and other substances will be considered hazardous materials, as identified in the scope of work”.

- An effort will be made to store only enough product required to complete the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure that minimizes contact with stormwater
- Products will be kept in their original containers with the original manufacturer’s label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturer’s recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials
- Tanks containing fuel will have secondary containment installed to contain any spilled material

Material Handling and Waste Management in Staging Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------|
| Staging and Materials Site Management | - SD SPECS (107) - SD Drawings (P-1-D, P-3-E, and P-5-A) - WM-1 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Solid Waste Management | - SD SPECS (N/A) - WM-6 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Concrete Curing | - SD SPECS (N/A) - NS-12 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Material and Equipment Use Over Water | - SD SPECS (N/A) - NS-13 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Concrete Finishing | - SD SPECS (N/A) - NS-14 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Structure Demolition-Removal Over or Adjacent to Water | - SD SPECS (N/A) - NS-15 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Material Delivery and Storage | - SD SPECS (N/A) - WM-2 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Material Use | - SD SPECS (N/A) - WM-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Stockpile Management | - SD SPECS (N/A) - WM-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Solid and source site materials, excess materials, hazardous materials, vehicle equipment and maintenance, sanitary waste management, and waste in general shall be managed at designated staging and waste areas. Staging and waste areas should be located a minimum of 150-ft away from any water feature (including irrigation amenities or domestic water sources) or areas susceptible to stormwater or surface water movement.

Solid and source site materials, include but are not limited to, dedicated asphalt or concrete plants (where the manufacturing of asphalt or concrete will occur on-site), gravel pits, stockpiles, source sites, general construction materials, and excess materials. The Contractor shall use an approved licensed solid waste management company. The Contractor shall reuse and recycle trash, source materials, construction materials, and construction debris unless it is not usable. If it is not usable or cannot be recycled it will be considered solid waste. All solid waste materials, with the exception of source materials, will be collected and disposed of in a securely lidded dumpster and shall be covered and secured at night and during all precipitation events. Any leaky solid waste dumpster must be exchanged or replaced within 24-hours of confirmation. Collection and proper disposal of all leaking materials shall be the responsibility of the Contractor.

The Contractor shall arrange an adequate solid waste disposal schedule to ensure that there is adequate solid waste disposal capacity on-site at all times and that dumpsters do not overflow and are emptied on a regular basis. All solid waste materials shall be removed from the project site throughout the duration and after the project is completed. Solid waste materials shall not be buried, burned, or discharged from the site.

Designate Washout Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------|------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|
| Liquid Waste Management | - SD SPECS (N/A) - WM-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Concrete Waste Management | - SD SPECS (N/A) - SD Drawings (P-5-B) - WM-9 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 1 |
| Entrance/Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) - SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Concrete waste procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or to watercourses. A wash station may also be required to prevent transporting noxious weeds and contaminated soils from a contaminated site to an uncontaminated site or road surface.

Covering or containing hazardous materials or washing contaminated equipment may be required. All vehicle and equipment cleaning and maintenance shall occur in a designated staging site/area and include a water pollution control

equipment wash down area that shall have secondary containment and protection through the use of berms or other erosion and sediment controls or BMPs to reduce or eliminate discharges of pollutants.

The Contractor shall avoid mixing excess amounts of fresh concrete or cement mortar on-site. Storage of dry and wet materials associated with concrete should be located a minimum of 150-ft upslope of any water feature (including irrigation amenities or domestic water sources) or area susceptible to stormwater or surface water movement. The Contractor shall **Never** dispose of concrete, grout, or cement mortar washout into a watershed, water feature, or area susceptible to stormwater or surface water movement. Wash out concrete transit mixers only in designated washout areas. The Contractor shall design a temporary concrete washout station (s) as per ITD Standard Drawing P-5-B. All hardened concrete, grout, or cement mortar waste, including waste generated during equipment cleaning and QA/QC testing, shall be collected and transported to an approved licensed solid waste disposal/processing or recycling site by the Contractor.

Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------|-----------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|
| Vehicle and Equipment Fueling | - SD SPECS (N/A) - SD Drawings (P-5-E) - NS-9 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 1 |
| Vehicle and Equipment Maintenance | - SD SPECS (N/A) - NS-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pile Driving Operations | - SD SPECS (N/A) - NS-11 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

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 Resident Engineer.

| Fueling and/or Maintenance Activity | Practices to be Implemented to Control Spills and/or Exposure to Stormwater |
|-------------------------------------|-----------------------------------------------------------------------------|
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Add additional rows as needed by hitting Tab in the last cell of the table

Sanitary Waste BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|-----------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|
| Sanitary-Septic Waste Management | - SD SPECS (N/A) - WM-10 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 1 |

Sanitary and Septic Waste procedures and practices are used to minimize or eliminate the discharge of construction site sanitary/septic waste materials to the storm drain system or to watercourses. Sanitary/septic waste management practices are implemented on all construction sites that use temporary or portable sanitary/septic waste systems. Temporary portable toilets from an approved licensed sanitary waste company shall be used during the duration of the project and maintained and cleaned as needed. Portable toilets shall be located at designated staging areas and have secondary containment in case of a leak, spill, or discharge. All sanitary waste will be collected from the portable units a minimum once per week. Placement and removal of all portable toilets shall be the responsibility of the Contractor.

Contaminated Soil BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Contaminated Soil Management | - SD SPECS (N/A) - WM-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Prior to construction or soil disturbance, ITD shall inspect the site for physical contamination. During the construction phase, if the Contractor detects evidence of contamination, or encounters leaks, spills, or discharges are detected, contaminated soils and water should be contained and held for testing whenever contamination is suspected. Any specific contaminant known to exist or that is discovered on site and which has contaminated soil or has the potential to contaminant soil and/or drainages or water features (including irrigation amenities or domestic water sources) shall be reported to the Resident Engineer immediately. The Resident Engineer will coordinate clean-up of contaminated soils with the Idaho Communications Center (Statecom) at 1-800-632-8000.

Allowable Non-Stormwater Discharge Management and Equipment/Vehicle Washing

Non-stormwater (dust control water, water used in road grading, irrigation drainage, springs or ground water dewatering, etc) may combine with stormwater and be present in the discharge at this site. All water shall be treated in the same manner as stormwater runoff. The same BMPs used in this PPP for stormwater runoff shall be implemented to reduce non-stormwater impacts and limit non-stormwater discharges. The use of soap, solvents, and degreasers is specifically prohibited for cleaning use. Uncontaminated water discharge from dust control, dust abatement activities, and water used in road grading or excavation activities and compaction shall not reach waters of the United States.

The following incidental non-stormwater from the sources marked below may combine with stormwater and be present in the discharge at this site.

- Hydrant or Water Line Flushing
- Vehicle Wash-Down Water
- Dust Control Water
- Irrigation Drainage (including landscape)
- Spring or Groundwater

- Air Conditioner Condensate
- Uncontaminated Foundation or Footing Drains
- Pavement or Building Wash Water
- Uncontaminated Excavation Dewatering (without detergents)
- Potable Water
- No Known Non-Stormwater Sources Apparent

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 |
|-------------------------------------|-----------------------------------------------------------------|
| | |
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| | |
| | |

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Non-Stormwater BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------|------------------------------------------------|--------------------------|-----------------------------------------------------|
| Water Conservation Practices | - SD SPECS (106 and 205) - NS-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Dewatering Operations | - SD SPECS (N/A) - NS-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Paving and Grinding Operations | - SD SPECS (203) - NS-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Potable Water-Irrigation Management | - SD SPECS (N/A) - NS-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Vehicle and Equipment Cleaning | - SD SPECS (N/A) - SD Drawings () - NS-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Freeze Reduction | - SD SPECS (N/A) - NS-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Snow Management | - SD SPECS (N/A) - EC-15 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Snow Accumulation Management | - SD SPECS (N/A) - EC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Spill Prevention and Control BMPs

All ITD projects shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and ITD Incident Management Plan. In addition, a project Spill Plan shall be provided by the Contractor, and should be

included in **Appendix B**. The ITD BMPs listed below also contain guidance on waste management, spill prevention and control, and cleanup.

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------------|----------------------------|-------------------------------------|----------------------------------------------------------------------------------|
| Spill Prevention and Control | - SD SPECS (N/A) - WM-5 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 |
| Hazardous Waste Management | - SD SPECS (N/A) - WM-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Illicit Connection-Illegal Discharge Detection and Reporting | - SD SPECS (N/A) - NS-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Per 40 CFR 112, if petroleum products stored at the construction site aggregate 1,320 gallons or more, a Spill Prevention, Control, and Countermeasure Plan (SPCC) plan will be required.

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 per ITD PPP requirements. 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 | Implementation Schedule |
|-----------------------------------------|-----------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Channel Protection - Check Dams | - SD SPECS (212) - SD Drawings (P-2-B) - PC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sheet Flow to Buffers | - SD SPECS (N/A) - PC-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Flexible Liners | - SD SPECS (212 and 624) - SD Drawings (P-2-A and P-2-C) - PC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Rigid Channel Liners | - SD SPECS (209 and 623) - SD Drawings (P-2-D) - PC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes and Berms | - SD SPECS (205, 209, and 212) - SD Drawings (P-1-E and P-1-F) - PC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dry Swale | - SD SPECS (N/A) - PC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------|
| Wet Swale | - SD SPECS (N/A) - PC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geosynthetics | - SD SPECS (640 and 718) - PC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Surface Sand Filter | - SD SPECS (N/A) - PC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Subsurface Sand Filter | - SD SPECS (N/A) - PC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Perimeter Sand Filter | - SD SPECS (N/A) - PC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Organic Filter | - SD SPECS (N/A) - PC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Sand Filter | - SD SPECS (N/A) - PC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Bioretention | - SD SPECS (N/A) - PC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Interceptor Ditches | - SD SPECS (208 and 209) - PC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Retaining Walls | - SD SPECS (210 and 512) - PC-17 | <input checked="" type="checkbox"/> | Date to be Implemented June 1, 2022 Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP |
| Stormwater Basins | - SD SPECS (205 and 212) - SD Drawings (P-1-C and P-4-A) - PC-18 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Basin with Micropool | - SD SPECS (N/A) - PC-19 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wet Basin | - SD SPECS (N/A) - PC-20 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------|
| Wet Extended Detention Basin | - SD SPECS (N/A) - PC-21 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Shallow Wetland | - SD SPECS (N/A) - PC-22 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Shallow Wetland | - SD SPECS (N/A) - PC-23 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pond Wetland System | - SD SPECS (N/A) - PC-24 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Wetland | - SD SPECS (N/A) - PC-25 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sediment Control Box | - SD SPECS (605 and 609) - SD Drawings (E-6-A-F, P-1-H, P-3-A, P-3-B, and P-3-D) - PC-26 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Trench | - SD SPECS (N/A) - PC-27 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Basin | - SD SPECS (N/A) - PC-28 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains - Chutes - Flumes | - SD SPECS (208, 212, 409, 606, 607, and 609) - SD Drawings (D-1-A, D-1-B, and P-2-D) - PC-29 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Rock Armor / Mulch – Turf Reinforced Mat | - SD SPECS (N/A) - PC-30 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Serrations / Roughening | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-31 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Terraces / Benching | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-32 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Topsoil Management | - SD SPECS (213 and 711.09) - PC-33 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (621, 711.05, 711.12, 711.06) - PC-34 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) Sta 2+05 – 3+85 Quantity of BMP 0.08 Acres |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------------------|----------------------------------------|--------------------------|------------------------------------------------------------------------|
| Vegetation-Planting | - SD SPECS (620 and 711.06) - PC-35 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Water Quality Inlet / Oil Grit Separator | - SD SPECS (N/A) - PC-36 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Street Sweeping | - SD SPECS (N/A) - PC-37 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Deep Sump Catch Basin | - SD SPECS (N/A) - PC-38 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| On-line Storage in Storm Drain Network (Vaults) | - SD SPECS (N/A) - PC-39 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Porous Pavements | - SD SPECS (N/A) - PC-40 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Proprietary Manufactured Systems | - SD SPECS (N/A) - PC-41 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Section 5 - Inspection and Maintenance Requirements

Inspections

- Contractor shall inspect and maintain all structural and non-structural control measures for functionality as required by the contract
- Conduct inspections using the inspection and corrective action log form in the Appendix
- Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**

All BMP deficiencies identified during the inspection, or any inadequacies related to the PPP, must be corrected as soon as possible but never later than 7 days after the inspection.

Maintaining an Updated PPP Plan

Changes to the PPP must be documented and may include any one of the following:

- Construction methods
- Operation methods
- Design of the project (including civil plan sheets)

In the field change orders
Maintenance or inspection procedures
Staging sites
Material source sites/stockpile sites
Disposal/excess material/waste sites
Haul roads, temporary roads, and locations where vehicles travel and enter or exit staging areas and construction sites
Implementation and maintenance of BMPs
Stormwater discharge locations
Sequencing/scheduling changes
Impacts to wetlands or sensitive areas
Changes in personnel

All of these can result in the need for additional BMPs, and therefore a PPP update.

The sole objective of all modifications is to keep the PPP concurrent to existing on-the-ground conditions and to eliminate erosion and sediment impacts, as well as other pollutant impacts that could potentially result from the project. All modifications to the PPP shall be documented in **Appendix C** through the completion of inspections reports that shall serve as the corrective action log on this project.

Section 6 - Recordkeeping

Low Erosivity Waiver

If this PPP is being prepared in lieu of a Stormwater Pollution Prevention Plan based on the applicability of obtaining a Low Erosivity Waiver for the project, a copy of ITD, the Contractor, and any applicable local entity filing for a Low Erosivity Waiver (LEW) should be included in **Appendix D**. Guidance on the applicability of the LEW on your project can be found at the following website: <http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm>

Attention should be given to the expirations date on the LEW.

Inspections

Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**.

Section 7 - Certification and Notification

| | | | |
|-------------------------------------------------------|---------------------------------------|-----------|---------------|
| LHTAC Representative's Printed Name Karissa Nelson | Title LHTAC Environmental Engineer | 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 – Basic Spill Prevention and Control Plan Language

In addition to all the erosion and sediment control BMPs, non-stormwater BMPs, and good housekeeping BMPs discussed in the this PPP plan, the minimum following information will be provided by the Contractor for Spill Prevention and Cleanup:

- 1) Contact information for Contractor's designated Spill Coordinator for the project. This person must have authority to mobilize equipment, personnel, and materials in the event of a spill or discharge.
- 2) Documentation of training and/or education on spill response and cleanup.
- 3) Description of the location and content of spill kits on the project site.

Appendix C – Executed Inspection Reports/Corrective Action Log

Appendix D – Low Erosivity Waivers (if applicable)

Appendix E – 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 | |



State of Idaho
DEPARTMENT OF WATER RESOURCES

322 E Front Street, Suite 648 • PO Box 83720 • Boise ID 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700
Website: idwr.idaho.gov • Email: idwrinfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

July 6, 2021

Scott Esquibel
Bear Lake County
PO Box 190
Paris, ID 83261

RE: Joint Application for Permit No. S11-20117
St. Charles Creek – Bridge Replacement

Dear Mr. Esquibel:

The Idaho Department of Water Resources (IDWR) has reviewed your above referenced application for a permit to alter St. Charles 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.

Your project has been determined to meet the Stream Channel Alteration Rules, IDAPA 37.03.07 Minimum Standards (Rule 55). You may consider this letter a permit to construct your project according to your attached application, received April 28, 2021, including diagrams. The project location is within Section 15, Township 15 South, Range 43 East, Boise Meridian, Bear Lake County, Idaho.

Project activities include replacing a bridge over St. Charles Creek. Once the existing bridge deck and abutments have been removed, new abutments and a 34-foot long by 23-foot wide bridge deck will be installed. Approximately 14-cubic yards of clean angular rock riprap will be discharged to help protect the new abutments. The bridge has been designed to accommodate a 1% flow interval with 1.96-feet of freeboard.

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 July 1, 1993, and are enclosed with this permit.

Rule 56 - Construction Procedures

Rule 59 - Culverts and Bridges

SPECIAL CONDITIONS:

[1] All construction shall be completed in accordance with the descriptions and methods on the attached application and diagrams. 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] Permittee shall conduct instream work between August 1 and November 30.

[4] 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 shall be installed according to the manufacturer's specifications, during construction, and must be maintained until construction is completed and the disturbed ground is revegetated and stable.

[5] All temporary structures, 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.

[6] 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.

[7] 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.

[8] This permit shall expire December 31, 2023.

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 Cass Jones 208-287-4897 or cass.jones@idwr.idaho.gov if you have any questions regarding this matter.

Sincerely,



Cass Jones
Stream Channel Protection
Idaho Department of Water Resources

cc: Wayne Davidson, Bear Lake County
Matthew Schenk, Idaho Department of Environmental Quality, Idaho Falls
Becky Abel, Idaho Department of Fish and Game, Idaho Falls
Pat Brown, Idaho Department of Lands, Idaho Falls
U.S. Army Corps of Engineers, Idaho Falls
Aaron Golart, Idaho Department of Water Resources, Boise

JOINT APPLICATION FOR PERMITS

APR 28 2021

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 Corps of Engineers Region 5 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

FOR AGENCY USE ONLY

| | | | |
|-----------------------------------------------------|-----------------------------|----------------------------------------------------------|-------------------------|
| USACE NWW- | Date Received: | <input type="checkbox"/> Incomplete Application Returned | Date Returned: |
| Idaho Department of Water Resources No. 11-20117 | Date Received: 4-28-2021 | <input type="checkbox"/> Fee Received DATE: 4-19-2021 | Receipt No.: E046845 |
| Idaho Department of Lands No. | Date Received: | <input type="checkbox"/> Fee Received DATE: | Receipt No.: |

INCOMPLETE APPLICATIONS MAY NOT BE PROCESSED

| | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------|
| 1. CONTACT INFORMATION - APPLICANT Required: | | | 2. CONTACT INFORMATION - AGENT: | | |
| Name: Scott Esquibel | | | Name: Brandon Keller | | |
| Company: Bear Lake County | | | Company: Keller Associates, Inc. | | |
| Mailing Address: 30 N Main, P.O. Box 190 | | | Mailing Address: 131 SW 5th Ave., Suite A | | |
| City: Paris | State: ID | Zip Code: 83261 | City: Meridian | State: ID | Zip Code: 83642 |
| Phone Number (include area code): (208) 637-9031 | E-mail: sesquibel@bearlakecounty.id.gov | | Phone Number (include area code): (208) 813-7600 | E-mail: bkeller@kellcrassociates.com | |
| 3. PROJECT NAME or TITLE: A022(598), St Charles Creek Br, Bear Lake Co | | | 4. PROJECT STREET ADDRESS: Minnetonka Cave Rd. & Jericho Loop | | |
| 5. PROJECT COUNTY: Bear Lake County | | 6. PROJECT CITY: St Charles | | 7. PROJECT ZIP CODE: | |
| 8. NEAREST WATERWAY/WATERBODY: St Charles Creek | | 9. TAX PARCEL ID#: | | 10. LATITUDE: 42° 7'17.01"N LONGITUDE: 111°24'27.99"W | |
| 11a. 1/4: | | 11b. 1/4: | | 11c. SECTION: 15 | |
| 11d. TOWNSHIP: 15S | | 11e. RANGE: 43E | | 12a. ESTIMATED START DATE: 2021 | |
| 12b. ESTIMATED END DATE: 2023 | | 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. St. Charles Creek Bridge is in Bear Lake County, on Jericho Loop Road at milepost 100.05, approximately 0.9 miles west of St. Charles, ID. | | | | | |
| 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 attached narrative. | | | | | |

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:

NA

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: 20.4 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

See attached narrative.

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 |
|--------------------------------------------|--------------------|---------------------------|-----------------------------------------|------------------------------|
| | See attached. | | | |
| | | | | |
| | | | | |
| TOTAL STREAM IMPACTS (Linear Feet): | | | | 0 |

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) |
|---------------------------------------------|--------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------|
| Erosion Control | Palustrine Scrub Shrub | 0 | Place Riprap | 12 |
| Fill | Palustrine Scrub Shrub | 37 | Roadway daylight | 88 |
| | | | | |
| TOTAL WETLAND IMPACTS (Square Feet): | | | | 100 |

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 attached 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 attached 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.

Wetlands impacted by the project will be mitigated and it is anticipated that the original functions and values lost will be restored. A total of 100 square feet/0.0023 acres of wetlands will be permanently impacted by the project. Mitigation will not be required by the USACE as impacts are less than 0.1 acres; however, the FHWA, in accordance with 23 CFR 777 – Mitigation of Impacts to Wetlands and Natural Habitat, will require mitigation. The loss of 0.0023 acres of wetlands and associated functions will be compensated through compensatory mitigation at a ratio of 1:1 acres of wetland impact to acres of in-kind wetland creation. The project will be mitigated for by funding a portion of the Rainey Creek stream restoration project located in Swan Valley Idaho in Bonneville County being completed by the U.S Forest Service (USFS) Caribou-Targhee National Forest.

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

| | | |
|---------------------------|-------------|--------------------|
| Dirt or Topsoil: | _____ | cubic yards |
| Dredged Material: | _____ | cubic yards |
| Clean Sand: | _____ | cubic yards |
| Clay: | _____ | cubic yards |
| Gravel, Rock, or Stone: | <u>13.5</u> | cubic yards |
| Concrete: | _____ | cubic yards |
| Other (describe): _____ : | _____ | cubic yards |
| Other (describe): _____ : | _____ | cubic yards |
| TOTAL : | <u>13.5</u> | cubic yards |

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

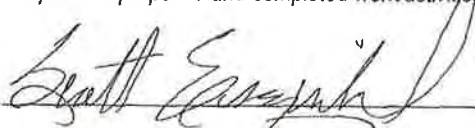
| | | | | | | |
|---------------------|---------------|--------------|---------------|---------------|-------------|-------------------------|
| Filling: | <u>0.0020</u> | acres | <u>88</u> | sq ft. | <u>2.94</u> | cubic yards |
| Backfill & Bedding: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Land Clearing: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Dredging: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Flooding: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Excavation: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Draining: | _____ | acres | _____ | sq ft. | _____ | cubic yards |
| Other: | <u>RIPRAP</u> | acres | <u>0.0003</u> | sq ft. | <u>12</u> | <u>0.44</u> cubic yards |
| TOTALS: | <u>0.0023</u> | acres | <u>100</u> | sq ft. | <u>3.38</u> | cubic yards |


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

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Linda Arnell Mailing Address: 441 Jefferson St City: Montpelier State: ID Zip Code: 83254 Phone Number (include area code): 208-847-0770 E-mail: lindabest1@yahoo.com | Name: Logan River LLC Mailing Address: 376 E 400 S Suite 120 City: Salt Lake City State: UT Zip Code: 84111 Phone Number (include area code): 208-230-7234 E-mail: |
| Name: Conrad E Michaelson Mailing Address: PO Box 67 City: Saint Charles State: ID Zip Code: 83272 Phone Number (include area code): 435-757-0527 E-mail: | Name: The Bunderson Family LLC C/O Becky Wilde Mailing Address: 315 S 830 E City: Smithfield State: UT Zip Code: 84335 Phone Number (include area code): 435-563-3209 E-mail: ikn4moose@hotmail.com |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |
| Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number (include area code): E-mail: |

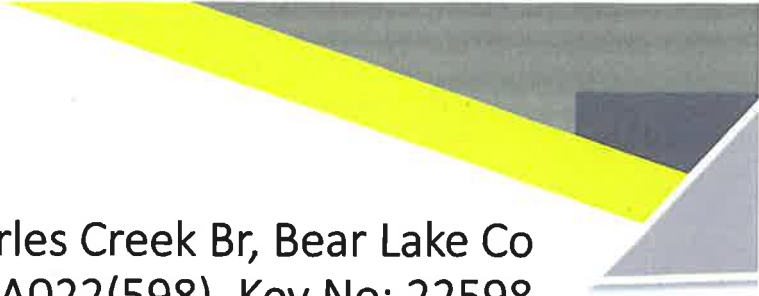
30. SIGNATURES: STATEMENT OF AUTHORIZATION / CERTIFICATION OF AGENT / ACCESS

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:  Date: 2-11-2021

Signature of Agent:  Date: 2-10-2021

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".



St Charles Creek Br, Bear Lake Co
Project No: A022(598), Key No: 22598

Joint Application for Permits
Additional Information
December XX, 2020



BLOCK 15 - PROJECT PURPOSE & NEED

The **purpose** of the project is to replace the load posted, deteriorated bridge structure (Bridge Key 22253) over St. Charles Creek on Jericho Loop Road. The proposed bridge will have a greater span and skew to better align with the creek. It is anticipated that the new bridge will be approximately 34 feet in length (clear span) and approximately 23 feet in width (curb-to-curb) with an 18-degree skew. Minor realignment of the existing approaches will be required to meet roadway geometric standards and constructability needs.

The **need** for this project is to address the deteriorating bridge structure and extend the span to push the abutments beyond the channel limits to minimize potential for future scouring. The existing bridge crosses St. Charles Creek and provides an essential travel way for agriculture, tourism, emergency vehicles, and local traffic. Farmers use the bridge to access land and move heavy, slow farm equipment. The alternative is to use US-89 which is heavily trafficked and significantly more dangerous for the slower moving farm equipment. The bridge provides a route to the Minnetonka Cave for thousands of tourists each year. Access to Green Canyon and St. Charles Canyon via Jericho Loop is an often-used shortcut by recreational users. The canyons provide multiple campgrounds and large trail systems. In addition, emergency vehicles use Jericho Loop to serve residences or as an alternative to US-89 when dealing with fires or medical emergencies.

BLOCK 16 - DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT

The 2019 Bridge Inspection Report (See TS&L Report Appendix D) rates the condition of the superstructure and deck as poor (4) and the substructure as critical (2). It rates the overall structure as intolerable and suggests that it be replaced. The inspection report indicates that no signs of decay in the timbers were observed, however, the timber deck is separating and bowing at various locations. The northwest corner of the bridge has settled 14 inches and is causing torsional forces to act on the bridge. This is due to scour and undermining at the northwest corner which has been armored by way of large riprap placement. The abutments and wingwalls are showing signs of weathering and checking, but no significant signs of decay or deterioration was observed.

Due to the age and deteriorating condition of the existing bridge, retrofit options were not considered as feasible alternatives. Replacement of the bridge is recommended. Replacement of the structure will need to accommodate the existing roadway typical section and ITD hydraulic freeboard requirements. Any bridge replacement will need to accommodate the LVRG and be designed for HL-93 design vehicle loading. In consideration of structure types, the span length is too long for a single culvert structure and would not be advantageous hydraulically to install a multiple, side-by-side culvert type structure. Box and stiff leg culvert type structures are typically limited to spans less than 25 feet.

Given these constraints, the design width, skew, and span requirements of the structure, a bridge alternative is better suited to meet the conditions of this project than a culvert type structure. Replacement of the bridge will be required.

Activity 1 – The Contractor will clear and grub vegetation including wetlands for access in association with construction needs, and to place erosion and sediment controls.

Activity 2 – The project is planned for full closure with detours during construction. The Contractor will demolish and remove the existing structure, which includes the existing bridge abutments and concrete wingwalls. All debris will be removed from the creek bed and be disposed of by the Contractor. Excavation for the new bridge abutments and riprap blanket will then take place. Structural fill and geotextile fabric will be placed for the new abutment/footing.

Activity 3 – Geotextile fabric, structural fill, and concrete for the new abutments will be placed and the excavation will be backfilled. Riprap will be placed around the abutments, followed by placement of the voided slab deck. Construction will occur during low-flow season; however, if dewatering is needed, wells will be drilled and the water will be pumped into a temporary lined basin.

Activity 4 – The roadway approaches to the bridge will be compacted and the road surface paved.

Typical Construction Equipment:

- Excavator
- Backhoe
- Loader
- Dump Truck(s)
- Crane
- Skidsteer
- Compaction Plate

There are no Section 10 waterways in the project area.

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

The existing concrete bridge was built in 1950 and has significant deterioration in the deck and girders. The latest bridge inspection report indicates that the Deck (NBI Item 58) and Superstructure (NBI Item 59) are rated 4 - Fair and Substructure (NBI Item 60) rated as a 2 – Critical. This alternative is not recommended because deterioration is likely to become severe and the bridge will have to be closed. The Do Nothing alternative does not address the needs of the project and is not recommended.

An important consideration in the alternative analysis is the construction schedule. The structure must be constructed during a non-peak traffic season if a single lane closure is used (mid-September – mid-December or March – May), which gives an available construction window of approximately three months.

In addition, BMPs described in section 26b of this application will further minimize impacts from the project on the St Charles Creek.

BLOCK 26B - BEST MANAGEMENT PRACTICES (BMP'S)

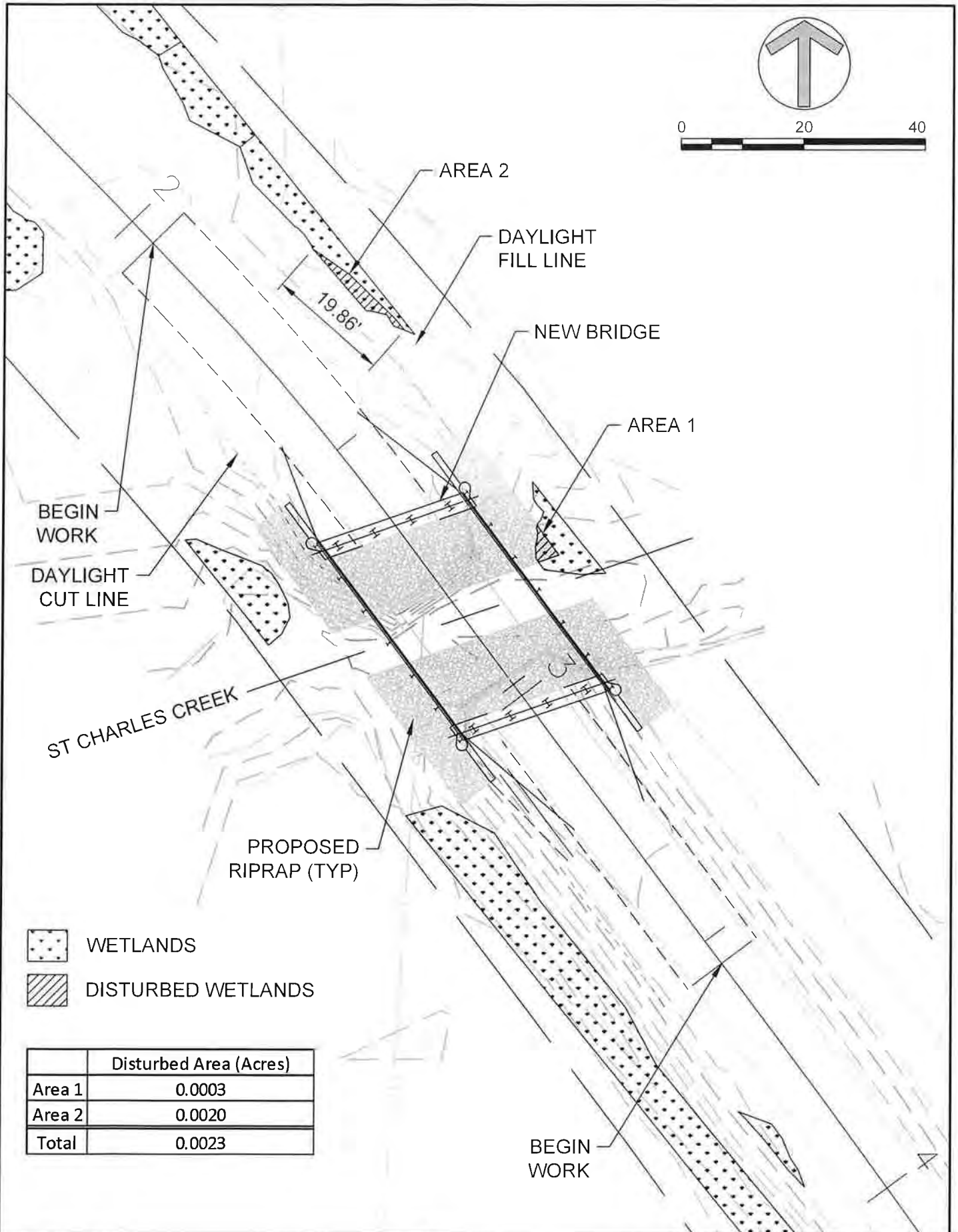
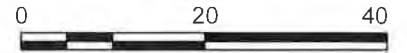
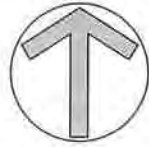
The Idaho Transportation Department's (ITD) BMPs Best Management Practices will be utilized on the project.



The attached plan (See Figures 1 & 2) shows the effect the project will have on the hydraulic characteristics and surface flows of the St Charles Creek. The bridge alignment and impacts to St Charles Creek are shown on the figures. Dust Control, Gravel Bag Barrier, Silt Fence and Fiber Wattles will be used throughout the project to limit the amount of sediments entering the river. The sediment controlling BMP's will be in-place before construction begins and will be maintained throughout construction of the bridge.

A Pollution Prevention Plan (PPP) will be prepared prior to construction. The PPP will document erosion, sediment and pollution controls to be implemented, inspection methods and schedules, as well as maintenance plans. All other wetland areas (such as may occur in or near proposed sources, staging areas, waste sites, etc.) will be retained and protected.

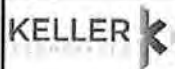
BLOCK 27 – LIST EACH IMPACT TO STREAM, RIVER, LAKE, RESERVOIR, INCLUDING SHORELINE

| Activity | Water Body | Intermittent or Perennial | Description of Impact and Dimensions | Impact Length Linear Feet |
|--------------------------------------------|-------------------|----------------------------------|-------------------------------------------------------------------|----------------------------------|
| New bridge abutments/Riprap | St Charles Creek | Perennial | riprap & concrete abutments 25.33'x3' each | 37.33' |
| New pile foundations (4 per abutment) | St Charles Creek | Perennial | piles driven into surface, 25.33' (length of abutments) | 25.33' |
| Existing Structure removal | St Charles Creek | Perennial | wingwall/riprap/abutment removal and bank rehabilitation; 82'x12' | 25' |
| New Wing Walls | St Charles Creek | Perennial | Precast concrete walls, 1' width (4 walls) | 2' |
| Total Stream Impacts (Linear Feet)* | | | | 37.33' |



-  WETLANDS
-  DISTURBED WETLANDS

| | Disturbed Area (Acres) |
|--------------|------------------------|
| Area 1 | 0.0003 |
| Area 2 | 0.0020 |
| Total | 0.0023 |



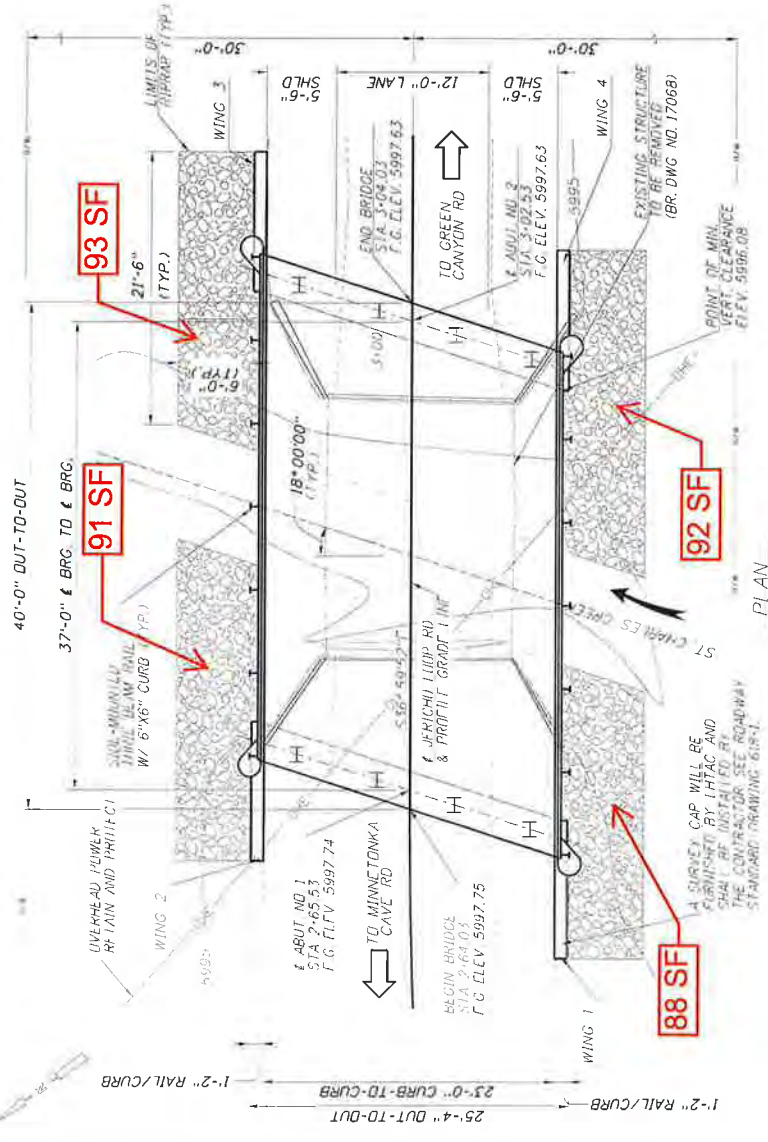
ST CHARLES CREEK BRIDGE

Wetland Delineation

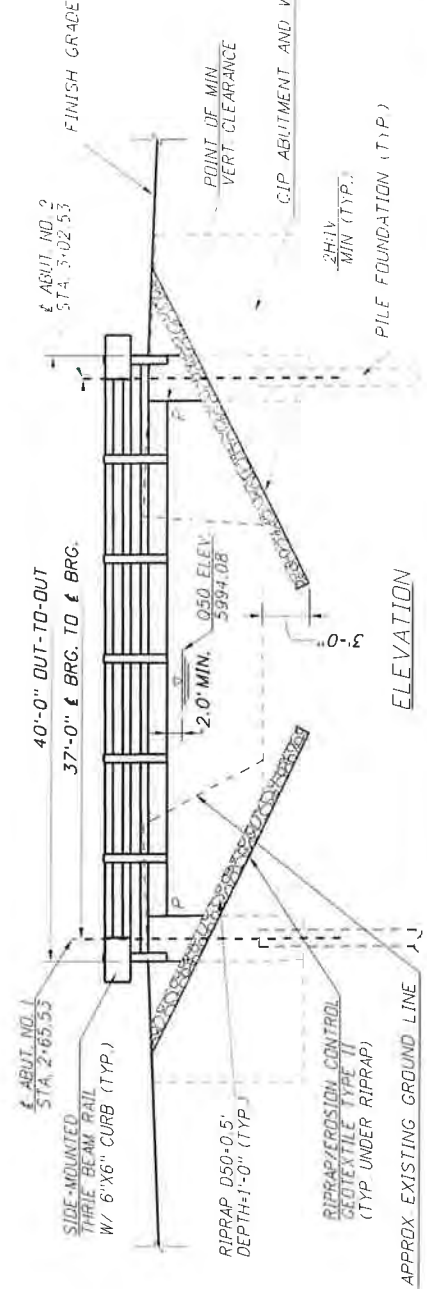
PROJECT NO:
KN 22598

FIGURE NO:
1

C:\2025\31010122598_KN22598\Drawings\Wetland\Wetland\Wetland.dwg (2/2/2025 11:14:20 AM) (11/15/2025) (11/15/2025) (11/15/2025) (11/15/2025)



Riprap Quantities below OHHW
 91 + 93 + 92 + 88 = 364 SF
 364 SF * 1' depth = 364 CF
 13.5 CY



ST CHARLES CREEK
 BRIDGE

CONSTRUCTION IMPACTS

PROJECT NO
 KN 22598
 FIGURE NO. 2

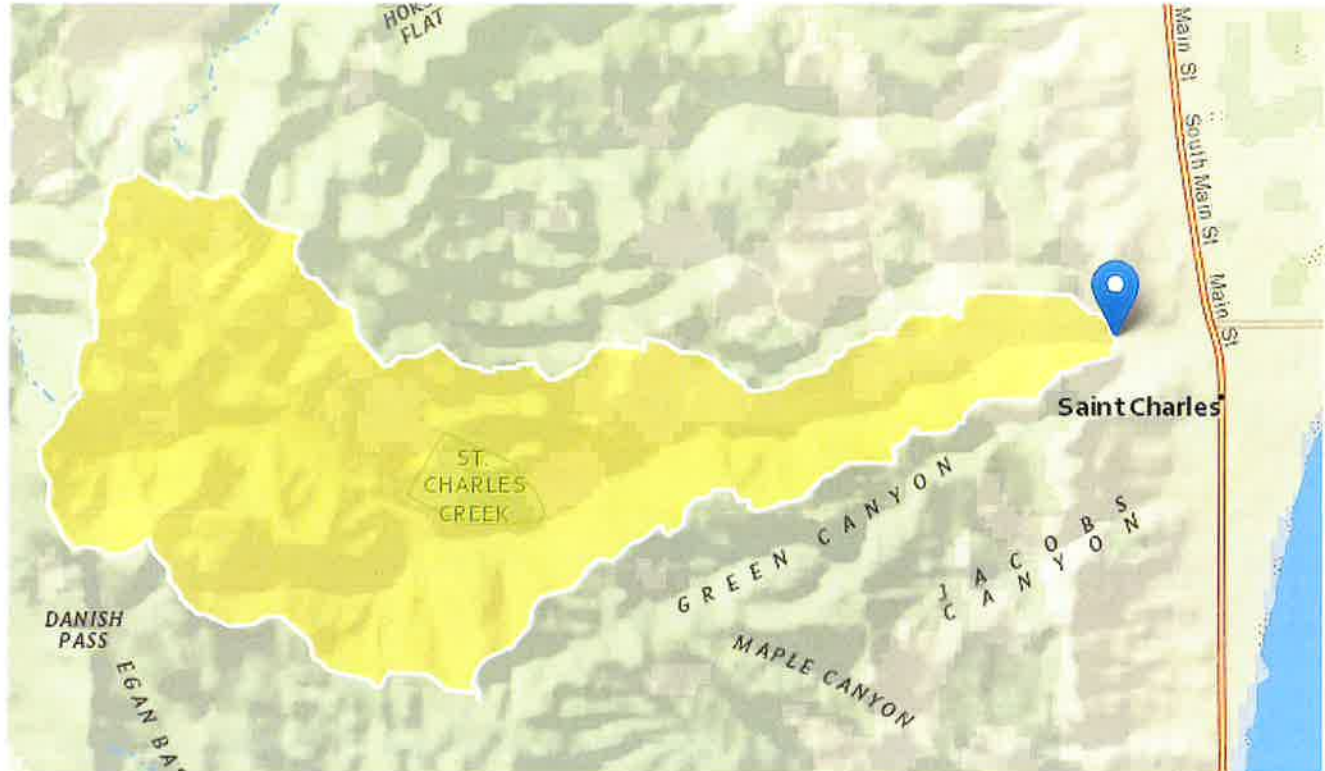
StreamStats Report

Region ID: ID

Workspace ID: ID20201221202639654000

Clicked Point (Latitude, Longitude): 42.12139, -111.40788

Time: 2020-12-21 13:27:01 -0700



Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------|
| AG_OF_DA | Agricultural Land in Percentage of Drainage Area (Idaho Logistic Regression Equations SIR 2006-5035) | | percent |
| BSLDEM10M | Mean basin slope computed from 10 m DEM | 38 | percent |
| BSLDEM30M | Mean basin slope computed from 30 m DEM | 34.9 | percent |
| CSL1085LFP | Change in elevation divided by length between points 10 and 85 percent of distance along the longest flow path to the basin divide, LFP from 2D grid | | feet per mi |

| Parameter Code | Parameter Description | Value | Unit |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|
| CSL10_85 | Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known | | feet per mi |
| DRNAREA | Area that drains to a point on a stream | 20.35 | square miles |
| DV_OF_DA | Developed Land in Percentage of Drainage Area (Idaho Logistic Regression Equations SIR 2006-5035 | | percent |
| ELEV | Mean Basin Elevation | 7660 | feet |
| ELEVMAX | Maximum basin elevation | | feet |
| FOREST | Percentage of area covered by forest | 49 | percent |
| IMPNLCD01 | Percentage of impervious area determined from NLCD 2001 impervious dataset | | percent |
| LAKEAREA | Percentage of Lakes and Ponds | | percent |
| LC01DEV | Percentage of land-use from NLCD 2001 classes 21-24 | | percent |
| LC11FOREST | Percentage of forest from NLCD 2011 classes 41-43 | | percent |
| MINBELEV | Minimum basin elevation | | feet |
| NFSL30_10M | Percent area with north-facing slopes greater than 30 percent from 10-meter NED. | 26 | percent |
| NFSL30_30M | Percent area with north-facing slopes greater than 30 percent from 30-meter DEM. | 25 | percent |
| PRECIP | Mean Annual Precipitation | 34.3 | inches |
| PRECPRIS10 | Basin average mean annual precipitation for 1981 to 2010 from PRISM | | inches |
| RELIEF | Maximum - minimum elevation | | feet |
| SLOP30_10M | Percent area with slopes greater than 30 percent from 10-meter NED | 67 | percent |
| SLOP30_30M | Percent area with slopes greater than 30 percent from 30-meter DEM. | 62.5 | percent |
| SLOP50 | Slopes Greater Than 50 Percent as percent of drainage area | | percent |
| VOLCANIC | Percent of drainage area as surficial volcanic rocks as defined in SIR 2006-5035 | | percent |

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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Application Version: 4.4.0



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

April 28, 2021

WALLA WALLA DISTRICT
REGULATORY DIVISION

**SUBJECT: NWW-2021-00031, E. 121 St. S. Idaho Canal Bridge Replacement Project,
ITD Key No: 22599**

Mr. Lance Bates
Bonneville County
2700 Manwill Road
Idaho Falls, Idaho 83401

Dear Mr. Bates:

We have determined that your proposed project "E. 121 St. S. Idaho Canal Bridge Replacement Project" is authorized in accordance with Department of Army (DA) Nationwide Permit (NWP) No. 14: Linear Transportation Projects. This project is located between mile post 100.98 and 101.02 of E. 121 St. S., within Section 30 of Township 1 North, Range 38 East, near latitude 43.388411° N and longitude - 112.023997° W, in Bonneville County, near Shelley, Idaho. Please refer to File Number NWW-2021-00031 in all future correspondence with our office regarding this project.

Project activities include the discharge of 43 cubic yards of riprap below the ordinary high water mark of the Idaho Canal, including adjacent wetlands, to armor the proposed abutments and wing walls of the new bridge. The project also entails 27 cubic yards of fill within wetlands to align and expand the new bridge approaches. The project proposes the permanent loss of 0.0066 acres of wetlands adjacent to the Idaho Canal and proposes to permanently impact 48 linear feet of Idaho Canal. All work shall be done in accordance to the attached drawings, titled "E 121 St. S. Idaho Canal Bridge Replacement Project", sheets 1 through 3, dated March 12, 2021.

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).

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.

The following Special Conditions include:

a. 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.

You must also comply with the conditions detailed in the attached Section 401 Water Quality Certification (WQC) issued for this project on February 22, 2021, by the Idaho Department of Environmental Quality (IDEQ). If you have any questions regarding the conditions set forth in the Water Quality Certification, please contact IDEQ directly at 208-528-2650, Idaho Falls Regional Office..

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.

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.

This verification is valid until March 18, 2022, 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 18, 2022, please contact us at least 60-days prior to this date. A new application and verification may be required.

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

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

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

Walla Walla District Regulatory. For more information about the Walla Walla District Regulatory program, you can visit us online³.

If you have any questions or need additional information about this permit authorization, you can contact Shane Skaar by phone at (208) 433-4478, by mail at the address in the letterhead, or email at shane.k.skaar@usace.army.mil. For informational purposes, a copy of this letter has been sent to the Idaho Department of Water Quality and the Idaho Department of Water Resources.

Sincerely,



Tracy Peak, Deputy Chief
Regulatory Division

Enclosures

Transfer of Nationwide Permit Form
Compliance Certification

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

TRANSFER OF NATIONWIDE PERMIT

When the structures or work authorized by this Nationwide Permit, **NWW-2021-00031, E. 121 St. S. Idaho Canal Bridge Replacement Project**, 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:

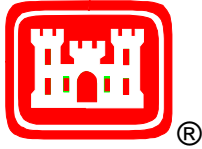
City, State, Zip:

Phone Number:

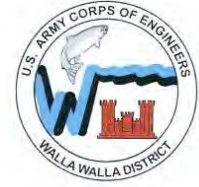
Signature of TRANSFEREE

DATE

COMPLIANCE CERTIFICATION



US Army Corps of Engineers
Walla Walla District



Permit Number: NWW-2021-00031

Name of Permittee: Bonneville County

Date of Issuance: April 28, 2021

Upon completion of the activity authorized by this permit and any mitigation required by the permit, please sign this certification and return it to the following address:

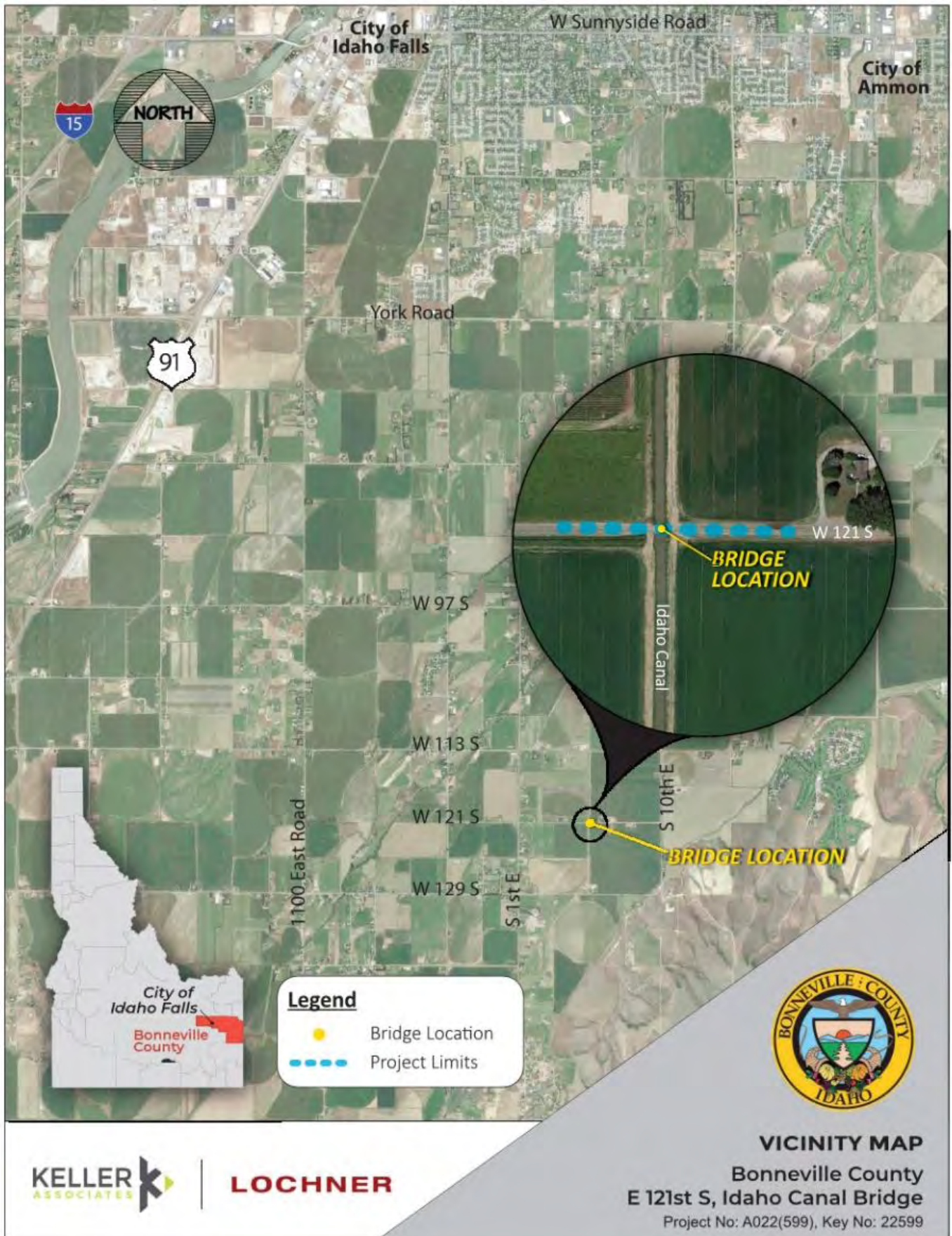
U.S. Army Corps of Engineers
Walla Walla District
Boise Regulatory Office
720 East Park Blvd., Suite 245
Boise, Idaho 83712-7757

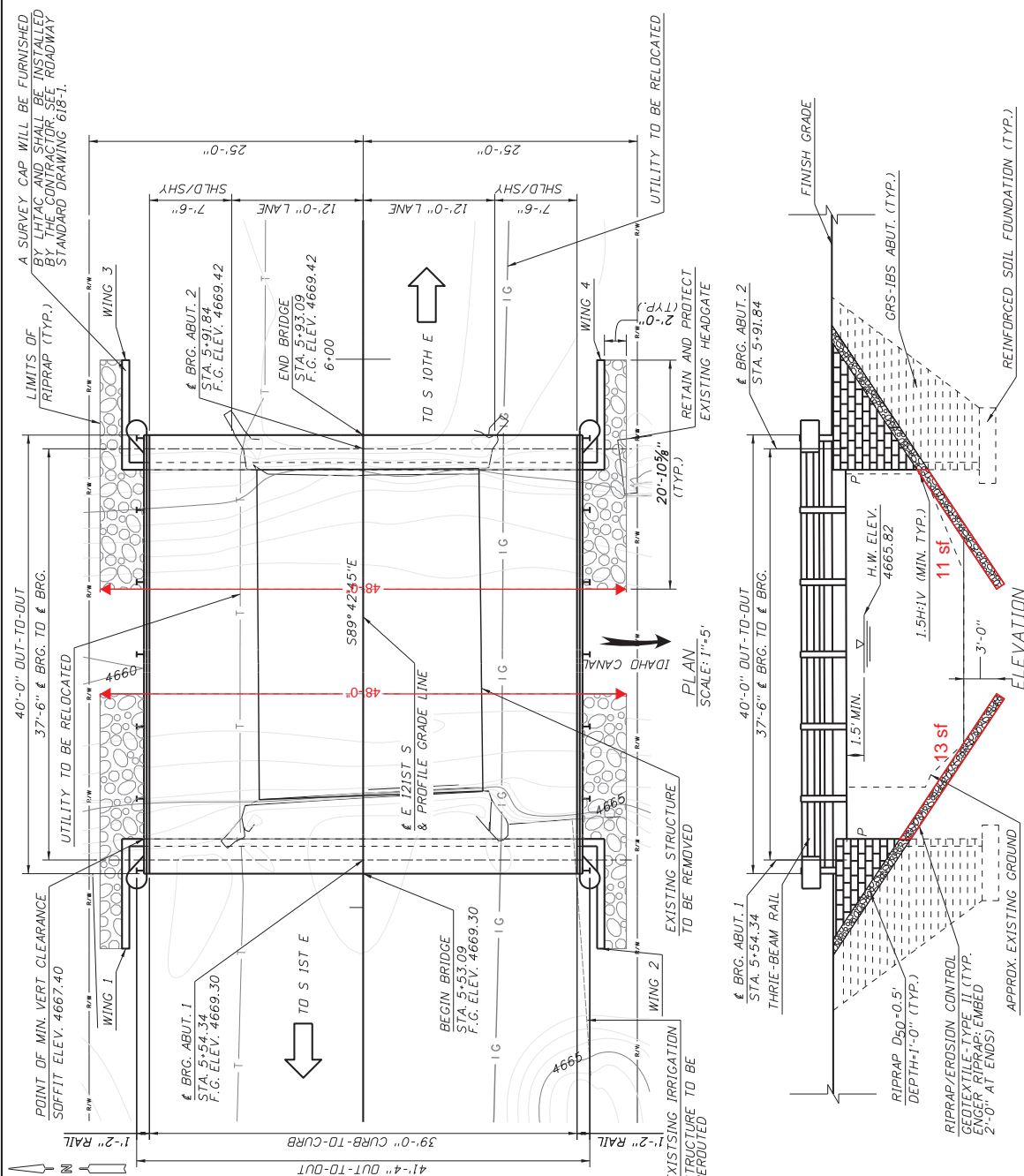
Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with all terms and conditions of this permit, the permit is subject to suspension, modification, or revocation and you are subject to an enforcement action by this office.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit. The required mitigation was also completed in accordance with the permit conditions.

Signature of PERMITEE

DATE





Riprap Volume below OHWM
 1152 CF
 42.7 CY

A SURVEY CAP WILL BE FURNISHED BY LHTAC AND SHALL BE INSTALLED BY THE CONTRACTOR. SEE ROADWAY STANDARD DRAWING 618-1.

Title: E. 121 St. S. bridge replacement project
 File No.: NWW-2021-00031
 Waterway: Idaho Canal
 Proposed activity: Bridge replacement
 Sheet 2 of 3 Date: March 12, 2021

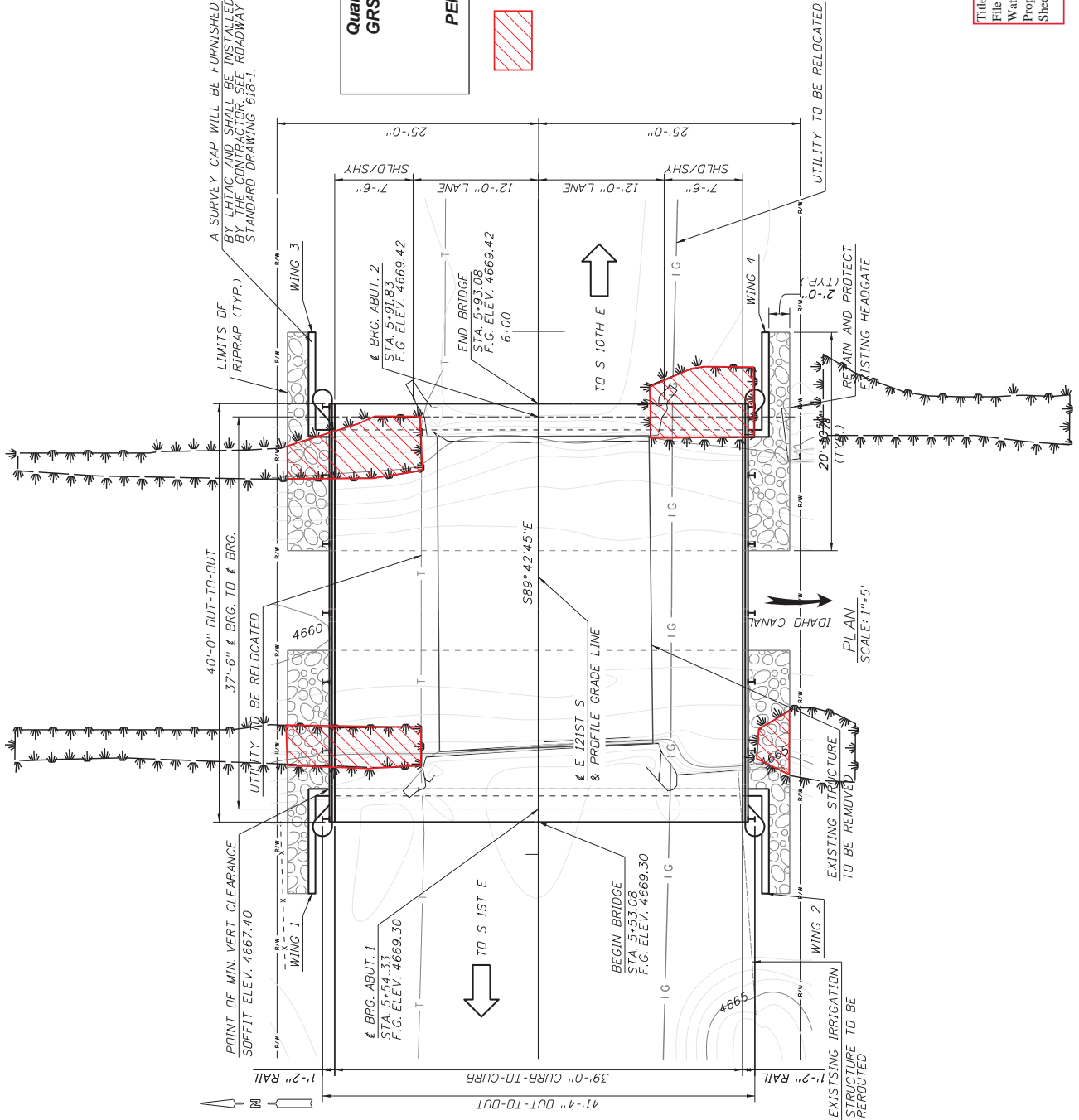
English
 PROJECT NO.
 A022(599)

IDaho TRANSPORTATION DEPARTMENT
 KELLER ASSOCIATES

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

| | |
|----------------|-------------|
| DESIGNED | P. Marlin |
| DESIGN CHECKED | D. Van Alia |
| DETAILED | P. Marlin |
| ENG. CHECKED | D. Krüzer |
| CORRECTIONS | |

| | |
|---------------|-------------------------------|
| SCALES SHOWN | ARE FOR 34" X 22" PRINTS ONLY |
| CADD FILE NO. | 22599-S11C-001.dgn |
| DRAWING DATE: | 12/27/2020 |



Quantities Impacting Wetlands
GRS-IBS Abutments & Riprap:
 155 sf ~ .0036 Acres
Excavation:
 132 sf ~ .0030 Acres
PEM Impacts - 287 SF ~ 0.0066



Title: E. 121 St. S. bridge replacement project
 File No.: :NW-2021-00031
 Waterway: Idaho Canal
 Proposed activity: Bridge replacement
 Sheet 3 of 3 Date: March 12, 2021

NATIONWIDE PERMIT 14

LINEAR TRANSPORTATION: Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge 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 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, 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 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 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) 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; activities requiring a Pre-Construction Notification (PCN) for NWP 14 are **not certified**.

Coeur d'Alene Tribal Lands: DENIED

Shoshone-Bannock Tribal Lands: DENIED

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

REGIONAL CONDITIONS for SPECIFIC NATIONWIDE PERMITS

1. Refer to General Condition 32(b) 1-10 for additional required information .
2. Stream simulation techniques shall be employed on streams where ESA listed fish are present. (Stream simulation design criteria is available at the U.S. Forest Service website at: http://www.stream.fs.fed.us/fishxing/aop_pdfs.html.)
3. The streambed shall be returned to pre-construction contours after construction unless the purpose of the activity is to eliminate a fish barrier and restore the natural substrate and contour.

REGIONAL CONDITIONS, WALLA WALLA DIVISION

Watersheds Requiring Pre-Construction Notification, Specific to Anadromous Fish:

Pre-construction notification (PCN) will be required for the above listed nationwide permits in the geographic area as shown on Figure 1: *Watersheds Requiring Pre-Construction Notification*, dated March 19, 2017 (see pg. 20).

Vegetation Protection & Restoration: Permittee shall avoid and minimize the removal of native vegetation in riparian and wetland areas to the maximum extent practicable. Areas subject to temporary vegetation removal in riparian and wetland areas during construction shall be replanted with appropriate native species by the end of the first growing season following the disturbance except as waived by the District Engineer.

Permittee shall use suitable material to stabilize engineered fills associated with the installation of culverts and other bridge structures. Refer to Nationwide Permit General Condition 6 (suitable material). Permittee shall use appropriate erosion and sediment control measures to ensure stability in and around instream structures.

De-Watering: Discharges for temporary cofferdams and de-watering structures and permittee shall comply with the following conditions:

- 1) Cofferdams shall be constructed of non-erosive material such as concrete jersey barriers, sand or gravel filled 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.
- 2) Diversion channels constructed to bypass flow around the construction site shall be lined with plastic, large rock, or otherwise protected from erosion prior to releasing flows into or through the diversion channel.
- 3) 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.
- 4) Water pipe intakes shall be screened (openings <3/32 inch) to prevent entrainment of fish trapped in the coffered area.
- 5) Fish trapped within the coffered areas shall be collected by electrofishing, seining or dip net 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 followed. http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf
- 6) Temporary stockpiles in waters of the United States shall be removed in their entirety so as not to form a berm or levee parallel to the stream that could confine flows or restrict overbank flow to the floodplain.

Re-Watering: For stream channels which have been dewatered during project construction: Stream channels will be re-watered slowly to minimize a sudden increase in turbidity.

REGIONAL ADDITIONS to the GENERAL CONDITIONS

General Condition #4, Migratory Bird Breeding Areas: The U.S. Fish and Wildlife Service (USFWS) is the primary Federal agency responsible for the conservation and management of migratory bird resources. For additional information contact the US Fish and Wildlife Service (Boise Office 208-387-5243); north Idaho field office (Spokane) at 509-891-6839 or the eastern Idaho field office (Chubbuck) at 208-237-6975.

General Condition #9, Management of Water Flows: To obtain information on State of Idaho definition of high water 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: If the permittee does not have a Best Management Plan (BMP), refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties.

For additional information refer to the Idaho Department of Environmental Quality Catalog of Stormwater Best Management Practices for Idaho Cities and Counties. Website: <http://www.deq.idaho.gov/media/494058-entire.pdf>.

Use of native vegetation is the preferred method to treat soil erosion and stabilize areas disturbed during construction. Eroded and/or disturbed areas shall be replanted with native vegetation and stabilized until vegetative root mass can become established, unless the District Engineer determines this is not practicable. Non-biodegradable materials, such as chicken or hog wire or plastic netting that may entrap wildlife or pose a safety concern should not be used for soil stabilization.

General Condition #18, Endangered Species: Non-Federal applicants must contact either their local Idaho Department of Fish and Game (IDFG) or the U.S. Fish and Wildlife Service (USFWS) to determine if any listed species or designated critical habitat might be in the vicinity of their project. Applicants shall notify District Engineer of their findings (see County contact numbers below).

Contact USFWS at (509) 893-8009 for *Bonner, Boundary, Kootenai, Shoshone, Benewah* and *Latah* Counties

Contact USFWS at (208) 378-5388 for all other Idaho Counties

General Condition #20, Historic Properties: Applicants must contact the Idaho State Historic Preservation Office at (208) 334-3847 located in Boise, Idaho to determine if their project may affect historic properties listed in the National Register of Historic Places. Applicant shall notify the District Engineer of their findings.

NOTIFICATION PROCEDURES PERTAINING TO CERTAIN NATIONWIDE PERMITS

Select Waters and Wetlands: The Corps will coordinate with the Idaho Department of Fish and Game (IDFG) for activities in the following waters, watersheds and wetlands that require notification and are authorized:

- 1) Waters: Henry's Fork of the Snake River and its tributaries; South Fork Snake River and its tributaries; Big Lost River upstream of the US 93 crossing south of Leslie; East Fork Big Lost River; Boise River upstream of Arrow Rock Reservoir; Salmon River and its tributaries, St. Joe River; Priest River; Big Wood River.
- 2) River Basins and Watersheds: Beaver-Camas Creeks and Mud Lake Basin; Medicine Lodge Creek and Crooked Creek; Kootenai River; Middle and South Fork Clearwater River.
- 3) The following HUC 12 sub-watersheds:
Big Sand Creek-Palouse River (170601080102); Rock Creek-Palouse River (170601080110); Upper Lolo Creek (170603060201); Musselshell Creek (170603060202); Eldorado Creek (170603060203); Middle Lolo Creek (170603060204); Lower Lolo Creek (170603060205); East Fork Potlatch River (170603060801); West

Fork Potlatch River-Potlatch River(170603060802); and Hog Meadow Creek-Potlatch River (17060306902).

- 4) **Wetlands identified in Idaho Department of Fish and Game, Wetland Conservation Strategy as Class I, Class II and Reference Habitat Sites.** (Idaho Department of Fish and Game (IDFG) Wetland Conservation Strategies have been developed for the Henrys Fork Basin, Northern Idaho, Big Wood River, Southeast Idaho, East-Central Idaho and Spokane River Basin, Middle and Western Snake River and tributaries, and the Upper Snake River–Portneuf Drainage, Weiser River Basin, and West Central Mountain Valleys and adjacent wetlands. Closed basins of Beaver-Camas Creeks, Medicine Lodge Creek, Palouse River and lower Clearwater River sub-basins, Middle Fork and South Fork Clearwater Basins and Camas Prairie in northern Idaho. Refer to the internet site at: <http://fishandgame.idaho.gov/content/page/wetlands-publications-idaho-natural-heritage-program#reports>)
- 5) **Wetlands identified in the Idaho Wetland Conservation Prioritization Plan-2012.** (Murphy, C., J. Miller and A. Schmidt. 2012. [https://parksandrecreation.idaho.gov/sites/default/files/uploads/documents/SCORTP/Update/Apdx%20.%20Wetlands%Priority%Plan%20\(Part%20I\)%Compressed1.pdf](https://parksandrecreation.idaho.gov/sites/default/files/uploads/documents/SCORTP/Update/Apdx%20.%20Wetlands%Priority%Plan%20(Part%20I)%Compressed1.pdf))

GENERAL CONDITIONS

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 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.

***See Regional Addition**

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.

***See Regional Addition**

To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction 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.

12. Soil Erosion and Sediment Controls.

***See Regional Addition**
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 Fills.

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. The permittee 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 NWP activity may cause more than minimal adverse

effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

***See Regional Addition**

(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 the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, 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 designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat 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. In cases where the non-Federal applicant has identified listed species or critical habitat 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 critical habitat, or until ESA section 7 consultation 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 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 applicant 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 world wide 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 their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts 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.

***See Regional Addition**

(a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, 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. 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 to 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, which may include background research, consultation, oral history interviews, sample field investigation, and 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 the 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. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and 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 to historic properties or that NHPA section 106 consultation has been completed.

(d) 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.

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you 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 NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 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 in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined 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) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since 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. Restored riparian areas should consist of native species. 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 NWPs, 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)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the

impact site and the number of credits to be provided.

(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 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.

Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe 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)). 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 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 prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-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 any required compensatory mitigation. The success 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 work 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 work 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 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 is not authorized by NWP until the appropriate Corps office issues the section 408 permission 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 critical habitat 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. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. 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) 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. For single and complete linear projects, 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. 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 wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, 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;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the 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 designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat 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 activity that requires 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 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 the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through

(10) of this general condition. 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 NWPs 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 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) 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 (iv) 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 email, 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 email 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 NWPs, including the need for mitigation to ensure 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 of 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.

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

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, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for 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.

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

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.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

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.

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 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.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

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. 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 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. The loss of stream bed includes the acres or linear feet of stream bed that is filled or excavated as a result of the regulated activity. 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.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR part 328.3(c)(4). 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: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR part 328.3(c)(6)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

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.

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 waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

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 project: The term “single and complete project” is defined at 33 CFR part 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 project must have independent utility (see definition). For linear projects, a “single and complete project” is 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 waterbody several times at separate and distant locations, each crossing is considered a single and complete project. 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.

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. 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 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 wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR part 328.3(c)(4) and 33 CFR part 328.3(d), respectively. 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, which is defined at 33 CFR part 328.3(c)(7).

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's, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States under 33 CFR part 328.3(a)(1)-(5), that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR part 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

DEFINITIONS, REGIONAL ADDITIONS

Alkaline Wetlands: wetlands on alkaline and or saline soils found where evaporation far exceeds precipitation; sites range from sloped seeps and springs (most common) to drainages or pond and playa margins; flooding and saturation varies, but high groundwater is typical and vegetation is salt tolerant.

REFERENCE: Cowardin, L. M., Carter, F.C Golet, and E.T. LaRoe. 1979 Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC

Forested Wetlands: Wetlands characterized by woody vegetation that is 6 meters tall or taller; They are located where moisture is relatively abundant, particularly along rivers and in the mountains and normally possess an overstory of trees and an understory of young trees or shrubs and an herbaceous layer.

REFERENCE: Classification of Wetlands and Deepwater Habitats of the United States, Mr. Lewis M. Cowardin; Office of Biological Services; Fish & Wildlife Services; 1979

Invasive Species: Species of plants not native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

REFERENCE: Executive Order No. 13112; U.S. Department of Agriculture National Invasive Species Information Center

Kettle: A steep sided, usually basin or bowl shaped hole or depression, commonly without surface drainage, in glacial drift deposits, often containing a lake or swamp.

REFERENCE: Bates, Robert L. & Jackson, Julia A.; Glossary of Geology, American Geological Institute; Falls Church; 1980

Native Species: Species that occurs naturally in a particular region, state, ecosystem and habitat without direct or indirect human actions.

REFERENCE: Federal Native Plant Conservation Committee; 1994

Peatland: Wetlands in cold and persistently saturated settings with at least 30 cm of peat accumulation: fen peatlands form on slopes with groundwater discharge and on floating anchored mats in kettle ponds, subalpine lakes or valley lakeshores; as peat accumulates, ridges or mounds may form; they often support specially adapted mosses and plants.

REFERENCE: Bursik, R.J. and Moseley, R.K.; Ecosystem Conservation Strategy for Idaho Panhandle Peatlands; Cooperative project between Idaho Panhandle National Forest and Idaho Department of Fish & Game; Conservation Data Center; Boise 28 pp plus Appendix; 1995

Playas: Shallow, unpredictably, and temporarily flooded precipitation filled pools formed on hardpan soils with a clay or cemented layer, or on shallow soils over bedrock; vegetation is typically sparse and often salt tolerant, but playas may support endemic plants and invertebrates.

REFERENCE: Tiner, R.W., H.C. Bergquist, G.P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Select Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA.

Spring-fed Wetlands: Wetlands supported by surface discharge of groundwater, often occurring on gentle to steep slopes, but also including upwellings in flat basins

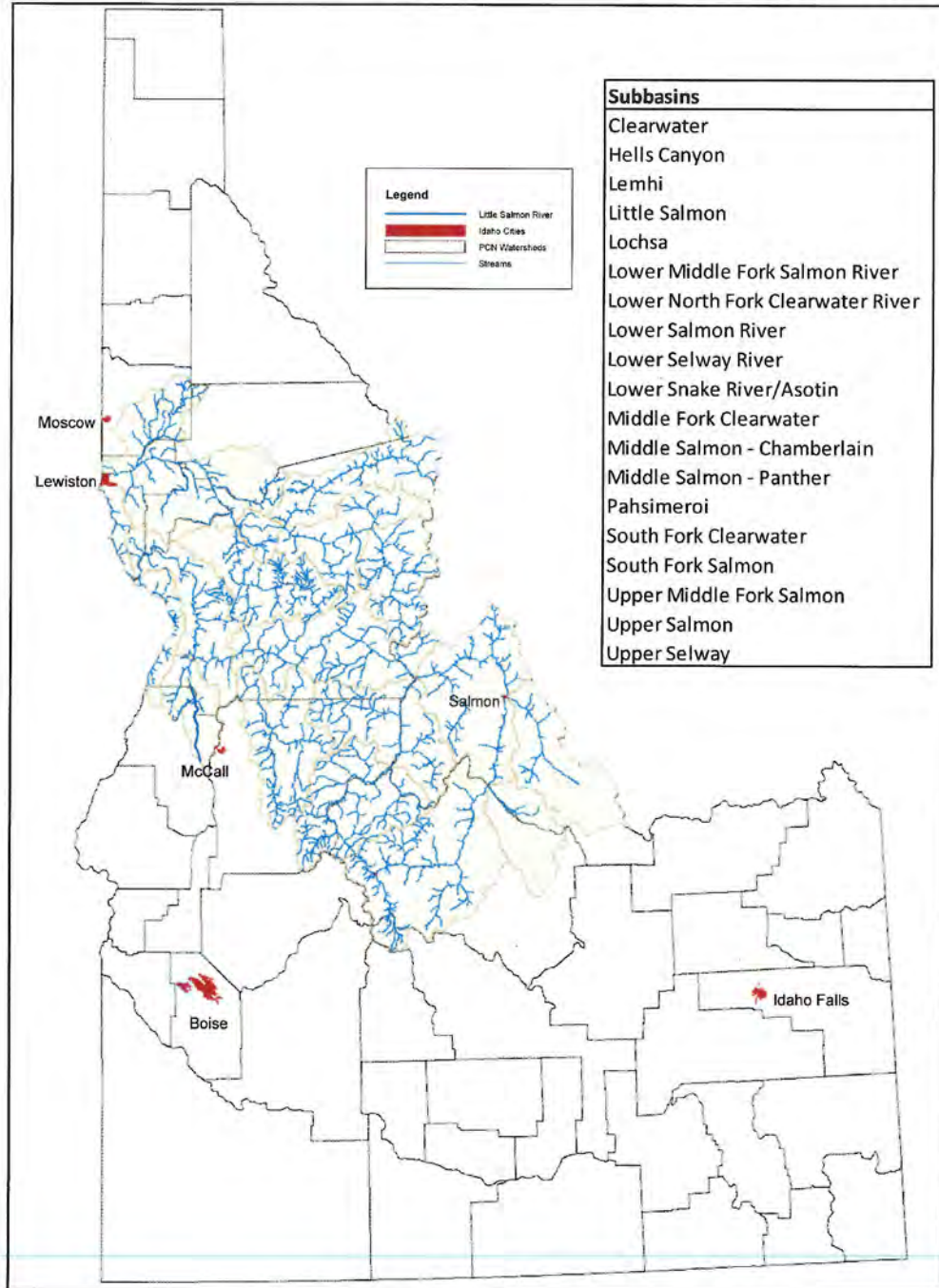
REFERENCE: Sada, D.W., Williams, J.E., Silvey, J.C., Halford, A., Ramakka, J., Summers, P., Lewis, L. 2001 Riparian area management. A guide to managing, restoring, and conserving springs in the western United States. Technical Reference 1737-17. Denver, CO: Bureau of Land Management. BLM/ST/ST-01/001+1737.

Vernal Pools: Precipitation-filled seasonal wetlands inundated during periods when temperature is sufficient for plant growth, followed by a brief waterlogged-terrestrial stage and culminating in extreme desiccating soil conditions of extended duration.

REFERENCE: Keely, J.E. & Zedler, P.H.; Characterization and Global Distribution of Vernal Pools; Pp 1-14 in C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren Jr., and R. Ornduff (Editors); Ecology, Conservation, and Management of Vernal Pool Ecosystems (Proceedings from Conference, 1996); California Native Plant Society, Sacramento, CA; 1998.



Figure 1. Watersheds Requiring Pre-Construction Notification



US Army Corps
of Engineers®

60 30 0 60 Miles

19 March 2017

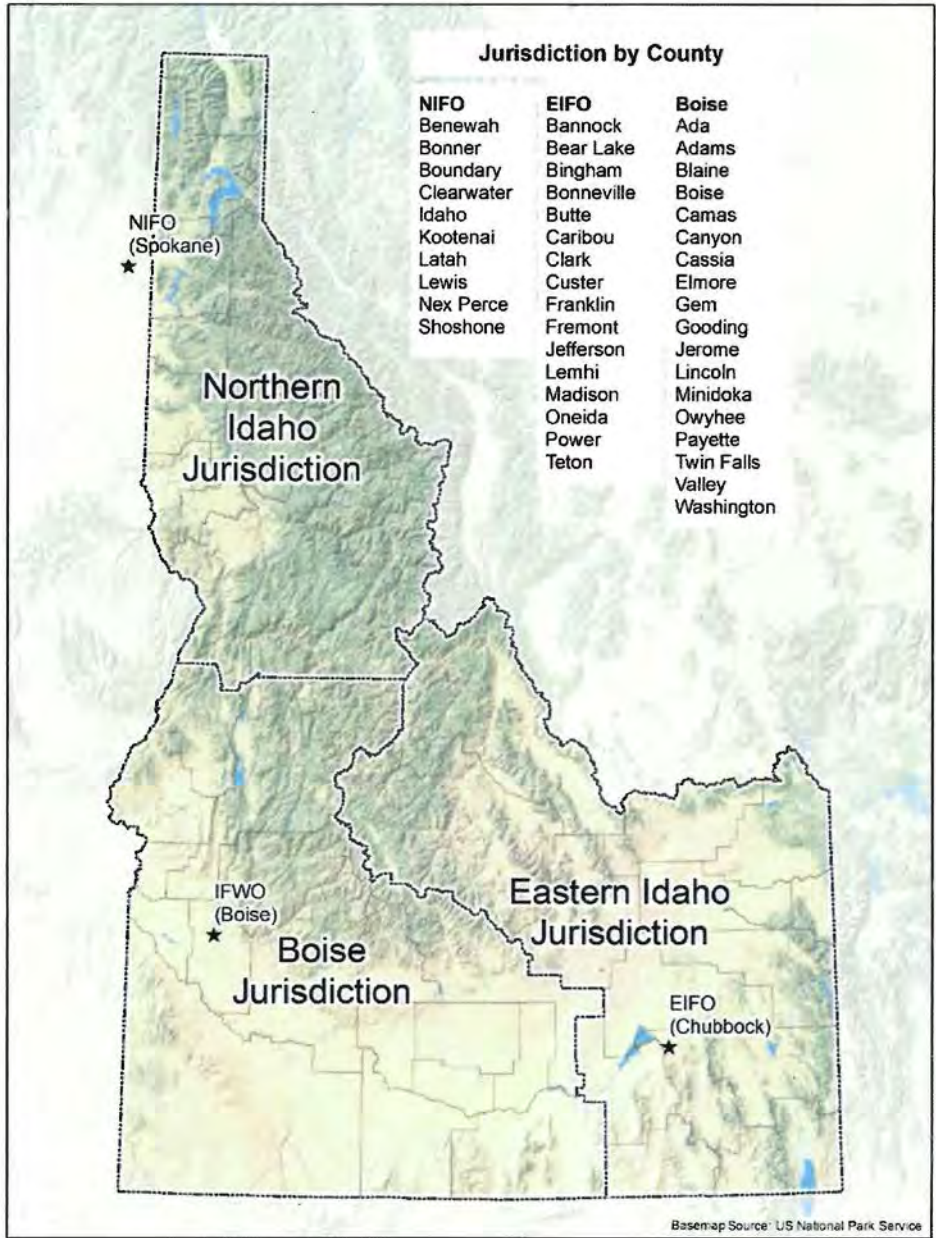


Figure 2. U.S. Fish and Wildlife Field Office Coverage.



Idaho Department of Environmental Quality Final §401 Water Quality Certification

March 3, 2017

2017 U.S. Army Corps of Engineers §404 Nationwide Permits (NWP)

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the proposed 2017 Nationwide Permits published in the Federal Register on June 1, 2016, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permits, including the Regional Conditions set forth by the Army Corps of Engineers (ACOE or Corps), along with the conditions set forth in this water quality certification, then there is reasonable assurance the activities will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- 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 deemed 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 not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing 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 Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern, for projects permitted under the 2017 NWP's administered by the ACOE is sediment. Where heavy metals are of concern due to mining activities additional considerations may be necessary for projects taking place in such areas. If the project reduces riparian vegetation, then temperature (thermal loading) may also be of concern.

The procedures outlined in the [*Sediment Evaluation Framework for the Pacific Northwest*](#)¹ may be applied to assess and characterize sediment to determine the suitability of dredged material for unconfined aquatic placement; to determine the suitability of post dredge surfaces; and to predict effects on water quality during dredging. (See Conditions Necessary, *Fill Material* section for more details).

As part of the Section 401 water quality certification, DEQ is requiring the applicant to comply with various conditions to protect water quality and to meet Idaho WQS, including the criteria applicable to sediment.

Receiving Water Body Level of Protection

The ACOE NWP's authorize construction activities in waters of the United States. In Idaho, jurisdictional waters of the state can potentially receive discharges either directly or indirectly from activities authorized under the NWP's. DEQ applies a water body by water body approach to determine the level of antidegradation protection a water body will receive.

All waters in Idaho that receive discharges from activities authorized under a NWP will receive, at minimum, Tier I antidegradation protection because Idaho's Tier I antidegradation policy applies to all state waters. Water bodies that fully support their aquatic life or recreational uses are considered *high quality waters* and will receive Tier II antidegradation protection. Because of the statewide applicability, the antidegradation review will assess whether the NWP permit complies with Tier I and Tier II antidegradation provisions.

Although Idaho does not currently have any Tier III designated outstanding resource waters (ORWs), it is possible for a water body to be designated as an ORW during the life of the NWP's. Because of this potential, the antidegradation review also assesses whether the permit complies with the outstanding resource water requirements of Idaho's antidegradation policy.

¹ Northwest Regional Sediment Evaluation Team (RSET). 2016. Sediment Evaluation Framework for the Pacific Northwest. Prepared by the RSET Agencies, July 2016, 160 pp plus appendices.

To determine the support status of the receiving water body, the most recent EPA-approved Integrated Report, available on Idaho DEQ’s website, is to be used:

<http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report/>.

High quality waters are identified in Categories 1 and 2 of the Integrated Report. If a water body is in either Category 1 or 2, it is a Tier II water body.

Unassessed waters are identified in Category 3 of DEQ’s Integrated Report. These waters require a case-by-case determination to be made by DEQ based on available information at the time of the application for permit coverage.

Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) contains impaired waters for which a [TMDL](#) has been approved by EPA. Category 4(b) contains impaired waters for which controls other than a TMDL have been approved by EPA. Category 5 contains waters which have been identified as “impaired”, for which a TMDL is needed. These waters are Tier I waters, for the use which is impaired. With the exception, if the aquatic life uses are impaired for any of these three pollutants—dissolved oxygen, pH, or temperature—and the biological or aquatic habitat parameters show a healthy, balanced biological community, then the water body shall receive Tier II protection, in addition to Tier I protection, for aquatic life uses (IDAPA 58.01.02.052.05.c.i).

DEQ’s webpage also has a link to the state’s map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format:

<http://www.deq.idaho.gov/assistance-resources/maps-data/>.

Water bodies can be in multiple categories for different causes. If assistance is needed in using these tools, or if additional information/clarification regarding the support status of the receiving water body is desired, please feel free to contact your nearest DEQ regional office or the State Office (Table 1).

Table 1. Idaho DEQ Regional and State Office Contacts

| <i>Regional Office</i> | <i>Address</i> | <i>Phone Number</i> | <i>Email</i> |
|------------------------|--------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------|
| Boise | 1445 N. Orchard Rd., Boise 83706 | 208-373-0550 | julia.achabal@deq.idaho.gov |
| Coeur d’Alene | 2110 Ironwood Parkway, Coeur d’Alene 83814 | 208-769-1422 | june.bergquist@deq.idaho.gov |
| Idaho Falls | 900 N. Skyline, Suite B., Idaho Falls 83402 | 208-528-2650 | troy.saffle@deq.idaho.gov |
| Lewiston | 1118 “F” St., Lewiston 83501 | 208-799-4370 | mark.sellet@deq.idaho.gov |
| Pocatello | 444 Hospital Way, #300 Pocatello 83201 | 208-236-6160 | greg.mladenka@deq.idaho.gov |
| Twin Falls | 650 Addison Ave. W., Suite 110, Twin Falls 83301 | 208-736-2190 | balthasar.buhidar@deq.idaho.gov |

| | | | |
|--------------|------------------------------------|--------------|----------------------------------------------------------------------------------------|
| State Office | 1410 N. Hilton Rd., Boise 83706 | 208-373-0502 | nicole.deinarowicz@deq.idaho.gov |
|--------------|------------------------------------|--------------|----------------------------------------------------------------------------------------|

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 shall be maintained and protected. The numeric and narrative criteria in the WQS 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 completed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the completion of a TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect beneficial uses (IDAPA 58.01.02.055.04).

The general (non-numeric) effluent limitations in the NWP and associated Regional Conditions for the ACOE Walla Walla District address best management practices (BMPs) aimed at minimizing impacts to the aquatic environment, especially sediment and turbidity impacts including: vegetation protection and restoration, de-watering requirements, erosion and sediment controls, soil stabilization requirements, pollution prevention measures, prohibited discharges, and wildlife considerations. Although the NWP do not contain specific (numeric) effluent limitations for sediment or turbidity, the BMPs identified in the permits and in this water quality certification will ensure compliance with DEQ's water quality standards, including the narrative sediment criteria (IDAPA 58.01.02.200.08) and DEQ's turbidity criteria (IDAPA 58.01.02.250.02.e).

In order to ensure compliance with Idaho WQS, DEQ has included a condition requiring the permittee(s) to comply with Idaho's numeric turbidity criteria, developed to protect aquatic life uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 nephelometric turbidity units (NTU)² instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02.250.02.e). DEQ is requiring turbidity monitoring when project activities result in a discharge to waters of the United States that causes a visible sediment plume. (See Conditions Necessary, *Turbidity* section for more details).

If there is an approved TMDL on a receiving water body that requires a load reduction for a pollutant of concern then the project must be consistent with that TMDL.

For authorized activities requiring a pre-construction notification (PCN), the Corps will have the opportunity to evaluate the NWP activities on a case-by-case basis to ensure that the activity will not cause more than a minimal adverse environmental effect, individually and cumulatively. The Corps has agreed to forward the verification letters to the appropriate DEQ regional office (Table 1) for all authorized activities including the NWP activities that require a PCN. This will

²NTU is a unit of measure of the concentration of suspended particles in the water (turbidity). It is determined by shining a light through a sample and measuring the incident light scattered at right angles from the sample.

better inform DEQ of the authorized activities that are occurring throughout the state and determine if additional conditions will need to be implemented when the ACOE reissues the NWP in 5 years.

DEQ concludes that, given the nature of the activities authorized by the 2017 NWPs, such activities will comply with Idaho's Tier I requirements under IDAPA 58.01.02.051.01 and 58.01.02.052.07, provided the permitted activities are carried out in compliance with the limitations and associated requirements of the 2017 NWPs, Regional Conditions and conditions set forth in this water quality certification.

Protection of High-Quality Waters (Tier II Protection)

Water bodies that fully support their beneficial uses are recognized as high-quality waters and will be provided Tier II protection in addition to Tier I protection. Water quality parameters applicable to existing or designated beneficial uses must be maintained and protected under Tier II, unless a lowering of water quality is deemed necessary to accommodate important economic or social development.

The ACOE does not authorize projects with more than “minimal individual and cumulative impacts” on the aquatic environment under a NWP. As required by the National Environmental Policy Act (NEPA) the Corps has analyzed the individual and cumulative effects for the NWP activities. DEQ recognizes that short term changes in water quality may occur with respect to sediment as a result of the authorized activities, but does not expect any long term adverse changes to water quality. As a general principle, DEQ believes degradation of water quality should be viewed in terms of permanent or long-term adverse changes. Short-term or temporary reductions in water quality, if reasonable measures are taken to minimize them, may occur without triggering a Tier II analysis.

To ensure proposed regulated activities will not cause more than minimal individual and cumulative impacts on the aquatic environment, certain NWPs require project proponents to notify district engineers (in the form of a PCN) of their proposed activities prior to conducting regulated activities. This level of review gives the district engineer the opportunity to evaluate activities on a case-by-case basis to determine whether additional conditions or mitigation requirements are warranted to ensure that the proposed activity results in no more than the minimal individual and cumulative impacts on the aquatic environment.

DEQ has denied certification for NWP 12, NWP 13, and NWP 14 when a PCN is required. DEQ will be issuing an individual certification to ensure no lowering of water quality occurs for any of these projects proposed on Tier II water.

Additionally, if an authorized project causes a visible sediment plume on a Tier II water then turbidity monitoring is required.

DEQ concludes that the activities authorized by the 2017 NWPs will comply with Idaho's Tier II requirements under IDAPA 58.01.02.051.02 and 58.01.02.052.08 providing permitted activities are carried out in compliance with the limitations and associated requirements of the 2017 NWPs, Regional Conditions and conditions of this water quality certification.

Protection of Outstanding Resource Waters (Tier III Protection)

Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point and nonpoint source activities (IDAPA 58.01.02.051.03). No water bodies in Idaho have been designated as ORWs to date. Because it is possible waters may become designated during the term of the 2017 NWP, DEQ has evaluated whether the NWP complies with the ORW antidegradation provision.

The ACOE does not authorize projects with more than "minimal individual and cumulative impacts" on the aquatic environment under a NWP. DEQ recognizes that short term changes in water quality may occur with respect to sediment as a result of the authorized activities, but does not expect any long term adverse changes to water quality. DEQ believes that the terms of the 2017 NWP, Regional Conditions and conditions of this water quality certification provides reasonable assurance there will be no lowering of water quality.

As a condition of this certification, DEQ is requiring that the permittee coordinate with the appropriate DEQ regional office prior to filing their Joint Application for Permit with the Corps to ensure there is no lowering of water quality on any future designated ORWs.

In sum, DEQ concludes that the authorized activities will comply with Idaho antidegradation provisions should waters become designated ORWs during the term of the NWP.

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Best Management Practices

Best Management Practices (BMPs) must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses of waters of the state and to prevent exceedances of state water quality standards. BMPs shall be selected and installed prior to construction. The permittee must monitor and evaluate BMP effectiveness each day during project activities to assure that water quality standards are being met.

Approved BMPs for specific activities (mining, forestry, stream channel alteration, etc.) are codified in IDAPA 58.01.02.350. Additionally, DEQ has a catalog of Stormwater best management practices that is available at: <http://www.deq.idaho.gov/media/494058-entire.pdf>. This catalog presents a variety of BMPs that can be used to control erosion and sediment during and after construction. Other sources of information are also available and may be used for selecting project appropriate BMPs.

Notification

The ACOE has agreed to forward the verification letters to the appropriate DEQ regional office (Table 1) for all authorized activities for which a verification letter is issued. This will better inform DEQ of the authorized projects that are occurring throughout the state and allow DEQ to determine if additional conditions will need to be implemented when the ACOE reissues the NWP in 5 years.

Waiver Consultation

Prior to the District Engineer making a waiver determination, the ACOE will coordinate with the appropriate DEQ regional office to ensure the proposed activity is in compliance with Idaho's water quality standards.

TMDL Compliance

If there is an approved or established TMDL, then the permittee must comply with the established loads in the TMDL.

Outstanding Resource Waters

Should waters become designated as ORWs during the term of the NWP, a permittee proposing a project on an ORW must contact the appropriate DEQ regional office regarding the location and specifics of the project prior to filing their Joint Application for Permit with the Corps to ensure there will be no lowering of water quality on an ORW.

Fill Material

Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed in waters of the United States shall be clean material only. If dredged material is proposed to be used as fill material and there is a possibility the material may be contaminated, then the permittee should apply the procedures in the *Sediment Evaluation Framework for the Pacific Northwest* (RSET, 2016) to assess and characterize sediment to determine the suitability of dredged material for unconfined-aquatic placement; determine the suitability of post dredge surfaces; and to predict effects on water quality during dredging. This document is available at

<http://cdm16021.contentdm.oclc.org/cdm/ref/collection/p16021coll11/id/973>

Turbidity

All projects must be carried out in a manner that does not violate Idaho's numeric criterion for turbidity, which states: "Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02.250.02.e). Monitoring is required when there are discharges into waters of the United States that cause a visible sediment plume.

A properly and regularly calibrated turbidimeter is required for measurements analyzed in the field (preferred method), but grab samples may be collected and taken to a laboratory for analysis. When monitoring is required a sample must be taken at an undisturbed area immediately up-current from in-water disturbance or discharge to establish background turbidity levels. Background turbidity, latitude/longitude, date, and time must be recorded prior to monitoring down-current. Then a sample must be collected immediately down-current from the in-water disturbance or point of discharge and *within* any visible sediment plume. The turbidity, latitude/longitude, date, and time must be recorded for each sample. The downstream sample must be taken immediately following the upstream sample in order to obtain meaningful and representative results.

Results from the down-current sampling point must be compared to the up-current or background level sampled during each monitoring event. If the down-current turbidity exceeds up-current or background turbidity by 50 nephelometric turbidity units (NTU) or more, then the project is causing an exceedance of the WQS. If an exceedance occurs, the applicant must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity (this may include modifying the existing BMPs). Any exceedance of the turbidity standard must be reported to the appropriate DEQ regional office (Table 1) within 24 hours.

Copies of turbidity monitoring records or logs must be available to DEQ upon request. The log must include background measurements (in NTUs); down-current measurements, comparison of background and down-current monitoring as a numeric value (in NTUs), and latitude/longitude, time and date for each sampling event. Monitoring records or logs must describe all exceedances and subsequent actions taken to correct the violations, including monitoring and the effectiveness of the action(s) taken.

Mixing Zones

If a mixing zone, or alternatively a point of compliance is desired then the permittee must contact the appropriate DEQ regional office to obtain authorization.

Culverts

To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. For perennial waters one should consider the Idaho Stream Channel Alterations rules (IDAPA 37.03.07 found at <https://adminrules.idaho.gov/rules/2012/37/0307.pdf>). Another source of BMPs for culvert installation can be found in the Idaho Forest Practices Act (IDAPA 20.20.01 found at <https://adminrules.idaho.gov/rules/current/20/0201.pdf>). Examples of best management practices include, but are not limited to: parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, anti-seep barriers such as bentonite clay, or other acceptable roadway retention systems.

Wood Preservatives

DEQ's [*Guidance for the Use of Wood Preservatives and Preserved Wood Products In or Around Aquatic Environments*](#) must be considered when using treated wood materials in the aquatic environment. Within this guidance document DEQ references the [*Best Management Practices for the Use of Treated Wood in Aquatic and Wetland Environments*](#)³. This document provides recommended guidelines for the production and installation of treated wood products destined for use in sensitive environments.

Reporting of Discharges Containing Hazardous Materials or Deleterious Materials

All spills of hazardous material, deleterious material or petroleum products which may impact waters (ground and surface) of the state shall be immediately reported. Call 911 if immediate

³ Western Wood Preservers Institute, Wood Preservation Canada, Southern Pressure Treaters' Association, and Southern Forest Products Association. 2011. "Best Management Practices: For the Use of Treated Wood in Aquatic and Wetland Environments" Vancouver, WA: Western Wood Preservers Institute.

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 in Table 2 during normal working hours or Idaho State Communications Center after normal working hours. If the spilled volume is above federal reportable quantities, contact the National Response Center.

For immediate assistance: Call 911

National Response Center: (800) 424-8802

Idaho State Communications Center: (800) 632-8000

Table 2. Idaho DEQ Regional Contacts

| <i>Regional Office</i> | <i>Toll Free Phone Number</i> | <i>Phone Number</i> |
|------------------------|-------------------------------|---------------------|
| Boise | 888-800-3480 | 208-373-0550 |
| Coeur d'Alene | 877-370-0017 | 208-769-1422 |
| Idaho Falls | 800-232-4635 | 208-528-2650 |
| Lewiston | 877-541-3304 | 208-799-4370 |
| Pocatello | 888-655-6160 | 208-236-6160 |
| Twin Falls | 800-270-1663 | 208-736-2190 |

Projects for Which Certification Is Denied

DEQ does not have the required reasonable assurance that the following activities will comply with State WQS and other appropriate requirements of state law. Therefore, DEQ denies certification with respect to activities authorized to occur on waters designated as ORWs during the term of the permit. In addition, DEQ denies certification with respect to the activities listed below, except those that occur on man-made waterways as defined in the WQS (IDAPA 58.01.02.010.58). The applicant will be required to obtain an individual certification before the activity can be conducted.

NWPs partially denied

- NWP 12 – Utility Line Activities; activities requiring a Pre-Construction Notification (PCN) are not certified.
- NWP 13 – Bank Stabilization; activities requiring a Pre-Construction Notification (PCN) are not certified.
- NWP 14 – Linear Transportation Projects; activities requiring a Pre-Construction Notification (PCN) are not certified.

NWPs denied entirely

- NWP 16 - Return Water from Upland Contained Disposal Areas
- NWP 17 - Hydropower Projects
- NWP 23 - Approved Categorical Exclusions
- NWP 51 – Land-Based Renewable Energy Generation Facilities
- NWP 52 – Water-Based Renewable Energy Generation Pilot Projects
- NWP 53 – Removal of Low-Head Dams
- NWP 54 – Living Shorelines

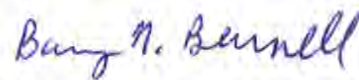
Other Conditions

This certification is conditioned upon the requirement that if there are material modification of the NWPs or the permitted activities—including without limitation, significant changes from the draft to final NWPs, significant changes to the draft Regional Conditions, or the Waters of the United States (WOTUS) rule becoming effective—then DEQ may re-evaluate the certification to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

Right to Appeal Final Certification

The final Section 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 Nicole Deinarowicz, State Office IDEQ, at (208) 373-0591 or via email at nicole.deinarowicz@deq.idaho.gov.



Barry N. Burnell
Water Quality Division Administrator



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

900 North Skyline, Suite B • Idaho Falls, ID 83402 • (208) 528-2650

Brad Little, Governor
Jess Byrne, Director

February 22, 2021

Chris Canfield
City of Idaho Falls Public Works Department
PO Box 50220
Idaho Falls, Idaho 83405

RE: Idaho 8401 Water Quality Certification for NWW-2021-00030, Higbee Butte Arm Canal and NWW-2021-00031 E 121st S projects

Dear Mr. Canfield:

On December 12, 2020, the Idaho Department of Environmental Quality (DEQ) received a request for a 8401 Water Quality Certification (WQC) from the City of Idaho Falls and the Local Highway Technical Assistance Council for bridge replacement projects in Bonneville County.

DEQ two WQC and began a public comment period on January 20, 2021 through February 10, 2021. DEQ received no comments on either WQC and finalized them.

Enclosed, please find DEQ's final WQCs.

Please do not hesitate to contact me at 208.528.2650 or troy.saffle@deq.idaho.gov with questions or concerns about the WQC process and final permit.

Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "T. Saffle".

Troy Saffle
Regional WQ Manager
Idaho Falls Regional Office

enclosure

c: Shane Skaar, ACOE
Karissa Nelson, LHTAC
Beth Spelsberg, DEQ (EDMS Link Only)



Idaho Department of Environmental Quality Final §401 Water Quality Certification

February 22, 2021

404 Permit Application Number: 2021-00031/E 121st S Bridge Replacement

Applicant/Authorized Agent: Bonneville County/Karissa Nelson LHTAC
Environmental Engineer

Project Location: 43.38841, -112.02398

Receiving Water Body: Idaho Canal

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit, publicly noticed on December 22, 2020, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

Project Description

The proposed project will involve the removal and replacement of a bridge over the Idaho Canal on E 121st S near S 1st E street approximately nine miles south of Idaho Falls, Idaho in Bonneville County. The existing bridge will be removed and replaced with a pre-cast slab bridge that is approximately 41 feet wide to accommodate 12 foot wide lanes of travel and almost 8 foot wide shoulder widths. Impacts to adjacent emergent wetlands are estimated at 287 square feet.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- 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 deemed 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 not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing 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 Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutant of concern for this project is sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment.

Receiving Water Body Level of Protection

This project is located on Idaho Canal within the Blackfoot Subbasin. The Idaho Canal is not included in the assessment unit (AU) database maintained by DEQ, or is it included in the National Hydrography Dataset (NHD). The Idaho Canal is a man-made waterway (irrigation canal), not currently designated in sections 110 through 160 of the WQS. It is dewatered each year after the irrigation season.

In Idaho, man-made waterways that are not designated in IDAPA 58.01.02, sections 110-160, are protected for the uses for which they were developed; in this case, agricultural water supply. The Idaho Canal is undesignated, it is not assessed in the most recent Integrated Report, and is presumed to be dewatered during the proposed project. Therefore, DEQ finds Tier I antidegradation protection (IDAPA 58.02.01.052.07) appropriate for the Idaho Canal.

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 shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. The only pollutant of concern for this project is sediment. DEQ does not expect the project to cause or contribute to any exceedances of the Idaho WQS turbidity standard as a result of this project. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria.

There is no available information indicating the presence of any existing beneficial uses other than agricultural water supply during the irrigation season. The proposed project will occur after the irrigation season, and DEQ finds the proposed BMPs, permit conditions, and conditions in this certification will be adequate to maintain and protect agricultural water supply use after the project is complete. Therefore, the permit ensures that the level of water quality necessary to protect the known use is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. DEQ reserves the right to modify, amend, or revoke this certification 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 WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to

- another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. 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.
 5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
 6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
 7. 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 Section 404 permit.
 8. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit *must* be obtained. More information can be found at <https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10>.

Fill Material

1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
2. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

1. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ's *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties*, available online at <http://www.deq.idaho.gov/media/494058-entire.pdf>. Other resources may also be used for selecting appropriate BMPs.
2. One of the first construction activities shall be placing permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
3. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.

4. Permanent erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.
5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. 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.

Pollutants/Toxics

1. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Vegetation Protection and Restoration

1. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
5. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Dredge Material Management

1. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

Management of Hazardous or Deleterious Materials

1. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
2. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
3. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
4. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
5. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
7. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, 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 in such a manner that it will not reach surface or ground waters of the state.
 - 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).
 - Idaho Falls Regional Office: 208-528-2650 / 800-232-4635
 - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

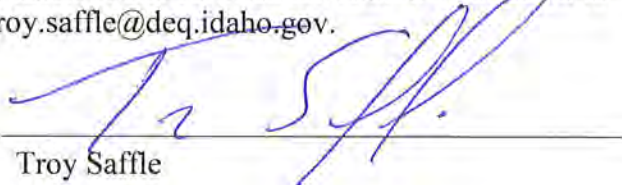
Required Notification

The permittee must notify the Idaho Falls Regional Office, and provide digital photos of the dewatered canal when authorized work begins.

Right to Appeal Final Certification

The final Section 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 Troy Saffle at 208.528.2650 or via email at troy.saffle@deq.idaho.gov.



Troy Saffle

Regional WQ Manager

Idaho Falls Regional Office

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 (8½"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

| FOR AGENCY USE ONLY | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------|--------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------|--------------------|--------------------|
| USACE NWW- | Date Received: | <input type="checkbox"/> Incomplete Application Returned | | | Date Returned: | | | | |
| Idaho Department of Water Resources No. | Date Received: | <input type="checkbox"/> Fee Received DATE: | | | Receipt No.: | | | | |
| 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: Lance Bates, PE | | | | | Name: Brandon Keller, PE | | | | |
| Company: Bonneville County | | | | | Company: Keller Associates, Inc. | | | | |
| Mailing Address: 2700 Manwill Road | | | | | Mailing Address: 131 SW 5th Ave., Suite A | | | | |
| City: Idaho Falls | | | State: ID | Zip Code: 83401 | City: Meridian | | | State: ID | Zip Code: 83642 |
| Phone Number (include area code): (208) 529-1290 | | E-mail: lbates@co.bonneville.id.us | | | Phone Number (include area code): (208) 813-7600 | | E-mail: bkeller@kellerassociates.com | | |
| 3. PROJECT NAME or TITLE: E 121st S, Idaho Canal Bridge, KN 22599 | | | | | 4. PROJECT STREET ADDRESS: E 121st S, Bonneville Co. | | | | |
| 5. PROJECT COUNTY: Bonneville | | 6. PROJECT CITY: NA | | | 7. PROJECT ZIP CODE: NA | | 8. NEAREST WATERWAY/WATERBODY: Idaho Canal | | |
| 9. TAX PARCEL ID#: | | 10. LATITUDE: 43°23'18.28"N LONGITUDE: 112°01'26.39"W | | 11a. 1/4: SE | 11b. 1/4: NE | 11c. SECTION: 30 | 11d. TOWNSHIP: IN | 11e. RANGE: 38E | |
| 12a. ESTIMATED START DATE: November, 2021 | | 12b. ESTIMATED END DATE: April, 2022 | | | 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 type="checkbox"/> NO <input checked="" type="checkbox"/> YES | | | | |
| 14. DIRECTIONS TO PROJECT SITE: Include vicinity map with legible crossroads, street numbers, names, landmarks. Located 5.0 miles east of Shelley, ID (mile post 100.96 to 101.03). Start of project coordinates: N. 627656.7508, E. 694068.7110. End of project coordinates: N. 627654.6185, E. 694507.9792 | | | | | | | | | |
| 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 attached 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 attached 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 attached 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.

Wetlands impacted by the project will be mitigated and it is anticipated that the original functions and values lost will be restored. A total of 287 square feet/0.0066 acres of wetlands will be permanently impacted by the project. Mitigation will not be required by the USACE as impacts are less than 0.1 acres; however, the FHWA, in accordance with 23 CFR 777 – Mitigation of Impacts to Wetlands and Natural Habitat, will require mitigation. The loss of 0.0066 acres of wetlands and associated functions will be compensated through compensatory mitigation at a ratio of 1:1 acres of wetland impact to acres of in-kind wetland creation. The project will be mitigated for by funding a portion of the Rainey Creek stream restoration project located in Swan Valley Idaho in Bonneville County being completed by the U.S. Forest Service (USFS) Caribou-Targhee National Forest.

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

Dirt or Topsoil: _____ cubic yards
 Dredged Material: _____ cubic yards
 Clean Sand: _____ cubic yards
 Clay: _____ cubic yards
 Gravel, Rock, or Stone: 42.7 cubic yards
 Concrete: _____ cubic yards
 Other (describe): _____ : _____ cubic yards
 Other (describe): _____ : _____ cubic yards

TOTAL : _____ 42.7 cubic yards

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

Filling: _____ acres _____ sq ft. _____ 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: 0.0030 acres 132 sq ft. 116 cubic yards
 Draining: _____ acres _____ sq ft. _____ cubic yards
 Other: **ABUTMENTS & RIPRAP** : 0.0036 acres 155 sq ft. 26.3 cubic yards

TOTALS: 0.0066 acres 287 sq ft. 142.3 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:

CE - 12/23/2020

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: 0 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

See attached narrative.

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 |
|--------------------------------------------|------------------------|---------------------------|-----------------------------------------|------------------------------|
| | See attached narrative | | | |
| | | | | |
| | | | | |
| TOTAL STREAM IMPACTS (Linear Feet): | | | | 0 |

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) |
|---------------------------------------------|--------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------|
| Abutments & Erosion Ctrl | Emergent | 0 | Construct abutments and place riprap | 155 |
| Excavation | Emergent | 0 | Excavate area to place Riprap and a portion of roadway | 132 |
| | | | | |
| TOTAL WETLAND IMPACTS (Square Feet): | | | | 287 |

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

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Rockin S Equipment Co. Mailing Address: PO Box 127 City: State: Zip Code: San Ramon CA 94583 Phone Number <i>(include area code)</i> : E-mail: | Name: Nickolas Trospen Mailing Address: 345 E 121 S City: State: Zip Code: Idaho Falls ID 83404 Phone Number <i>(include area code)</i> : E-mail: |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name: Steven and Robyn Longhurst Mailing Address: 11645 S 10TH E City: State: Zip Code: Idaho Falls ID 83404 Phone Number <i>(include area code)</i> : E-mail: | Name: South Slope Holdings LLC Mailing Address: 10966 Secret View Rd City: State: Zip Code: Sandy UT 84092 Phone Number <i>(include area code)</i> : E-mail: |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Name: Merrill Hanny Mailing Address: 535 E 129TH S City: State: Zip Code: Idaho Falls ID 83404 Phone Number <i>(include area code)</i> : E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number <i>(include area code)</i> : E-mail: |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

| | |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Name: Mailing Address: City: State: Zip Code: Phone Number <i>(include area code)</i> : E-mail: | Name: Mailing Address: City: State: Zip Code: Phone Number <i>(include area code)</i> : E-mail: |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

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.

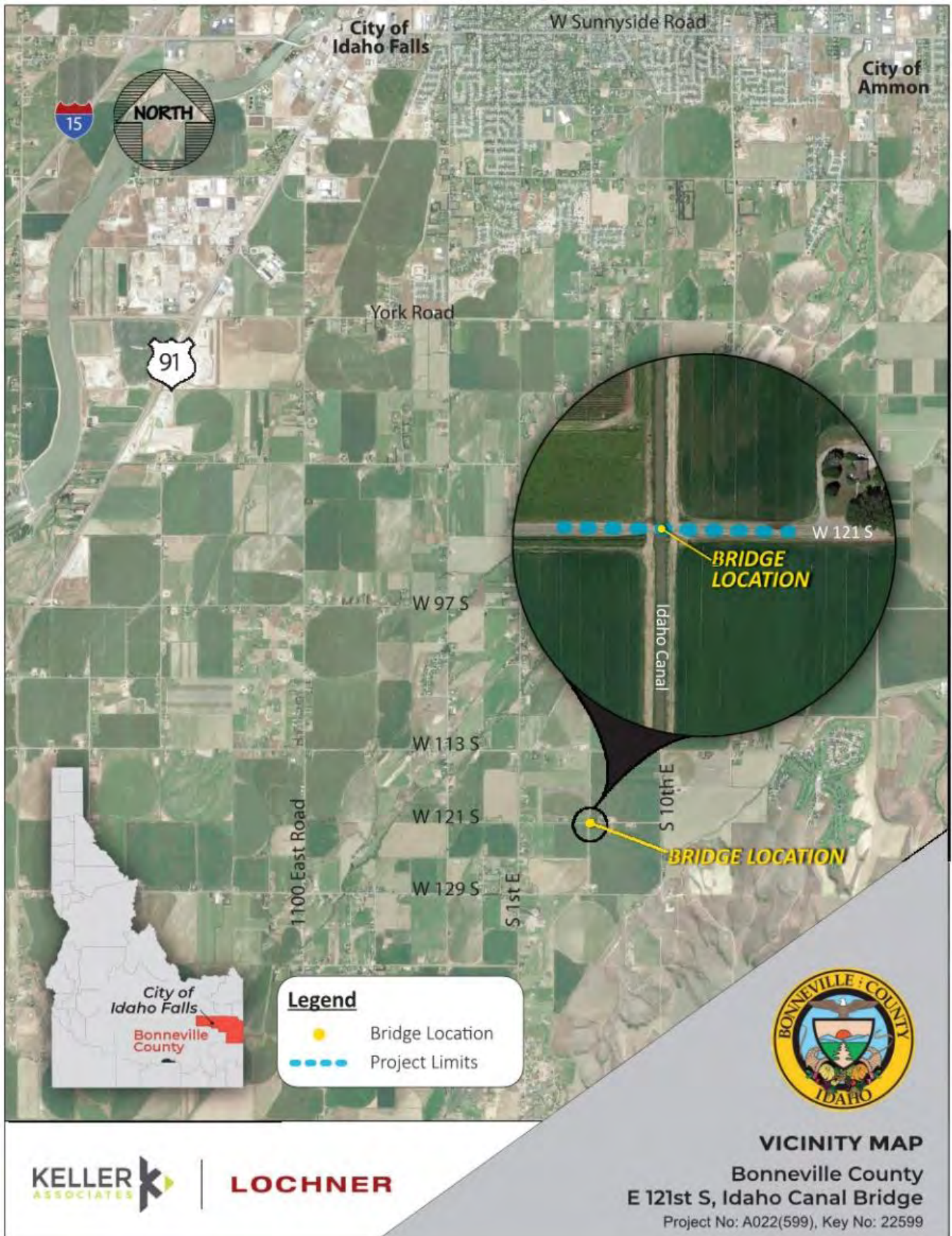
Signature of Applicant: _____ Date: _____

Signature of Agent:  _____ 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".

**E 121st S, Idaho Canal Br, Bonneville Co Project
No: A022(599), Key No: 22599**

**Joint Application for Permits
Additional Information
March, 2021**



BLOCK 15 - PROJECT PURPOSE & NEED

The **purpose** of the project is to remove and replace the existing two lane, single span bridge structure (Bridge Key 31090) over the Idaho Canal. The proposed bridge will have a longer span than the existing structure to better align with the Idaho Canal and minimize potential for future scour. The most recent inspection report states that there is significant spalling and disintegration of the concrete structure, along with scouring that has exposed and deteriorated some of the footings. It is anticipated that the new bridge will be approximately 40 feet long and widened to better facilitate traffic needs, safety and scouring. Minor realignment of the existing approaches is anticipated to meet roadway geometric standards and constructability needs.

The **need** for this project is to address the functionally obsolete, deteriorating bridge structure and extend the span to push the abutments beyond the channel limits to minimize potential for future scouring.

The existing Idaho Canal bridge structure, built in 1953 and reconstructed in 1971, is composed of reinforced solid grouted masonry beams with a reinforced concrete deck over the beams. An asphalt wearing surface covers the deck structure. The existing bridge is approximately 35 feet long and 22 feet wide with an approximate curb-to-curb width of 20 feet. The bridge is roughly perpendicular to the Idaho Canal at its point of intersection (0° skew). The beams are supported by reinforced concrete abutments and footings. The design loading on the inspection report is listed as H-15.

BLOCK 16 - DETAILED DESCRIPTION OF EACH ACTIVITY WITHIN OVERALL PROJECT

Project actions will include replacing the Idaho Canal Bridge (ITD Bridge Key No. 31090) It is anticipated that the new bridge will be approximately 40 feet in length (clear span) and will be a single span structure. Minor realignment of the existing approaches of E 121st S will be required in order to meet current roadway geometric standards and to accommodate the increased bridge size and roadway width.

Temporary shoring will be placed during the construction process. The GRS-IBS abutment system will be installed. The GRS-IBS abutment systems uses CMU or other blocks as a facing and layers of geotextile fabric to resist the earth pressure behind the wall. Layers of block are stacked on top of a a layer of geotextile fabric. Each layer is covered with structural fill and then compacted in lifts. CMU wing walls will be incorporated into this system on each side of the bridge. A surface layer of 1.00' depth riprap will be placed along the side slopes and below the bridge to prevent scour and erosion of the bridge abutments.

Activity 1 – The Contractor will clear and grub vegetation including wetlands for access in association with construction needs, and to place erosion and sediment controls.

Activity 2 – The project is planned for full closure with detours during construction. The Contractor will demolish and remove the existing structure, which includes the existing bridge abutments and concrete wingwalls. All debris will be removed from the creek bed and be disposed of by the Contractor. Excavation for the new bridge abutments and riprap blanket will then take place. Structural fill and geotextile fabric will be placed for the new abutment/footing.

Activity 3 – Geotextile fabric, structural fill, and concrete for the new abutments will be placed and the excavation will be backfilled. Riprap will be placed around the abutments, followed by placement of the voided slab deck. Construction will occur during low-flow season; however, if dewatering is needed, wells will be drilled and the water will be pumped into a temporary lined basin.

Activity 4 – Roadway improvements will commence 200 feet West of the bridge and end 200 feet East of the bridge. Improvements include 1.25' of Granular Subbase, 0.5' of ¾" Aggregate for untreated base, and 0.25' of Hot Mix Asphalt. Roadway widths will vary to match the width of the bridge and taper to match the existing roadway.

Typical Construction Equipment:

- Excavator
- Backhoe
- Loader
- Dump Truck(s)
- Crane
- Skidsteer
- Compaction Plate

There are no Section 10 waterways in the project area.

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

The existing bridge displays cracking; corrosion; spalling; exposed footings; scour; and disintegration. In review of possible alternatives, not replacing the bridge poses a safety hazard to the public.

The new bridge is anticipated to be 41 feet, 4 inches wide to better accommodate two-way traffic. This allows for two 12 foot wide lanes, a 7 foot, 9 inch should/shy distance, a Thrie Beam ridge rail on both sides of the bridge with boxing glove end treatments.

Under the TS&L report, four bridge alternatives were proposed for the type of bridge structure. The bridge design alternatives that were analyzed were a precast concrete voided slab bridge w/ GRS-IBS abutments, a prefabricated modular steel girder bridge w/ GRS-IBS abutments, a precast concrete voided slab bridge w/ CIP abutments and driven piles, and a precast concrete voided slab bridge w/ CIP abutments and spread footing. As part of the TS&L report, precast bridge abutments and footings were also considered, but are not a cost-effective solution. The roadway alignment for each alternative remains similar.

An important consideration in the alternative analysis is the construction schedule. The structure must be constructed during the non-irrigation season (November – March), which gives an available construction window of approximately five months.

The bridge and roadway are designed with a combination of AASHTO, ITD, and County standards.

In addition, BMPs described in section 26b of this application will further minimize impacts from the project on the Idaho Canal.

BLOCK 26B - BEST MANAGEMENT PRACTICES (BMP'S)

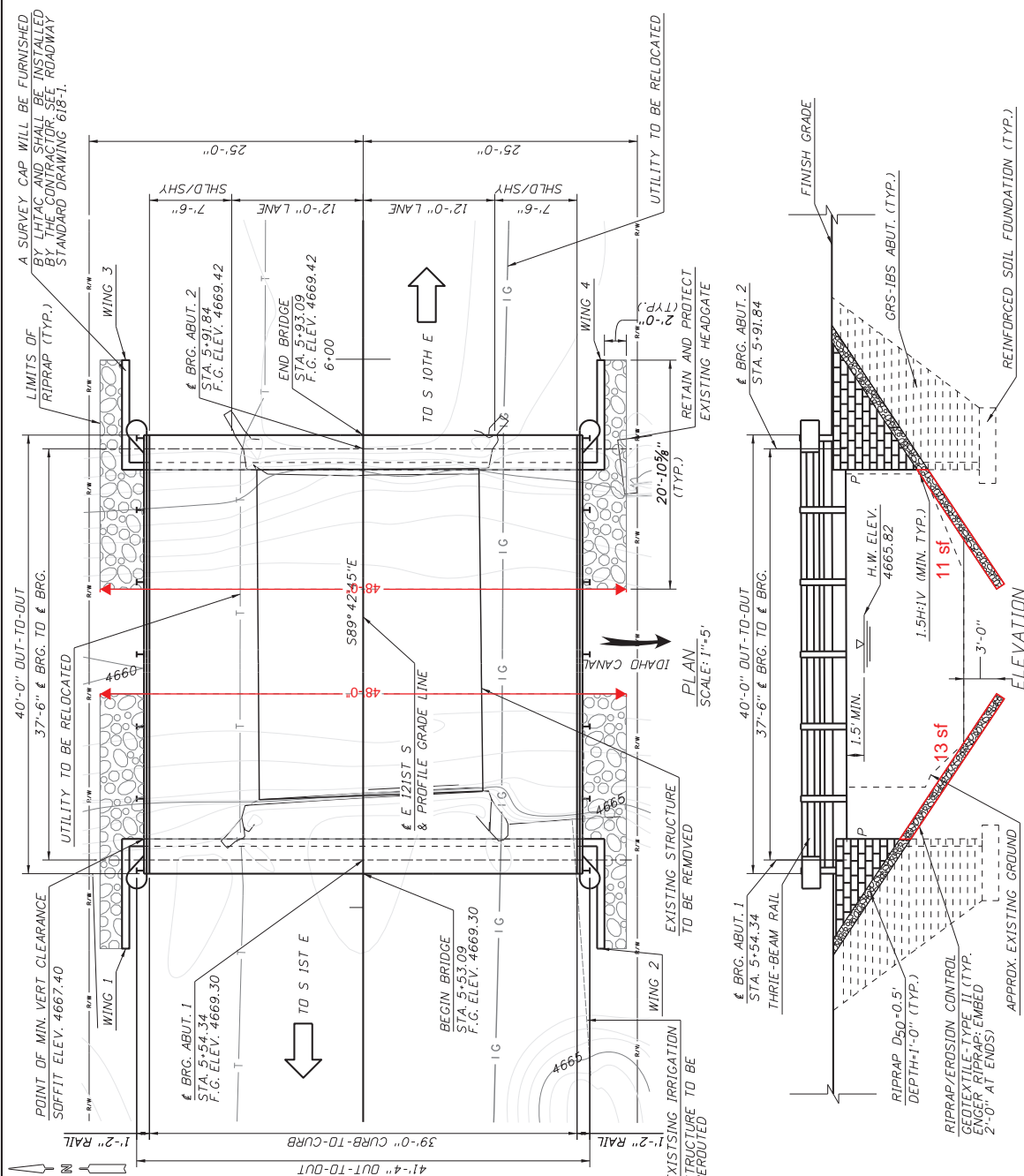
The Idaho Transportation Department's (ITD) BMPs Best Management Practices will be utilized on the project.

The attached plan (See Attached Figures) shows the effect the project will have on the hydraulic characteristics and surface flows of the Idaho Canal. The bridge alignment and construction impact to the Idaho Canal are also shown on the figures. Dust Control, Gravel Bag Barrier, Silt Fence and Fiber Wattles will be used throughout the project to limit the amount of sediments entering the canal. The sediment controlling BMP's will be in-place before construction begins and will be maintained throughout construction of the bridge.

A Pollution Prevention Plan (PPP) will be prepared prior to construction. The PPP will document erosion, sediment and pollution controls (as mentioned above) to be implemented, inspection methods and schedules, as well as maintenance plans. All other wetland areas (such as may occur in or near proposed sources, staging areas, waste sites, etc.) will be retained and protected.

BLOCK 27 – LIST EACH IMPACT TO STREAM, RIVER, LAKE, RESERVOIR, INCLUDING SHORELINE

| Activity | Water Body | Intermittent or Perennial | Description of Impact and Dimensions | Impact Length Linear Feet |
|--------------------------------------------|-------------|---------------------------|--------------------------------------------------------------------------------------------------------|---------------------------|
| New bridge abutments | Idaho Canal | Perennial | CMU blocks, Structural Fill abutments 41'-4" x 2'-6" each | 41'-4" |
| Riprap | Idaho Canal | Perennial | Riprap placed around structural elements, 44' x 13'-3" in front of abutments 2' x 10' around wingwalls | 48' |
| Existing Structure removal | Idaho Canal | Perennial | wingwall/riprap/abutment removal and bank rehabilitation; 48' x 53'-4" | 48' |
| New Wing Walls | Idaho Canal | Perennial | CMU concrete walls, 8" width (4 walls) | 2'-8" |
| Total Stream Impacts (Linear Feet)* | | | | 140' |



Riprap Volume below OHWM
 1152 CF
 42.7 CY

| | |
|--------------------|------------|
| BRIDGE KEY NO. | 31091 |
| COUNTY | BONNEVILLE |
| BRIDGE DRAWING NO. | 17980 |
| KEY NO. | 22599 |
| SHEET | 1 OF 5 |

SITUATION AND LAYOUT
 40' PRESTRESSED VOIDED SLAB BRIDGE
 E 121ST S OVER IDAHO CANAL
 STA. 5+73.09, M.P. 100.985

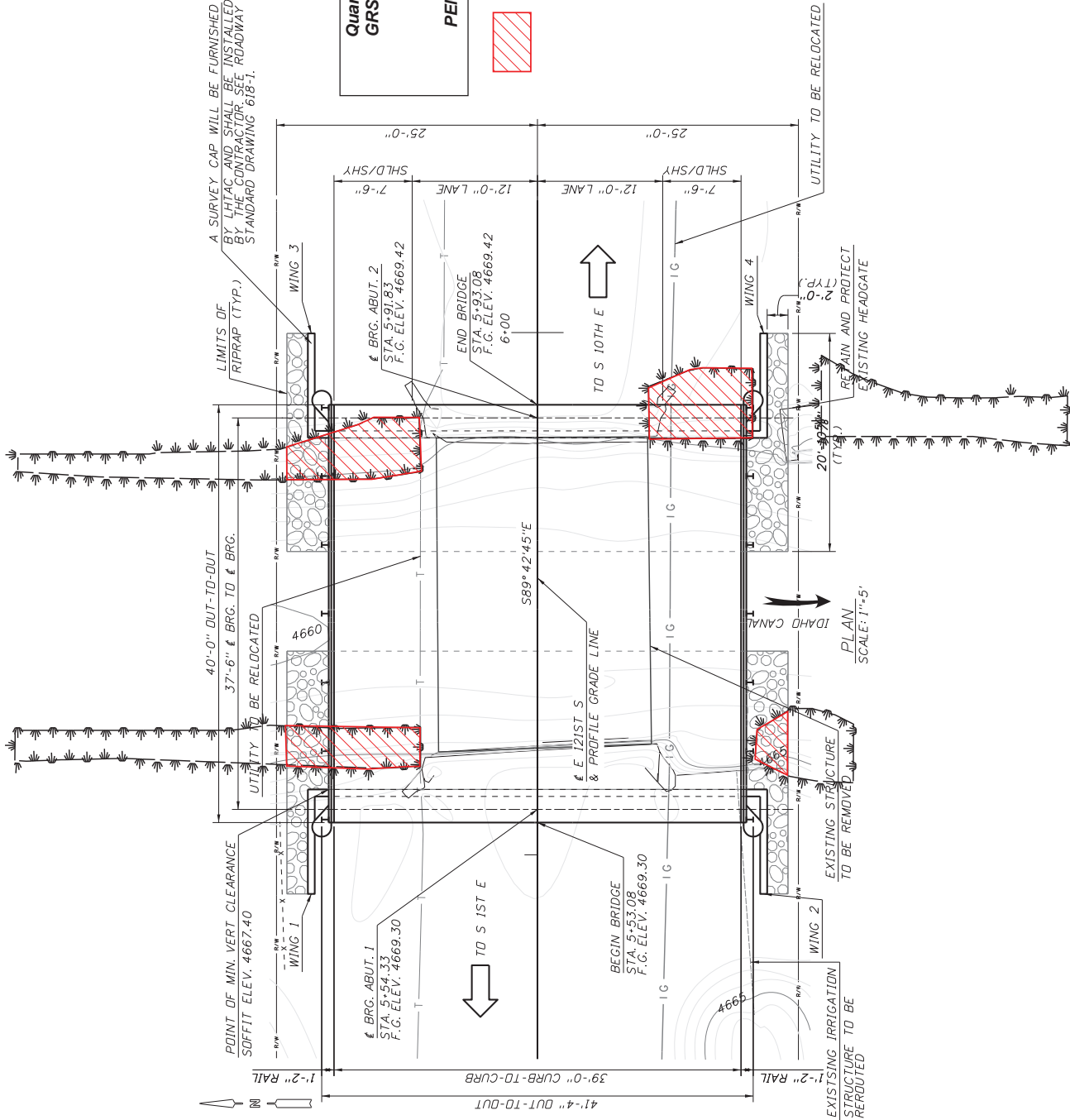
English
 PROJECT NO.
 A0221(599)


IDAHO TRANSPORTATION DEPARTMENT
 KELLER ASSOCIATES

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

| | |
|----------------|-------------------------------|
| DESIGNED | P. Marlin |
| DESIGN CHECKED | D. Van Alia |
| DETAILED | P. Marlin |
| ENG. CHECKED | D. Krüzer |
| CORRECTIONS | |
| SCALES SHOWN | ARE FOR 34" X 22" PRINTS ONLY |
| CADD FILE NO. | 22599-SITC-001.dgn |
| DRAWING DATE: | 12/27/2020 |

Quantities Impacting Wetlands
GRS-IBS Abutments & Riprap:
 155 sf ~ .0036 Acres
Excavation:
 132 sf ~ .0030 Acres
PEM Impacts - 287 SF ~ 0.0066



A SURVEY CAP WILL BE FURNISHED BY UHAC AND SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING 618-1.

LIMITS OF RIPRAP (TYP.)

40'-0" OUT-TO-OUT

POINT OF MIN. VERT. CLEARANCE SOFFIT ELEV. 4667.40

BRG. ABUT. 1
 STA. 5+54.33
 F.G. ELEV. 4669.30

BRG. ABUT. 2
 STA. 5+91.83
 F.G. ELEV. 4669.42

BEGIN BRIDGE
 STA. 5+53.08
 F.G. ELEV. 4669.30

TO S 1ST E

TO S 10TH E

41'-4" OUT-TO-OUT

39'-0" CURB-TO-CURB

S89° 42' 45" E

E 121ST S & PROFILE GRADE LINE

IDAHO CANAL

PLAN SCALE: 1"=5'

EXISTING IRRIGATION STRUCTURE TO BE REMOVED

EXISTING STRUCTURE TO BE REMOVED

REMAIN AND PROTECT EXISTING HEADGATE

UTILITY TO BE RELOCATED

WING 1

WING 2

WING 3

WING 4

1'-2" RAIL

1'-2" RAIL

1'-2" RAIL

1'-2" RAIL

1'-2" RAIL

1'-2" RAIL

1'-2" RAIL



Your Safety • Your Mobility
Your Economic Opportunity

Pollution Prevention Plan Idaho Transportation Department (ITD)

ITD 2788 (Rev. 04-18)
itd.idaho.gov



Instructions

The Pollution Prevention Plan (PPP) is a requirement for ITD projects which do not have coverage under the National Pollutant Discharge Elimination System (NPDES) 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 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 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.

Multiple operators may share the same PPP, but make sure that responsibilities are clearly described, and that all signatory requirements are met.

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 meet the requirements of Sections 107.17 and 212 of the Standard Specifications for Highway Construction and 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 Narrative Site Information

| | | | |
|-----------------------------------------------|----------------------------------------------------------------------|----------------------|-------------------|
| Key Number 22599 | Project Name E 121 st S, Idaho Canal Br, Bonneville Co | | |
| Location/Address 509 E 121 st S | City Idaho Falls | County Bonneville | Zip Code 83404 |
| Beginning Milepost (if applicable) 100.96 | Ending Milepost (if applicable) 101.03 | | |

Operator(s)**Local Highway Technical Assistance Council 5**

| | | | |
|--------------------------------------|-------------------------------------|---------------------------------|-------------------|
| LHTAC Contact Name Karissa Nelson | | Title Environmental Engineer | |
| Office Address 3330 Grace Street | City Boise | County Ada | Zip Code 83642 |
| Telephone Number 208-344-0565 | E-mail Address knelson@lhtac.org | Fax Number 208-344-0789 | |

Local Sponsor Choose an item.

| | | | |
|-----------------------------------------------------|----------------------------------------------|-----------------------------|-------------------|
| Organization Name Bonneville County Public Works | | Contact Name Lance Bates | |
| Organization Address 2700 Manwill Road | City Idaho Falls | State ID | Zip Code 83402 |
| Telephone Number 208-529-1290 | E-mail Address lbates@co.bonneville.id.us | Fax Number 208-529-1295 | |

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 | Fax Number | |

Estimated Project Start Date: (mm/dd/yyyy)**Estimated Project End Date: (mm/dd/yyyy)**

Section 1 - Project/Site Information**Location Information**

| | | | |
|------------------------------------------------------------|----------------------|---------------------------------------------------------------------------|--|
| Project/Site Name E 121 st S, Idaho Canal Br | | Project Street/Location/Milepost/Route MP 100.99 E 121 st S | |
| City Idaho Falls | County Bonneville | ZIP Code 83404 | |

Contact Information/Responsible Parties**Prime Contractor**

| | | | | |
|------------------------------------------------------------------|----------------|------|------------|----------|
| Company/Organization Name | | | | |
| Company/Organization Address | | City | State | Zip Code |
| Telephone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site) | | | | |

Project Manager(s) or Site Supervisor(s)

| | | | | |
|---------------------------------------------------------------------------------------------------|----------------|------------------------------|------------|----------|
| Company/Organization Name | | Manager/Supervisor's Name(s) | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | Fax Number | |
| Area of Control (if there is more than one operator at the site, insert area of control for each) | | | | |

PPP Preparer Information (Contractor)

| | | | | |
|------------------------------|----------------|-----------------|-------|----------|
| Company/Organization Name | | Preparer's Name | | |
| Company/Organization Address | | City | State | Zip Code |
| Cell Phone Number | E-mail Address | | | |

LHTAC Resident Engineer Information

| | | |
|--------------------------------|-------------------------------------|----------------------------|
| Engineer's Name Matt Koster | | |
| Address 3330 Grace Street | City Boise | Zip Code 83703 |
| Cell Phone Number | E-mail Address mkoster@lhtac.org | Fax Number 208 344 0789 |

General Scope of Work or Project Description

Replace the bridge over the Idaho Canal. Approximately 200 ft on both sides of the bridge of E 121st S will be reconstructed to transition to the wider and longer bridge. Canal road approach improvements are anticipated.

Activity Description by Responsible Party

To add more rows, hit Tab in the last cell of the table.

| Name and Contact Information for Subcontractor | Area of Subcontractor Controls/Work Performed |
|------------------------------------------------|-----------------------------------------------|
| | |
| | |
| | |
| | |

Soils, Slopes, Vegetation, Existing Drainage Patterns, Climate

| |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil Type(s) Bock loam |
| Slopes - Describe existing slopes and any changes due to construction activities 0 to 2% |
| Drainage Patterns - Describe existing drainage patterns and note any changes due to construction Well drained soils, natural drainage to the southwest follows natural channels and irrigation canals. |
| Existing Vegetation Pasture grasses |
| Climate/Rainfall Patterns – Select amount that applies Semi-Arid (10"-20" annual rainfall) |

Construction Site Estimates

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

Project site area to be disturbed – 0.75 acres

Off-site waste sites to be disturbed - 0 acres

Off-site borrow/source sites to be disturbed - 0 acres

Staging Area to be disturbed - 0 acres

Total project disturbed area – 0.75 acres

Receiving Waters

| |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Describe receiving surface waters (if applicable) Idaho Canal |
| Describe receiving storm sewer systems (if applicable) and note MS4 areas None |
| List immediate downstream water bodies (water bodies that are connected or would receive a direct discharge from the Project) that have been listed as impaired for sediment or waters subject to TMDLs by the Idaho Department of Environmental Quality (IDEQ) under Section 303(d) of the CWA Sand Creek (not assessed) and Snake River |

Site Features and Sensitive Areas that Require Protection

| |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide a description of any unique features (such as wetlands) that require protection (if applicable) 0.006 acres of wetlands will be impacted and mitigated in kind advance wetland creation. |
| If applicable, describe measures to protect these unique features Disturbance will be limited to the immediate riparian areas of the canal bridge reconstruction. |

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
- Any industrial stormwater discharges other than from project construction
- 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

Use the table below to identify all potential pollutants and sources, other than sediment, to stormwater runoff

| Trade Name Material | Stormwater Pollutants | Location or N/A |
|---------------------------|---------------------------------|-----------------|
| Fuels and/or Lubricants | Petroleum Distillates | Bridge site |
| Hydraulic Oils | Mineral Oil | Bridge site |
| Asphalts | Petroleum Distillates | Bridge site |
| Concrete/Curing Compounds | pH | Bridge site |
| Anti-freeze | Glycol, Heavy Metals | Bridge site |
| Paints | Organic Chemicals, VOCs | N/A |
| Fertilizers | Nutrients-Nitrogen, Phosphorous | N/A |
| Sanitary Toilets | Bacteria, Viruses, Parasites | Bridge site |
| | | |

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

| BMPs | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------------|------------------------------------|-------------------------------------|----------------------------------------------------------|
| Preservation of Existing / Natural Vegetation | - SD SPECS (201 and 202) - EC-2 | <input checked="" type="checkbox"/> | Date October 2022 Location (Stations or MP) MP 100.99 |

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. Existing vegetated buffers (including preserving mature vegetation and trees) shall be utilized to minimize stormwater erosion potential and down slope movement to any watershed, water feature (including irrigation amenities or domestic water sources), or area susceptible to stormwater or surface water movement. The vegetated buffers shall consist of areas of undisturbed vegetation including grasses, shrubs, woody plants, and trees that are located between the traversed roadway section and the existing swales, ditches, canals, wetlands, and intermittent/perennial streams or rivers that are located within ITD right-of-way. The vegetated buffers shall be left undisturbed throughout the project life and act as permanent erosion and sediment control BMPs to ensure short and long-term slope stability.

Phase Construction Activity

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|------------------------------------------|--------------------------|-----------------------------------|
| Scheduling and Sequencing of Construction Activities | - SD SPECS (108, 205, and 212) - EC-1 | <input type="checkbox"/> | Date Location (Stations or MP) |

The specific scheduling and sequencing of construction activities are required to be outlined by the Contractor and become a permanent part of the PPP. Records must be maintained as part of the PPP and shall include dates and durations when major activities occur (i.e. soil disturbing activities); dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures have been initiated and are obtained. Scheduling and sequencing of construction activities including the CMP Schedule shall be documented in this PPP by the Contractor. Describe major phases of construction in the spaces provided here:

Phase I

-
-

Phase II

-
-

Repeat as needed for additional Phases

Control Stormwater Flowing Onto and Through the Project

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Coffer and Tarp Dams / Water Filled Bladders/ Aprons | - SD SPECS (210 and 501) - EC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains | - SD SPECS (212 and 706) - SD Drawings (P-1-A) - EC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes / Berms | - SD SPECS (205, 209, and 212) - SD Drawings P-1-F and P-1-E - SC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Clear Water Diversion | - SD SPECS (N/A) - NS-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Stabilize Soils and Protect Slopes

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------------|------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Hydraulically Applied Erosion Control Products | - SD SPECS (212, 621, and 711) - EC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Hydroseeding | - SD SPECS (621 and 711) - EC-7 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.99 Quantity of BMP 0.15 Acres |
| Soil Binders | - SD SPECS (212) - EC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Straw Mulch | - SD SPECS (212, 621, and 711) - EC-9 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.99 Quantity of BMP 0.15 Acres |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------|
| | | | Quantity of BMP |
| Wood Mulch | - SD SPECS (212, 621, and 711) - EC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geotextiles, Plastic Covers, and Erosion Control Blanket | - SD SPECS (212, 621, and 711) - EC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (212 and 621) - EC-12 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP) MP 100.96 – 101.03 Quantity of BMP 0.15 Acres |
| Dust Control | - SD SPECS (104, 106, 107, 205, 212, 621, and 711) - EC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wind Erosion Control | - SD SPECS (205 and 212) - EC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Protect Storm Drain Inlets

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------|-----------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Inlet/Outlet Protection | - SD SPECS (212, 640, 711, and 718) - SC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Perimeter Controls and Sediment Barriers

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------|------------------------------------|--------------------------|------------------------------------------------------------------------|
| Gravel Bag Barrier | - SD SPECS (212) - SC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sandbag Barrier | - SD SPECS (212) - SC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Silt Fence | - SD SPECS (212 and 718) - SC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------|----------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Sediment Retention Fiber Rolls | - SD SPECS (N/A) - SC-8 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 Quantity of BMP 790 feet |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Retain Sediment On-Site

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Sediment-Desilting Basin | - SD SPECS (212) - SD Drawings (P-1-C, P-1-D, P-4-A) - SC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Establish Stabilized Construction Exits and Temporary Haul Roads

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|--------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Street Sweeping and Vacuuming | - SD SPECS (N/A) - SC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Construction Entrances | - SD SPECS (104, 205, and 212) - SD Drawings (P-1-F) - SC-11 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 Quantity of BMP 2 |
| Temporary Roads | - SD SPECS (104, 107, 205, and 212) - SC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Entrance Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) -SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Temporary Stream Crossing | - SD SPECS (602) - NS-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Insert any required additional text or tables here

Section 3 - Good Housekeeping BMPs

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 Resident Engineer 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.

The following are material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. For the purposes of this plan and for any ITD projects, **Hazardous Material** is defined as “any material that poses harmful risks to human health and/or the environment. Includes any hazardous or toxic substance, waste, pollutant, or chemical regulated under the CAA, CWA, TSCA, and/or RCRA; a pollutant or contaminant as any substance likely to cause death, disease, abnormalities, etc. (CERCLA Sec. 101(33)); or those listed in 40 CFR 302. For ITD purposes, petroleum, lead paint, asbestos, and other substances will be considered hazardous materials, as identified in the scope of work”.

- An effort will be made to store only enough product required to complete the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible under a roof or other enclosure that minimizes contact with stormwater
- Products will be kept in their original containers with the original manufacturer’s label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturer’s recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials
- Tanks containing fuel will have secondary containment installed to contain any spilled material

Material Handling and Waste Management in Staging Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------|
| Staging and Materials Site Management | - SD SPECS (107) - SD Drawings (P-1-D, P-3-E, and P-5-A) - WM-1 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Solid Waste Management | - SD SPECS (N/A) - WM-6 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Concrete Curing | - SD SPECS (N/A) - NS-12 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Material and Equipment Use Over Water | - SD SPECS (N/A) - NS-13 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Concrete Finishing | - SD SPECS (N/A) - NS-14 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Structure Demolition-Removal Over or Adjacent to Water | - SD SPECS (N/A) - NS-15 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Material Delivery and Storage | - SD SPECS (N/A) - WM-2 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Material Use | - SD SPECS (N/A) - WM-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Stockpile Management | - SD SPECS (N/A) - WM-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Solid and source site materials, excess materials, hazardous materials, vehicle equipment and maintenance, sanitary waste management, and waste in general shall be managed at designated staging and waste areas. Staging and waste areas should be located a minimum of 150-ft away from any water feature (including irrigation amenities or domestic water sources) or areas susceptible to stormwater or surface water movement.

Solid and source site materials, include but are not limited to, dedicated asphalt or concrete plants (where the manufacturing of asphalt or concrete will occur on-site), gravel pits, stockpiles, source sites, general construction materials, and excess materials. The Contractor shall use an approved licensed solid waste management company. The Contractor shall reuse and recycle trash, source materials, construction materials, and construction debris unless it is not usable. If it is not usable or cannot be recycled it will be considered solid waste. All solid waste materials, with the exception of source materials, will be collected and disposed of in a securely lidded dumpster and shall be covered and secured at night and during all precipitation events. Any leaky solid waste dumpster must be exchanged or replaced within 24-hours of confirmation. Collection and proper disposal of all leaking materials shall be the responsibility of the Contractor.

The Contractor shall arrange an adequate solid waste disposal schedule to ensure that there is adequate solid waste disposal capacity on-site at all times and that dumpsters do not overflow and are emptied on a regular basis. All solid waste materials shall be removed from the project site throughout the duration and after the project is completed. Solid waste materials shall not be buried, burned, or discharged from the site.

Designate Washout Areas

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|---------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Liquid Waste Management | - SD SPECS (N/A) - WM-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Concrete Waste Management | - SD SPECS (N/A) - SD Drawings (P-5-B) - WM-9 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 Quantity of BMP 1 |
| Entrance/Outlet Tire Wash | - SD SPECS (621) - SD Drawings (P-3-E) - SC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Concrete waste procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or to watercourses. A wash station may also be required to prevent transporting noxious weeds and contaminated soils from a contaminated site to an uncontaminated site or road surface.

Covering or containing hazardous materials or washing contaminated equipment may be required. All vehicle and equipment cleaning and maintenance shall occur in a designated staging site/area and include a water pollution control

equipment wash down area that shall have secondary containment and protection through the use of berms or other erosion and sediment controls or BMPs to reduce or eliminate discharges of pollutants.

The Contractor shall avoid mixing excess amounts of fresh concrete or cement mortar on-site. Storage of dry and wet materials associated with concrete should be located a minimum of 150-ft upslope of any water feature (including irrigation amenities or domestic water sources) or area susceptible to stormwater or surface water movement. The Contractor shall **Never** dispose of concrete, grout, or cement mortar washout into a watershed, water feature, or area susceptible to stormwater or surface water movement. Wash out concrete transit mixers only in designated washout areas. The Contractor shall design a temporary concrete washout station (s) as per ITD Standard Drawing P-5-B. All hardened concrete, grout, or cement mortar waste, including waste generated during equipment cleaning and QA/QC testing, shall be collected and transported to an approved licensed solid waste disposal/processing or recycling site by the Contractor.

Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------|-----------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Vehicle and Equipment Fueling | - SD SPECS (N/A) - SD Drawings (P-5-E) - NS-9 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 Quantity of BMP 1 |
| Vehicle and Equipment Maintenance | - SD SPECS (N/A) - NS-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pile Driving Operations | - SD SPECS (N/A) - NS-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

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 Resident Engineer.

| Fueling and/or Maintenance Activity | Practices to be Implemented to Control Spills and/or Exposure to Stormwater |
|-------------------------------------|-----------------------------------------------------------------------------|
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Add additional rows as needed by hitting Tab in the last cell of the table

Sanitary Waste BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|----------------------------------|-----------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------|
| Sanitary-Septic Waste Management | - SD SPECS (N/A) - WM-10 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.99 Quantity of BMP 1 |

Sanitary and Septic Waste procedures and practices are used to minimize or eliminate the discharge of construction site sanitary/septic waste materials to the storm drain system or to watercourses. Sanitary/septic waste management practices are implemented on all construction sites that use temporary or portable sanitary/septic waste systems. Temporary portable toilets from an approved licensed sanitary waste company shall be used during the duration of the project and maintained and cleaned as needed. Portable toilets shall be located at designated staging areas and have secondary containment in case of a leak, spill, or discharge. All sanitary waste will be collected from the portable units a minimum once per week. Placement and removal of all portable toilets shall be the responsibility of the Contractor.

Contaminated Soil BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------|----------------------------|--------------------------|-----------------------------------------------------|
| Contaminated Soil Management | - SD SPECS (N/A) - WM-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Prior to construction or soil disturbance, ITD shall inspect the site for physical contamination. During the construction phase, if the Contractor detects evidence of contamination, or encounters leaks, spills, or discharges are detected, contaminated soils and water should be contained and held for testing whenever contamination is suspected. Any specific contaminant known to exist or that is discovered on site and which has contaminated soil or has the potential to contaminant soil and/or drainages or water features (including irrigation amenities or domestic water sources) shall be reported to the Resident Engineer immediately. The Resident Engineer will coordinate clean-up of contaminated soils with the Idaho Communications Center (Statecom) at 1-800-632-8000.

Allowable Non-Stormwater Discharge Management and Equipment/Vehicle Washing

Non-stormwater (dust control water, water used in road grading, irrigation drainage, springs or ground water dewatering, etc) may combine with stormwater and be present in the discharge at this site. All water shall be treated in the same manner as stormwater runoff. The same BMPs used in this PPP for stormwater runoff shall be implemented to reduce non-stormwater impacts and limit non-stormwater discharges. The use of soap, solvents, and degreasers is specifically prohibited for cleaning use. Uncontaminated water discharge from dust control, dust abatement activities, and water used in road grading or excavation activities and compaction shall not reach waters of the United States.

The following incidental non-stormwater from the sources marked below may combine with stormwater and be present in the discharge at this site.

- Hydrant or Water Line Flushing
- Vehicle Wash-Down Water
- Dust Control Water
- Irrigation Drainage (including landscape)
- Spring or Groundwater

- Air Conditioner Condensate
- Uncontaminated Foundation or Footing Drains
- Pavement or Building Wash Water
- Uncontaminated Excavation Dewatering (without detergents)
- Potable Water
- No Known Non-Stormwater Sources Apparent

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 |
|-------------------------------------|-----------------------------------------------------------------|
| | |
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| | |
| | |

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

Non-Stormwater BMPs

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------|------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------|
| Water Conservation Practices | - SD SPECS (106 and 205) - NS-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Dewatering Operations | - SD SPECS (N/A) - NS-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Paving and Grinding Operations | - SD SPECS (203) - NS-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Potable Water-Irrigation Management | - SD SPECS (N/A) - NS-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Vehicle and Equipment Cleaning | - SD SPECS (N/A) - SD Drawings () - NS-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Freeze Reduction | - SD SPECS (N/A) - NS-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Snow Management | - SD SPECS (N/A) - EC-15 | <input checked="" type="checkbox"/> | Date to be Implemented January 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Snow Accumulation Management | - SD SPECS (N/A) - EC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Spill Prevention and Control BMPs

All ITD projects shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and ITD Incident Management Plan. In addition, a project Spill Plan shall be provided by the Contractor, and should be

included in **Appendix B**. The ITD BMPs listed below also contain guidance on waste management, spill prevention and control, and cleanup.

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|--------------------------------------------------------------|----------------------------|-------------------------------------|-------------------------------------------------------------------------------------|
| Spill Prevention and Control | - SD SPECS (N/A) - WM-5 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP) MP 100.96 – 101.03 |
| Hazardous Waste Management | - SD SPECS (N/A) - WM-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| Illicit Connection-Illegal Discharge Detection and Reporting | - SD SPECS (N/A) - NS-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) |

Per 40 CFR 112, if petroleum products stored at the construction site aggregate 1,320 gallons or more, a Spill Prevention, Control, and Countermeasure Plan (SPCC) plan will be required.

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 per ITD PPP requirements. 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 | Implementation Schedule |
|-----------------------------------------|-----------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|
| Channel Protection - Check Dams | - SD SPECS (212) - SD Drawings (P-2-B) - PC-1 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sheet Flow to Buffers | - SD SPECS (N/A) - PC-2 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Flexible Liners | - SD SPECS (212 and 624) - SD Drawings (P-2-A and P-2-C) - PC-3 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Channel Protection-Rigid Channel Liners | - SD SPECS (209 and 623) - SD Drawings (P-2-D) - PC-4 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dikes and Berms | - SD SPECS (205, 209, and 212) - SD Drawings (P-1-E and P-1-F) - PC-5 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Dry Swale | - SD SPECS (N/A) - PC-6 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------|
| Wet Swale | - SD SPECS (N/A) - PC-7 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Geosynthetics | - SD SPECS (640 and 718) - PC-8 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Surface Sand Filter | - SD SPECS (N/A) - PC-9 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Subsurface Sand Filter | - SD SPECS (N/A) - PC-10 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Perimeter Sand Filter | - SD SPECS (N/A) - PC-11 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Organic Filter | - SD SPECS (N/A) - PC-12 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Sand Filter | - SD SPECS (N/A) - PC-13 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Bioretention | - SD SPECS (N/A) - PC-14 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| 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"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Interceptor Ditches | - SD SPECS (208 and 209) - PC-16 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Retaining Walls | - SD SPECS (210 and 512) - PC-17 | <input checked="" type="checkbox"/> | Date to be Implemented October 2022 Location (Stations or MP)MP 100.96 – 101.03 |
| Stormwater Basins | - SD SPECS (205 and 212) - SD Drawings (P-1-C and P-4-A) - PC-18 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Basin with Micropool | - SD SPECS (N/A) - PC-19 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Wet Basin | - SD SPECS (N/A) - PC-20 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------|
| Wet Extended Detention Basin | - SD SPECS (N/A) - PC-21 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Shallow Wetland | - SD SPECS (N/A) - PC-22 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Extended Detention Shallow Wetland | - SD SPECS (N/A) - PC-23 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pond Wetland System | - SD SPECS (N/A) - PC-24 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Pocket Wetland | - SD SPECS (N/A) - PC-25 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Sediment Control Box | - SD SPECS (605 and 609) - SD Drawings (E-6-A-F, P-1-H, P-3-A, P-3-B, and P-3-D) - PC-26 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Trench | - SD SPECS (N/A) - PC-27 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Infiltration Basin | - SD SPECS (N/A) - PC-28 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Slope Drains - Chutes - Flumes | - SD SPECS (208, 212, 409, 606, 607, and 609) - SD Drawings (D-1-A, D-1-B, and P-2-D) - PC-29 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Rock Armor / Mulch – Turf Reinforced Mat | - SD SPECS (N/A) - PC-30 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Serrations / Roughening | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-31 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Terraces / Benching | - SD SPECS (205) - ITD Design Manual Sec. 5.6 - PC-32 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Topsoil Management | - SD SPECS (213 and 711.09) - PC-33 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Vegetation-Seeding | - SD SPECS (621, 711.05, 711.12, 711.06) - PC-34 | <input checked="" type="checkbox"/> | Date to be Implemented Location (Stations or MP)MP 100.96 – 101.03 Quantity of BMP 0.15 Acres |

| BMP | Specification(s) | Check if Used | Implementation Schedule |
|-------------------------------------------------|----------------------------------------|--------------------------|------------------------------------------------------------------------|
| Vegetation-Planting | - SD SPECS (620 and 711.06) - PC-35 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Water Quality Inlet / Oil Grit Separator | - SD SPECS (N/A) - PC-36 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Street Sweeping | - SD SPECS (N/A) - PC-37 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Deep Sump Catch Basin | - SD SPECS (N/A) - PC-38 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| On-line Storage in Storm Drain Network (Vaults) | - SD SPECS (N/A) - PC-39 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Porous Pavements | - SD SPECS (N/A) - PC-40 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| Proprietary Manufactured Systems | - SD SPECS (N/A) - PC-41 | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |
| | | <input type="checkbox"/> | Date to be Implemented Location (Stations or MP) Quantity of BMP |

Section 5 - Inspection and Maintenance Requirements

Inspections

- Contractor shall inspect and maintain all structural and non-structural control measures for functionality as required by the contract
- Conduct inspections using the inspection and corrective action log form in the Appendix
- Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**

All BMP deficiencies identified during the inspection, or any inadequacies related to the PPP, must be corrected as soon as possible but never later than 7 days after the inspection.

Maintaining an Updated PPP Plan

Changes to the PPP must be documented and may include any one of the following:

- Construction methods
- Operation methods
- Design of the project (including civil plan sheets)

In the field change orders
Maintenance or inspection procedures
Staging sites
Material source sites/stockpile sites
Disposal/excess material/waste sites
Haul roads, temporary roads, and locations where vehicles travel and enter or exit staging areas and construction sites
Implementation and maintenance of BMPs
Stormwater discharge locations
Sequencing/scheduling changes
Impacts to wetlands or sensitive areas
Changes in personnel

All of these can result in the need for additional BMPs, and therefore a PPP update.

The sole objective of all modifications is to keep the PPP concurrent to existing on-the-ground conditions and to eliminate erosion and sediment impacts, as well as other pollutant impacts that could potentially result from the project. All modifications to the PPP shall be documented in **Appendix C** through the completion of inspections reports that shall serve as the corrective action log on this project.

Section 6 - Recordkeeping

Low Erosivity Waiver

If this PPP is being prepared in lieu of a Stormwater Pollution Prevention Plan based on the applicability of obtaining a Low Erosivity Waiver for the project, a copy of ITD, the Contractor, and any applicable local entity filing for a Low Erosivity Waiver (LEW) should be included in **Appendix D**. Guidance on the applicability of the LEW on your project can be found at the following website: <http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm>

Attention should be given to the expirations date on the LEW.

Inspections

Completed, certified, and executed Inspection Forms serve as a Corrective Action Log for ITD projects. These forms should be retained along with this PPP in **Appendix C**.

Section 7 - Certification and Notification

| | | | |
|-------------------------------------------------------|---------------------------------------|-----------|---------------|
| LHTAC Representative's Printed Name Karissa Nelson | Title LHTAC Environmental Engineer | 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 – Basic Spill Prevention and Control Plan Language

In addition to all the erosion and sediment control BMPs, non-stormwater BMPs, and good housekeeping BMPs discussed in the this PPP plan, the minimum following information will be provided by the Contractor for Spill Prevention and Cleanup:

- 1) Contact information for Contractor's designated Spill Coordinator for the project. This person must have authority to mobilize equipment, personnel, and materials in the event of a spill or discharge.
- 2) Documentation of training and/or education on spill response and cleanup.
- 3) Description of the location and content of spill kits on the project site.

Appendix C – Executed Inspection Reports/Corrective Action Log

Appendix D – Low Erosivity Waivers (if applicable)

Appendix E – 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 | |

ON PAGE 16 AND 17, SUBSECTION 101.03 – ABBREVIATIONS AND ACRONYMS

PWL Percent Within Limits

QCP Quality Control Plan

ON PAGE 16 AND 17, SUBSECTION 101.04 – DEFINITIONS

HMA Paving Quality Control Plan. A quality control plan specific to hot mix asphalt paving.

Project Records. Records or data of any type on any media including those produced by the Contractor or its consultants, subcontractors, suppliers, or manufacturers that are related to the contract. Project records include, but are not limited to, plans, working drawings, specifications, manufacturer's recommendations, catalog cuts, daily time reports, testing records, testing observations, measurements, records of force account work, schedules and scheduled updates or revisions, quality control plans and related documentation, inspection reports, traffic control plans and log, safety program and incident reports, soil erosion and water pollution control plans and logs, employment records, payrolls, internal accounting records, equal opportunity and affirmative action records, on-the-job and disadvantaged business enterprise reports, preconstruction conference records, progress meeting records, partnering records, correspondence, e-mails, and any other documents related to the work.

Quality Assurance. All planned and systematic operations to ensure that the operation, material, and/or end product meets specifications. Quality assurance includes:

1. Approval and oversight of the Contractor's quality control plan.
2. Review of inspector, sampler, tester, and laboratory qualifications.
3. Inspection for conformity with contract requirements.
4. Contractor quality control.
5. Acceptance.
6. Independent assurance.
7. Challenge resolution.

Quality Control Plan. The documentation, approved by the Department, of the program used by the Contractor which specifies the actions, inspection, sampling, and testing necessary to keep production and placement operations within specifications, including provisions to quickly determine when an operation becomes out of control and those actions that the Contractor will take to restore compliance.

ON PAGE 38, SUBSECTION 105.03 – CONFORMITY WITH PLANS AND SPECIFICATIONS

Add after the first sentence:

For the quality characteristics of the items included in 2020 QASP SA Table 106.03-1, and subject to quality level analysis, acceptance will be based on the requirements of the 2020 Quality Assurance Special Provision for State Acceptance (2020 QASP SA).

ON PAGE 60, SUBSECTION 106.03 – SAMPLES, TESTS, AND CITED SPECIFICATIONS

Delete this subsection and replace with the following:

106.03 Samples, Tests, and Cited Specifications.

The Engineer will accept material, based on inspection and test results, before the Contractor incorporates material into the work. The Contractor may, with approval, incorporate material the Engineer cannot routinely sample before delivery, at the Contractor's risk. The Department will pay the Contractor for material incorporated into the work if the material meets the sampling, testing, and certification requirements.

Ensure the sampling and testing required by the contract, including references to WAQTC, ASTM, AASHTO, and Idaho standard test methods are from the current edition at time of bid opening, except as modified by the contract.

For testing performed on the Contractor's behalf for plant mix designs, alkali-silica reactivity expansion, and claim or dispute resolution, a professional engineer, licensed in the state where the testing will be performed, will supervise testing reporting.

Ensure a safe means of sampling and testing. If safe means of sampling and testing is not provided, work will be halted, at no additional cost to the Department. No material will be accepted after unsafe conditions have been identified and the Contractor has been notified of the unsafe conditions, until corrective action has been taken and the resumption of work is approved by the Engineer.

Ensure the individuals sampling and testing material and the testing facilities are qualified for the tests performed.

Provide crushing, screening, and mixing plants with approved sampling equipment capable of operating from the ground or a platform. Ensure the sampling equipment is capable of the following:

1. Moving at a constant rate across the width of the material falling from the discharge belt or chute.
2. Taking a representative sample of the material.
3. Conveying (e.g., slide, chute) the sample to the ground level where the sample can be safely and conveniently collected.

The Contractor is responsible for the quality of construction and materials incorporated into the work. The Contractor will perform all necessary quality control inspection, sampling, and testing and the Department is responsible for acceptance testing and independent assurance (IA) testing. Sampling and testing costs are included in the respective contract pay items. The Contractor is allowed to take the acceptance or IA samples as long as the sample collection is witnessed by the Department. The Contractor may employ an independent laboratory. The laboratory must follow the Contractor's approved quality control plan. Make all project records, including test results and all original source documentation for specified contract quality requirements available for review and allow Department representatives immediate access to the testing facilities during delivery and production hours.

The Contractor may observe the Department's sampling and testing activities. If the Contractor observes a deviation from the specified sampling or testing procedures, then the Contractor must describe the deviation to the Department immediately and document the deviation in writing within 24 hours to preserve their ability to challenge the sample.

A. Material Subject to Statistical-Based Acceptance.

When specified in the contract, the Department will use the quality level analysis as specified in 106.03.B to determine quality-based pay adjustments.

The Contractor and the Department will work cooperatively within their respective quality assurance (QA) responsibilities to produce and document a high quality project, meeting or exceeding the quality requirements of the contract.

1. The Department's Quality Assurance Responsibilities.

The Department is responsible for determining the acceptability of the work, approving and monitoring of the Contractor's quality control plan (QCP). The Department will perform acceptance sampling, testing, and inspection for any element of the work to ensure Contractor compliance with the QCP and contract requirements. The Department may also perform IA and verification sampling and testing at any time.

Acceptance sampling and testing is the Department's responsibility, unless alternate procedures are specified. The Department is responsible for performing acceptance testing and for evaluating the quality characteristics as specified in the 2020 QASP SA Table 106.03-1.

The Department will obtain all samples by utilizing stratified random sampling in accordance with Idaho IR 148.

Rounding will not be permitted at any level of calculating acceptance test results. The final reported value will be rounded to the nearest significant figure as specified in the 2020 QASP SA Table 106.03-1. ASTM E 29 does not apply.

The Department will provide official acceptance test results within 24 hours of receipt of the final sample for the lot. The Department will not provide official acceptance test results before the completion of the lot. Acceptance results and all original source documents/datasheets used during material acceptance testing will be made available for review upon request.

Unofficial results before final review can be shared with the Contractor, if available. These results must not be used for process quality control.

The Department will complete acceptance sampling, splitting, and testing as specified in the 2020 QASP SA Table 106.03-1 using independent, stratified random samples. Approximately ½ of the sample will be used for acceptance testing and the other ½ retained for challenge testing. The challenge samples must be secured with Department provided serialized security tape. All chain of custody information must be documented on Department provided forms and samples must be stored in a location only accessible by Department representatives.

a. Lot Description.

A lot is a specific quantity of material from a single source which is produced or placed by the same controlled process. Acceptance tests will be grouped into lots by the Engineer. Lot size will be determined by the Engineer using the following criteria:

- i. The minimum lot size is 3 tests for each quality characteristic. The minimum testing frequency is specified in the 2020 QASP SA Table 106.03-1.
- ii. A lot is based on a work shift's production when the minimum lot size is achieved.
 1. If the work shift is represented by less than 3 tests for any quality

characteristic, the work shift will be combined with the following work shift to form a lot.

2. If the final work shift is represented by less than 3 tests for any quality characteristic, the final work shift will be combined with the previous work shift to form a lot. A Superpave HMA acceptance test strip is considered a lot.

2. The Contractor's Quality Control Responsibilities.

The Contractor is responsible for quality control for all work. The Contractor will not rely on the Department's acceptance testing results for their process quality control.

- a. Quality Control Plan (QCP). The Contractor will develop, submit, and implement a QCP that meets the requirements of Idaho IR 158, as approved by the Department, for each of the materials included in 2020 QASP SA Table 106.03-1. A QCP for each of the materials, will be submitted to the Department at or before the preconstruction conference. The Department will provide the Contractor with approval or rejection of each QCP within 5 business days after receiving the QCP. Rejection of the QCP will require an additional 5 business days for re-evaluation. The QCP must be approved before that material is incorporated into the work/project. The QCP, as approved by the Department in accordance with Idaho IR 159, is binding upon the Contractor as a contract requirement.
 - i. QCP Amendments. Amend the QCP as necessary to conform to the current operations and submit the amended QCP for the Engineer's approval in accordance with IR 158. The Engineer will review and provide approval or rejection of the QCP amendment in accordance with Idaho IR 159 before the amendment is implemented.

At a minimum, the QCP will consist of plans, procedures, responsibilities, authority, and an organizational structure that demonstrates that an effective level of quality control will exist resulting in the end product complying with the contract requirements. The Contractor will provide all necessary quality control inspection, sampling, and testing to implement the QCP. The QCP will include an organizational structure and reporting requirements that demonstrate that QC personnel have sufficient independence to allow them to be primarily concerned with quality, as opposed to schedule and budget.

The Department will not sample or test for process control or assist in controlling the Contractor's production operations. The Contractor will provide QC personnel and testing equipment capable of providing a quality product that meets or exceeds the contract requirements. Continued production of non-conforming work for a reduced price as determined by the Department, instead of making adjustments to bring the work into conformance, is not allowed. The QCP will specifically include:

- i. Construction items covered by the QCP as specified in the contract.
- ii. Sampling location and techniques.
- iii. Sampling plan.
- iv. Tests and test methods.
- v. Testing frequencies.
- vi. Testing forms.

- vii. Inspection frequencies.
- viii. Detailed description of production and placement equipment and methods.
- ix. Detailed calibration processes and procedures for hot plants or mixing plants.
- x. Documentation procedures, including:
 - (1) Inspection and test records.
 - (2) Temperature measurements.
 - (3) Accuracy, calibration, or recalibration checks performed on production or testing equipment.

The QCP will identify the Contractor's QC personnel, including the company official ultimately responsible for the quality of the work. The Department's QCP approval process may include inspection of testing equipment and a sampling and testing demonstration by the Contractor's QC personnel to assure an acceptable level of performance.

The Contractor will comply with the approved QCP and will take all other steps necessary to assure a high quality project.

Failure by the Contractor to comply with the approved QCP will result in mandatory work suspension until compliance.

The Contractor will maintain and make available, quality control charts (at a minimum, a run chart as the material is being produced) for each quality characteristic to be used in the statistical analysis. Where applicable, the run chart will be plotted with the material's specification upper and lower limits for statistical analysis.

B. Quality Level Analysis.

Quality level analysis will not be performed if the total quantity of material, except the test strip(s), based on planned quantity, is less than the quantity computed for 3 tests at the frequencies specified in 2020 QASP SA Table 106.03-1.

1. Statistical Analysis. Unless otherwise specified, quality levels and pay factors will be computed as specified below:

- a. Determine the unrounded arithmetic mean (\bar{X}).

$$\bar{X} = \frac{\sum x_i}{n}$$

Where:

Σ = Summation.

x_i = Individual test value.

n = Total number test values.

- b. Compute the unrounded sample standard deviation (S).

$$S = \sqrt{\frac{\sum(x_i - \bar{X})^2}{n - 1}}$$

- c. Compute the unrounded upper quality index (Q_u).

$$Q_u = \frac{USL - \bar{X}}{S}$$

Where:

USL = Upper specification limit.

S = Standard deviation.

- d. Compute the unrounded lower quality index (Q_L).

$$Q_L = \frac{\bar{X} - LSL}{S}$$

Where:

LSL = Lower specification limit.

S = Standard deviation.

- e. Determine P_U (percent within the upper specification limit, which corresponds to a given Q_U).

$$P_U = 100 - \left(100 \times \int_0^A \text{beta} \left(X; \frac{n}{2} - 1 \right) dX \right)$$

Where:

P_U = Unrounded percent within upper limits.

$$A = \text{Maximum} \left[0, 0.5 - 0.5 \times Q_U \times \frac{n^{0.5}}{2(n-1)} \right]$$

$$X = \text{Maximum} \left[0, 0.5 - 0.5 \times Q_U \times \frac{n^{0.5}}{2(n-1)} \right]$$

$\text{beta}(X; \frac{n}{2} - 1)$ = Beta distribution density with $\alpha = \beta = \frac{n}{2} - 1$ where α and β are parameters of the beta distribution.

If a USL is not specified, P_U will be 100.

- f. Determine P_L (percent within lower specification limit, which corresponds to a given Q_L).

$$P_L = 100 - \left(100 \times \int_0^A \text{beta} \left(X; \frac{n}{2} - 1 \right) dX \right)$$

Where:

P_L = Unrounded percent within lower limits.

$$A = \text{Maximum} \left[0, 0.5 - 0.5 \times Q_L \times \frac{n^{0.5}}{2(n-1)} \right]$$

$$X = \text{Maximum} \left[0, 0.5 - 0.5 \times Q_L \times \frac{n^{0.5}}{2(n-1)} \right]$$

$\text{beta}(X; \frac{n}{2} - 1)$ = Beta distribution density with $\alpha = \beta = \frac{n}{2} - 1$ where α and β are parameters of the beta distribution.

If a LSL is not specified or the specification is zero, P_L will be 100.

- g. Determine the unrounded percent within limits (PWL) (i.e., the total percent within the specification limits).

$$PWL = (P_U + P_L) - 100$$

- h. Repeat steps 106.03.B.1.c through 106.03.B.1.g to calculate the PWL for each quality characteristic.
2. Acceptance Criteria. The Engineer will accept a lot containing material that does not meet specifications if the PWL is at least 40 for each of the quality characteristics. The Engineer must reject a lot containing non-specification material, which does not obtain at least a PWL of 40 for each quality characteristic. Remove rejected material, including those portions of the work in which that material was incorporated, at no additional cost to the Department. The Contractor may reuse the removed material if adjustments are made so the material meets the specifications.

If the PWL of a lot falls below 60 for any quality characteristic, stop production and/or delivery. A corrective action plan must be submitted to the Engineer and approved. Production and/or delivery may resume after the Contractor takes effective and acceptable actions to improve the production quality as outlined in the approved corrective action plan. If resuming production involves a significant change to the production process, as determined by the Engineer, stop the current lot and begin a new lot.

The Contractor may elect to remove defective material and replace it with new material on an entire lot basis, at no additional cost to the Department. The Department and the Contractor must re-sample, retest, and re-evaluate the new lot for acceptance.

The Engineer may isolate and reject obviously defective material without regard to testing procedures. The Contractor may isolate and reject obviously defective material during delivery and production before acceptance testing.

3. Materials.

- a. 301, 303, and 635 Materials. The upper and lower specification limits (USL and LSL) for gradations will be set based on the applicable requirements of 703 except as specified below:

- (1) Test results will not be included in the quality level analysis for fracture, sand equivalent, cleanness value, 100 percent passing, or for any sieves where the upper specification limit is 100 percent passing and the lower specification limit is 95 percent passing or greater.

The Engineer will use the lowest PWL computed for any 1 sieve as the basis of acceptance for that lot. The average PWL will be used for payment.

- b. 404 Material. When the lower specification limit is 0 percent and the upper specification limit is less than 3 percent, the upper specification limit will be 3 percent for statistical analysis. A 2 percent tolerance will be given for the percentage retained on the maximum sized sieve provided that 100 percent of the material passes the next larger sieve size. Only #4 and #8 sieves will be used for quality level analysis.
- c. 405 Superpave Material. The upper and lower specification limits for Superpave quality characteristics will be set by the limits established in 405.

- (1) For SP 2 aggregates, the lowest PWL for any 1 sieve will be used for acceptance and pay factor calculations.

ON PAGE 61, SUBSECTION 106.07 – TEST RESULT CHALLENGE RESOLUTION

Delete this subsection and replace with the following:

106.07 Test Result Challenge Resolution.

The Contractor and the Department may enter into a challenge resolution when the quality of a lot is believed to be misrepresented.

The test result challenge process as specified in 106.07 will be exhausted in its entirety before other dispute or claims processes are initiated as specified in 105.16, 105.17, 105.18, and 105.19. The intent of challenge resolution is to resolve testing issues early, efficiently, and as close to the project level as possible. The Contractor will waive their right to challenge test results if they fail to comply with the requirements set forth in this subsection.

A. Initiation of a Challenge.

To request a challenge of acceptance test results, provide written notice, including all quality characteristics and copies of original quality control source documentation, within 3 business days after receipt of the acceptance test results. Failure to comply with these requirements in this subsection will bar either party from any further administrative, equitable, or legal remedy.

1. The Contractor will waive their right to challenge if either of the following conditions occur:
 - i. The Engineer does not receive a written notice as specified within the time requirements (i.e., 3 business days).
 - ii. The Contractor does not obtain the required number of the Contractor's quality control tests reported on forms established in the QCP at the frequency specified in 2020 QASP SA Table 106.3-1.
2. The Department will review the written notice and quality control documentation.

B. Challenge Resolution Process.

1. The Department and the Contractor will identify differences in procedures and equipment.
2. The Department and the Contractor will agree to a work plan for initiating resolution by a challenge laboratory as specified in 106.07.C. or 106.07.D.
3. The Contractor can witness challenge testing.

C. Challenge of Material Not Subject to Statistical-Based Acceptance.

The challenge lab is the Department Central Materials Laboratory or a Department District Materials Laboratory not associated with the District in which the acceptance testing is being performed. Splits of the Department's acceptance samples for the entire lot will be used for challenge testing. The challenge samples will be tested for all quality characteristics used in the quality level analysis by the challenge laboratory. The challenge laboratory results are final and the Engineer will use the challenge laboratory's test results for all quality characteristics for acceptance.

1. If the Department's acceptance test results indicate reject level material, and:

- i. The challenge laboratory test results indicate acceptable material, then the Department will bear the cost of challenge laboratory testing.
- ii. The challenge laboratory test results indicate reject level material, then the costs of challenge laboratory testing will be deducted from any monies due or that may come due the Contractor under the contract at the rate of \$500.00 per sample.

For challenging of density properties, the Department's acceptance cores will be retained for retesting. The Contractor may request to observe challenge testing.

D. Challenge Laboratory Resolution of Material Subject to Statistical-Based Acceptance.

The challenge laboratory is the Department Central Materials Laboratory. The Central Materials Laboratory may elect to choose another challenge laboratory as needed to accommodate testing timelines. Upon challenge notification, the Department will arrange for testing of all challenged acceptance samples of the lot in question. Splits of the Department's acceptance samples will be used for challenge testing. The challenge samples for the entire lot will be tested for all quality characteristics used in the quality level analysis by the challenge laboratory. The challenge laboratory test results are final and the Engineer will use the challenge laboratory test results of all quality characteristics for acceptance for the entire lot.

The Contractor may use challenge resolution for density when the density pay factor is less than 1.00. The entire lot will be retested for density and used in the quality level analysis. A challenge resolution test will be performed by obtaining cores in new, stratified random sample locations equal to the same number of original acceptance tests. Sample locations will be identified by the Department using Idaho IR 148. Sampling of cores will be performed by the Contractor and must be witnessed by the Engineer. Traffic control and sampling will be performed by the Contractor. Challenge resolution may be performed regardless of the sampling location being exposed to traffic. The challenge test results are final and the Engineer will use the challenge test results for acceptance of the entire lot.

- 1. If the new composite pay factor results in a lower or equal composite pay factor for the lot in question, then the costs of challenge testing, in addition to the cost of any work related to traffic control performed for retesting at unit bid prices for the costs incurred, will be deducted from any monies due or that may come due the Contractor under the Contract at the rate shown in Table 106.07-1 per sample in the challenged lot.
- 2. If the new composite pay factor results in a higher composite pay factor for the lot in question, then the Department will bear the costs associated with the challenge testing, and the cost of any work related to traffic control performed for retesting at unit bid prices for the costs incurred.

Table 106.07-1 – Challenge Laboratory Testing Rates

| Material | Rate Per Sample |
|------------------------------------------|-----------------|
| 301 Granular Subbase | \$200 |
| 303 Aggregate Base | \$250 |
| 404 Cover Coat Material | \$300 |
| 635 Anti-Skid Material in Stockpile | \$300 |
| 405 SP 2 Mix Quality Characteristics | \$600 |
| 405 SP 2 Roadway Quality Characteristics | \$400 |
| 405 SP 3 Mix Quality Characteristics | \$600 |

| Material | Rate Per Sample |
|------------------------------------------|-----------------|
| 405 SP 3 Roadway Quality Characteristics | \$400 |
| 405 SP 5 Mix Quality Characteristics | \$600 |
| 405 SP 5 Roadway Quality Characteristics | \$400 |

ON PAGE 85, SUBSECTION 108.04 – PRECONSTRUCTION AND PREOPERATIONAL CONFERENCES

Add a #5:

5. A quality control plan as specified in 106.03.A.2.

ON PAGE 107, NEW SUBSECTION 109.09 – PAY FACTOR EQUATIONS

Insert with the following new subsection:

109.09 Pay Factor Equations.

The Engineer will determine a pay factor for each quality characteristic in an individual lot not rejected and replaced, except as otherwise specified, for use in the basis of payment calculations.

With the exception of reject quality level material, if any quality characteristic used in calculating the pay factor for the lot falls below 60 PWL all quality characteristics will be paid corresponding to the lowest, unrounded PWL.

A. 405 Mainline Density.

For mainline density, calculate the pay factor for each lot using the following formula:

$$PF_{MLD} = \frac{55 + 0.5 \times \left(PWL_{92} - \frac{(PWL_{92} - 90) + |PWL_{92} - 90|}{2} \right)}{\frac{100}{((PWL_{92} - 90)) + |(PWL_{92} - 90)|} + \frac{(PWL_{93} - 90) + |PWL_{93} - 90|}{1000} + \frac{(PWL_{94} - 90) + |PWL_{94} - 90|}{2000}}$$

Where:

PWL₉₂ is the percent of material between 92.0 to 100.0% compaction.

PWL₉₃ is the percent of material between 93.0 to 100.0% compaction.

PWL₉₄ is the percent of material between 94.0 to 100.0% compaction.

B. All Other Quality Characteristics.

For all other quality characteristics calculate the unrounded pay factors for each lot using the following equation:

$$PF = \frac{55 + 0.5 \times (PWL)}{100}$$

ON PAGE 158, SUBSECTION 301.05 – BASIS OF PAYMENT

Add the following:

A. Granular Subbase Pay Factor. All acceptable material will be paid at contract unit price.

When RAP material is included in acceptable subbase, the natural material will be tested as specified in 301 and the blended material will be paid at contract unit price.

ON PAGE 162, SUBSECTION 303.05 – BASIS OF PAYMENT

Delete this subsection and replace with the following:

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for all ____ aggregate type ____ for base accepted by the Department will be computed using the following formula:

$$PA_{303} = (PF_{303} - 1) \times Q_i \times P$$

Where:

PA_{303} = Pay adjustment for all ____ aggregate type ____ for base in dollars.

PF_{303} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

The incentive/disincentive dollar amount to be paid or deducted for all ____ aggregate type ____ for base in stockpile accepted by the Department will be computed using the following formula:

$$PA_{STKPL\ 303} = (PF_{STKPL\ 303} - 1) \times Q_i \times P$$

Where:

$PA_{STKPL303}$ = Pay adjustment for all ____ aggregate type ____ for base in stockpile in dollars.

$PF_{STKPL303}$ = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 179, SUBSECTION 404.05 – BASIS OF PAYMENT

Add the following:

If the aggregate pay factor is less than 0.75, the material may be allowed to be left in place with a price adjustment if the finished product is found to be capable of performing its intended purpose. The price adjustment will be 50 percent of the contract unit bid price multiplied by the total quantity of material with a pay factor less than 0.75.

For surface treatment aggregate, the Engineer will use the lowest pay factor computed for any 1 sieve as the pay factor for that lot.

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for

all cover coat material class _____ accepted by the Department, excluding material in stockpile and material with a pay factor less than 0.75 allowed to remain in place with a price adjustment, will be computed using the following formula:

$$PA_{404} = (PF_{404} - 1) \times Q_i \times P$$

Where:

PA_{404} = Pay adjustment for all cover coat material class _____ in dollars.

PF_{404} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

The incentive/disincentive dollar amount to be paid or deducted for all cover coat material class _____ in stockpile accepted by the Department will be computed using the following formula:

$$PA_{STKPL404} = (PF_{STKPL404} - 1) \times Q_i \times P$$

Where:

$PA_{STKPL404}$ = Pay adjustment for all cover coat material class _____ in stockpile in dollars.

$PF_{STKPL404}$ = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

ON PAGE 459, SUBSECTION 635.05 – BASIS OF PAYMENT

Add the following:

For anti-skid material, the Engineer will use the lowest pay factor computed for any 1 sieve as the pay factor for that lot.

Calculation of Incentive/Disincentive. The incentive/disincentive dollar amount to be paid or deducted for all anti-skid material accepted by the Department, excluding anti-skid defined as small quantity, will be computed for each lot using the following formula:

$$PA_{635} = (PF_{635} - 1) \times Q_i \times P$$

Where:

PA_{635} = Pay adjustment in dollars.

PF_{635} = Per 106.B.3 and 109.09.

Q_i = Quantity represented by individual lot (n).

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

2020 QASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance

| Material | Quality Characteristic | Test Method | Quality Characteristic Reported to | Quality Control Plan by the Contractor | | Acceptance by the Department | |
|--------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------|
| | | | | Minimum Testing Frequency (a) | Minimum Testing Frequency (a) | Minimum Testing Frequency (a) | Point of Sampling |
| 301 Granular Subbase (1) | Gradation – 703.11 | FOP for AASHTO T 27 | 0.01% | 1 test per 5,000 Tons | 1 test per 5,000 Tons | 1 test per 5,000 Tons | From windrow or roadway |
| | | | | 1 test per 5,000 Tons | 1 test per 5,000 Tons | | |
| | Sand Equivalent | FOP for AASHTO T 176 (Alt. Method #2), Mechanical | See Note 2. | 1 test per 5,000 Tons | 1 test per 5,000 Tons | 1 test per 5,000 Tons (pass/fail, no statistical analysis) | From windrow or roadway |
| | | | | 1 test per 5,000 Tons | 1 test per 5,000 Tons | | |
| 303 Aggregate Base (1) | Gradation – 703.04 | FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements) | 0.01% | 1 test per 1,000 Tons | 1 test per 1,000 Tons | 1 test per 1,000 Tons | From windrow or roadway |
| | | | | 1 test per 1,000 Tons | 1 test per 1,000 Tons | | |
| | Sand Equivalent | FOP for AASHTO T 176 (Alt. Method #2), Mechanical | See Note 2. | 1 test per 1,000 Tons | 1 test per 1,000 Tons | 1 test per 1,000 Tons (pass/fail, no statistical analysis) | From windrow or roadway |
| | | | | 1 test per 1,000 Tons | 1 test per 1,000 Tons | | |
| 404 Cover Coat Material (1) | Gradation – 703.06 | FOP for AASHTO T 335, Method 1 | See Note 2. | 1 test per 1,000 Tons | 1 test per 1,000 Tons | 1 test per 1,000 Tons (pass/fail, no statistical analysis) | From windrow or roadway |
| | | | | 1 test per 400 Tons | 1 test per 400 Tons | | |
| | Cleanness Value | Idaho IT 72 | See Note 2. | 1 test per 400 Tons | 1 test per 400 Tons | 1 test per 400 Tons (pass/fail, no statistical analysis) | At point of loading to the roadway |
| | | | | 1 test per 400 Tons | 1 test per 400 Tons | | |
| Fracture Count | FOP for AASHTO T 335, Method 1 | See Note 2. | 1 test per 400 Tons | 1 test per 400 Tons | 1 test per 400 Tons (pass/fail, no statistical analysis) | At point of loading to the roadway | |
| | | | 1 test per 400 Tons | 1 test per 400 Tons | | | |

Continued – 2020 QASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance

| Material | Quality Characteristic | Test Method | Quality Characteristic Reported to | Quality Control Plan by the Contractor | | Acceptance by the Department | |
|-------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|------------------------------------------|-------------------|
| | | | | Minimum Testing Frequency ^(a) | Point of Sampling | Minimum Testing Frequency ^(a) | Point of Sampling |
| 405 Superpave Class SP2 ^{(f)(g)} | Asphalt Content, P _a ^(e) | FOP for AASHTO T 168 ^(c) and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329 | 0.01% | 1 test minimum per 750 Tons | 1 test per 750 Tons | FOP for AASHTO R 97 ^(c) | |
| | Gradation ^e | FOP for AASHTO T 168 ^(c) and FOP for AASHTO R 47 and FOP for AASHTO T 30 (use wash method for all gradation measurements) | 0.01% | 1 test minimum per 750 Tons | 1 test per 750 Tons | FOP for AASHTO R 97 ^(c) | |
| | Fracture Count | FOP for AASHTO T 335, Method 1 | See Note 2. | By the Contractor as needed to control the operation. 1 test minimum per 1,500 Ton | N/A | N/A | |
| | Sand Equivalent | FOP for AASHTO T 176 (Alt. Method #2), Mechanical | See Note 2. | By the Contractor as needed to control the operation. 1 test minimum per 1,500 Tons | N/A | N/A | |
| | Mainline Density, MLD ^(d) | FOP for AASHTO T 355 ^(h) or FOP for AASHTO T 343 | 0.01% | 1 test minimum per 375 Tons | 1 test per 375 Tons ^(h) | FOP for AASHTO R 97 ^(c) | |
| | Recycled Asphalt Pavement | FOP for AASHTO T 308 and FOP for AASHTO T 30 | See Note 2. | 1 test minimum per 1,500 Tons | N/A | N/A | |

Continued – 2020 OASP SA Table 106.03-1 – Material Subject to Statistical Based Acceptance

| Material | Quality Characteristic | Test Method | Quality Characteristic Reported to | Quality Control Plan by the Contractor | | Acceptance by the Department | |
|-------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------|-------------------|
| | | | | Minimum Testing Frequency (a) | Point of Sampling | Minimum Testing Frequency (a) | Point of Sampling |
| 405 Superpave HMA Class SP 3, and SP 5 (b), (d) | Asphalt Content, P _a (e) | FOP for AASHTO T 168(c) and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329 | 0.01% | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | Gradation (e) | FOP for AASHTO T 30 (use wash method for all gradation measurements) | 0.01% | 1 test minimum per 750 Tons | 1 test minimum per 750 Ton | FOP for AASHTO R 97 (c) | |
| | Maximum Specific Gravity, G _{mm} (e) | FOP for AASHTO T 168(c) and FOP for AASHTO R 47 and FOP for AASHTO T 209 (Bowl Method) | 0.001 | 1 test minimum per 750 Tons | 1 test minimum per 750 Ton | FOP for AASHTO R 97 (c) | |
| | Bulk Specific Gravity of Compacted Mix, G _{mb} (e) | FOP for AASHTO T 168(c) and FOP for AASHTO R 47 and FOP for AASHTO T 312 and FOP for AASHTO T 166 (Method A) | 0.001 | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | Effective Specific Gravity of Combined Aggregate, G _{se} (e) | WAQTC TM 13 | 0.001 | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | Air Voids @ N _{design} , P _a (e) | WAQTC TM 13 | 0.01% | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | VMA @ N _{design} (e) | WAQTC TM 13 | 0.01% | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | Dust Proportion, DP (e) | WAQTC TM 13 | 0.001 | 1 test minimum per 750 Tons | 1 test minimum per 750 Tons | FOP for AASHTO R 97 (c) | |
| | Mainline Density (d)(e) | FOP for AASHTO T 355 (b) or FOP for AASHTO T 343 For cores: FOP for AASHTO R 67; FOP for AASHTO T 166 Method A or FOP for AASHTO T 331 | 0.01% | 1 test minimum per 375 Tons | 1 test per 375 Tons (b) | Roadway (c) | |
| | Recycled Asphalt Pavement | FOP for AASHTO T 308 and FOP for AASHTO T 30 | See Note 2. | 1 test minimum per 1,500 Tons | N/A | N/A | |
| 635 Anti-Skid Material in Stockpile (f) | Gradation – 703.10 | FOP for AASHTO T 27 with FOP for AASHTO T 11 (use wash method for all gradation measurements) | 0.01% | 1 test per 1,000 Tons By the Contractor as needed to control the operation | 1 test per 1,000 Tons | From crusher or if previously crushed, final stockpile location. | |

Note: 1. Refer to the OA Manual minimum test requirements for minimum testing not included in 2020 OASP SA Table 106.03-1.
 (a) If the total quantity of material is less than the minimum testing frequency for 1 test from 2020 OASP SA Table 106.03-1, acceptance will be as specified in the OA Manual Section 270.04.
 (b) When a test strip is not required, density acceptance is based on cores as specified in 405.L.
 (c) Sampling from the plant is not permitted unless the planned quantity is less than 750 tons or during the acceptance test strip.
 (d) The Department will use nuclear gauges. The Contractor may use nuclear or non-nuclear (i.e., electronic) gauges.
 (e) Calculated value based on unrounded results.
 (f) This material requires an approved quality control plan.
 (g) If the total quantity of material is between 750 and 2,250 tons, the entire quantity of material will be considered a single lot and will be accepted as specified in 405.03.1.
 2. This quality characteristic is not subject to statistical based acceptance. Refer to the OA Manual Table 275.01.1 for calculating and reporting requirements.

ON PAGE 253, SUBSECTION 430.03.B.5.b – COLD IN-PLACE RECYCLED (CIR) PAVEMENT/COMPACTION

Delete 405.03.L and replace with 405.03.O.

ON PAGE 569, SUBSECTION 720.07.1.b – RECYCLED ASPHALT PAVEMENT (RAP)/CATEGORY 2

Delete this sentence: "Submit test results within 10 calendar days before mix design submittal."

ON PAGE 570, SUBSECTION 720.07.3 – RECYCLED ASPHALT PAVEMENT (RAP)

Delete this sentence: "Provide the test results on a spreadsheet with the mix design submittal and update the spreadsheet, if additional RAP is produced before producing HMA."

And replace with this sentence: "Provide the test results on a spreadsheet with the specific gravity of aggregates and RAP submittal as specified in 405.03.A."

ON PAGES 180-207, SECTION 405 – SUPERPAVE® HOT MIX ASPHALT

Delete this section, in its entirety, and replace with the following:

405.01 Description. Construct 1 or more courses of Superpave hot mix asphalt (HMA) plant mix, including leveling courses if applicable, on a prepared surface. References in this section also apply to warm mix asphalt (WMA).

405.02 Materials. Provide materials as specified in:

| | |
|---------------------------------------|--------|
| Aggregate | 703 |
| Asphalt..... | 702 |
| Anti-Stripping Additive | 702 |
| Hydrated Lime | 720.06 |
| Recycled Asphalt Pavement (RAP) | 720.07 |

Test materials in accordance with the following applicable standard methods:

| | |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Particle Size Distribution of Aggregate | FOP for AASHTO T 27 |
| With Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing..... | FOP for AASHTO T 11 Method A or B |
| Mechanical Analysis of Extracted Aggregate | FOP for AASHTO T 30 |
| Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor..... | FOP for AASHTO T 312 |
| Superpave Volumetric Design for Hot Mix Asphalt (HMA)..... | AASHTO R 35 |
| Determining the Percentage of Fracture in Coarse Aggregate | FOP for AASHTO T 335 Method 1 |

| | |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures | AASHTO T 269 |
| Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures..... | FOP for AASHTO T 209 Bowl Method |
| Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens | FOP for AASHTO T 166 Method A |
| Pavement Straightedge Procedures..... | Idaho IR 87 |
| In-Place Density of Asphalt Mixtures by Nuclear Methods | FOP for AASHTO T 355 Backscatter mode |
| Sampling Asphalt Mixtures after Compaction (Obtaining Cores)..... | FOP for AASHTO R 67 |
| Determining Volume of Liquids in Horizontal or Vertical Storage Tanks..... | Idaho IT 120 |
| Acceptance Test Strip for Hot Mix Asphalt (HMA) Pavement | Idaho IR 125 |
| Standard Practice for Operating Inertial Profilers and Evaluating Pavement Profiles | AASHTO R 57 |
| Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method | FOP for AASHTO T 308 |
| Sampling Asphalt Mixtures..... | AASHTO R 97 (See QA Manual Section 270 for sampling method) |
| Reducing Samples of Hot Mix Asphalt to Testing Size | FOP for AASHTO R 47 |
| Moisture Content of Hot Mix Asphalt (HMA) by Oven Method..... | FOP for AASHTO T 329 |
| Plastic Fines in Graded Aggregate and Soils By Use of the Sand Equivalent Test | FOP for AASHTO T 176 Alternate Method #2, Mechanical, Pre-wet |
| Standard Method of Test for Compressive Strength of Hot Mix Asphalt..... | AASHTO T 167 |
| Standard Test Method for Effect of Water on Compressive Strength of Compacted Bituminous Mixtures (Immersion-Compression) | ASTM D1075 (Replace ASTM D1074 and ASTM D2726 with AASHTO T 167 and AASHTO T 166) |
| Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage | AASHTO T 283 |
| Uncompacted Void Content of Fine Aggregate, Method A | AASHTO T 304 |
| Mixture Conditioning of Hot-Mix Asphalt (HMA) | AASHTO R 30 |
| Sampling Asphalt Materials..... | FOP for AASHTO R 66 |
| Determining Rutting Susceptibility of Asphalt Pavement Mixture Using the Asphalt Pavement Analyzer (APA)..... | AASHTO T 340 |
| Superpave Volumetric Mix Design | AASHTO M 323 |
| Evaluation of the Superpave Gyrotory Compactor (SGC) Internal angle of Gyration Using Simulated Loading | AASHTO T 344 |

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate | Idaho FOP for ASTM D4791 (ratio of length to thickness equal to or greater than 5:1) |
| Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method..... | AASHTO T 331 |
| Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus | AASHTO R 79 |
| Standard Test Method for Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method | ASTM D6857 |
| Specific Gravity and Absorption of Aggregate Using Automatic Vacuum Sealing Method..... | Idaho IT 144 |
| Quantitative Extraction of Bitumen from Bituminous Paving Mixtures | AASHTO T 164 |
| Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures | AASHTO T 319 |
| Lime for Asphalt Mixtures..... | AASHTO T 303 |
| Determination of Recycled Asphalt Pavement (RAP) Aggregate Dry Bulk Specific Gravity (G_{sb}) | Idaho IT 146 |
| Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™) | ASTM D8159 |
| Standard Method of Test for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature | ASTM D8225 |
| Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA) | AASHTO T 324 |
| Stratified Random Sampling..... | Idaho IR 148 |
| Superpave Mix Design | Idaho IR 150 |
| Superpave Mix Design Evaluation..... | Idaho IR 151 |
| HMA Quality Control Plan Development and Implementation | Idaho IR 152 |
| Split Sample Comparison..... | Idaho IR 153 |
| Nuclear Density Gauge Correlation..... | Idaho IR 154 |
| Procedures for Checking Asphalt Drum Mix Plant Calibrations | Idaho IR 155 |
| Method for Determining Rolling G_{mm} | Idaho IR 156 |
| NCAT Correction Factor..... | Idaho IR 157 |
| Evaluation and Approval of HMA Plants..... | Idaho IR 160 |

Provide Superpave HMA composed of a combination of aggregate, approved additives, mineral filler (if required), RAP (if used), WMA additives or process (if used), and performance graded (PG) asphalt binder material. Provide a job mix formula (JMF) reported on ITD-0774 and a Superpave HMA pavement as specified and meeting the requirements in this section, 703, and 720.

Table 405.02-1 – Superpave Mixture Requirements

| Mixture Type | SP 2 (50 gyrations) | SP 3 (75 gyrations) | SP 5 (100 gyrations) |
|---------------------------------------------------------|------------------------|------------------------|-------------------------|
| Design ESALs ^(a) (millions) | < 1 | 1 < 10 | ≥ 10 |
| Gyratory Compaction | | | |
| Gyrations for N _{ini} | 6 | 7 | 8 |
| Gyrations for N _{des} | 50 | 75 | 100 |
| Gyrations for N _{max} | 75 | 115 | 160 |
| Relative Density, % G _{mm} @ N _{ini} | ≤ 90.5 | ≤ 89.0 | ≤ 89.0 |
| Relative Density, % G _{mm} @ N _{des} | 96.0 | 96.0 | 96.0 |
| Relative Density, % G _{mm} @ N _{max} | ≤ 98.0 | ≤ 98.0 | ≤ 98.0 |
| Air Voids, % P _a | 4.0 | 4.0 | 4.0 |
| Dust Proportion Range ^(b) | 0.6 – 1.4 | 0.6 – 1.4 | 0.6 – 1.4 |
| Voids Filled with Asphalt (VFA) Range, % | | | |
| 1½" | 64 – 80 | 64 – 75 | 64 – 75 |
| 1" | 65 – 78 | 65 – 75 | 65 – 75 |
| ¾" | 65 – 78 | 65 – 75 | 65 – 75 |
| ½" | 65 – 78 | 65 – 75 | 65 – 75 |
| ⅜" | 65 – 78 | 73 – 76 | 73 – 76 |
| #4 | 67 – 79 | 67 – 77 | 67 – 77 |
| Rut Depth, mm ^(c) | ≤ 10.0 mm | ≤ 10.0 mm | ≤ 10.0 mm |
| Stripping, passes ^(d) | 12,500 | 15,000 | 15,000 |
| Cracking Test, IDEAL-CT _{Index} ^(e) | 80 (index value) | 80 (index value) | 80 (index value) |

^(a) The anticipated project traffic level expected on the design lane over a 20 year period. Regardless of the actual design life of the roadway, determine the design ESALs for 20 years.

^(b) For No. 4 nominal maximum size mixtures, the dust proportion is 1.0 to 2.0 for SP 2 mixes and 1.5 to 2.0 for SP 3 and SP 5 mixes. For coarse graded ⅜, ½, and ¾ inch nominal maximum size mixtures, the dust proportion is 0.6 – 1.5. (Fine and coarse graded mixtures are defined in 703.05).

^(c) Maximum depth after specified number of stripping passes. The Hamburg must have passing test results in the mix design.

^(d) Minimum number of passes with no stripping inflection point. The Hamburg must have passing test results in the mix design.

^(e) The Ideal-CT value and the associated data generated will be included in the mix design submittal; the data will only be used for information.

Approved SP 3 mixes may be substituted for SP 2 mixes. Use the binder content corresponding to 3.5 percent air voids. Adjust the SP 3 mix binder content by selecting the binder content that achieves 3.5 percent air voids at 75 gyrations from the binder content versus air voids graph of the approved mix design and target this binder content in the C-JMF. The SP 3 mix will be tested during production and accepted as an SP 2 mix (i.e., measuring binder content and gradation) when a substitution is made and the SP 2 VFA value will be used.

Use a QPL anti-stripping additive, if needed. Determine the amount of liquid anti-stripping additive or lime required by performing AASHTO T 324 during the mix design development.

1. Warm Mix Asphalt (WMA). WMA is defined as HMA that is produced at a target discharge temperature of 275 °F or less using QPL WMA additives or processes. WMA is allowed for use. QPL WMA additives or processes may be used to facilitate mixing and compaction of HMA produced at target discharge temperatures above 275 °F; however, such mixtures will not be defined as WMA.

Use additives or processes from the QPL. Follow the supplier's or the manufacturer's written instructions for additives and processes when producing WMA mixtures.

Use equipment and WMA technologies capable of producing an asphalt mixture that meet specifications and is workable at the minimum placement and compaction temperature desired, regardless of storage or haul distance considerations.

Produce Superpave WMA by 1 or a combination of several QPL-approved technologies including chemical, foaming, and organic processes.

The Department and the Contractor will prepare Superpave WMA field samples, as recommended by the manufacturer's representative, for WMA mixture testing.

2. Recycled Asphalt Pavement (RAP). The Department will allow RAP in the Superpave HMA. Provide RAP as specified in 720.07. Produce the mixture as specified in 405. Select the mass of RAP, the type of RAP, and the extent of RAP processing necessary to meet specifications. The Department will not change specifications or the contract unit price if RAP is used in the mixture.

If RAP material is to be used from the project, obtain a representative sample of material for the mix design.

The mass of RAP used in Superpave HMA is the mass of asphalt binder, in percent that the RAP contributes to the total mass of binder in the mixture.

RAP Binder Percentages and Binder Grade Selection. Determine the percentage of RAP used and the binder grade required to meet the specified PG binder grade. Select the RAP percentage in the mix by determining the contribution of the RAP binder toward the total binder in the mix, by weight.

It may be necessary to use a softer virgin PG binder than is specified to account for the age hardened binder in the RAP. Adjust the binder grade specified to account for the stiffening effect of the aged binder in the RAP resulting in a composite binder meeting requirements. The method for determining the binder grade adjustment in Superpave HMA mixtures incorporating RAP is designated as Level 1 or Level 2 as shown in Table 405.02-2. Each level has a range of percentages that represent the contribution of the RAP binder toward the total binder, by weight.

Table 405.02-2 – Grade Adjustment for RAP Usage

| Level | RAP binder by weight of the total binder in the mixture, % | Binder Grade Adjustment to account for the stiffness of the asphalt binder in the RAP |
|-------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 0 to 17.0 | No binder grade adjustment is made. |
| 2 | > 17.0 to 30.0 | The selected binder grade adjustment for the binder grade specified on the plans is one grade lower for the high and the low temperatures designated. Or determine the asphalt binder grade adjustment using a blending chart. Note: See AASHTO M 323 for recommended blending chart procedure. |

Table 405.02-3 identifies the typical binder grades used and the recommended binder grade adjustments for each binder grade at the RAP level described in Table 405.02-2. If the binder grade adjustment is not in Table 405.02-3, use Table 405.02-2 to determine the binder grade adjustment needed.

Table 405.02-3 – Typical Adjusted Binder Grades

| | Level 2 | Level 1 |
|------------------------------------|-----------------------|-----------------------|
| Binder Grade Specified in Contract | Adjusted Binder Grade | Adjusted Binder Grade |
| 58-28 | 58-34 | No adjustment needed |
| 58-34 | No Adjustment Needed | |
| 64-28 | 58-34 | |
| 64-34 | 58-34 | |
| 70-28 | 64-34 | |
| 76-28 | 70-34 | |

Use the following equation to determine the percent of RAP by weight of mix:

$$X\% = c (a/b)$$

Where:

a = optimum asphalt content, percent in mixture to produce 4.0% air voids.

b = percent asphalt content in the RAP (from chemical extraction and/or FOP for AASHTO T 308 burn with asphalt binder correlation factor).

c = percent of RAP binder by weight of the total binder desired in the mix.

X = desired RAP percent by total weight of mix.

The following is an example of the calculation:

Total RAP binder desired equals 17% of total binder in the mixture. If RAP will contribute 5.1% asphalt content and the optimum asphalt content is 5.8%, then:

$$X\% = 17\% * (5.8/5.1) = 19.3\% \text{ RAP percent by total weight of mix.}$$

3. Recycled Asphalt Shingles (RAS). RAS is not allowed in any Superpave HMA.
4. Re-refined Engine Oil Bottoms (REOB). REOB is not allowed in any Superpave HMA.
5. Crumb Rubber Modifier (CRM). CRM is not allowed in any Superpave HMA.

405.03 Construction Requirements.

A. Specific Gravity of Aggregates and RAP. The Department will determine the bulk dry specific gravity of aggregate, G_{sb} , apparent specific gravity of aggregate, G_{sa} , and water absorption (by percent weight of dry aggregate) of the coarse and fine aggregate for each stockpile used in the mixture using AASHTO T 85 and Idaho IT 144. The Department will evaluate the RAP G_{sb} , if used, by determining the RAP G_{se} in accordance with Idaho IT 146. The Department will determine the specific gravity of aggregates and RAP at a minimum of once a calendar year for each stockpile.

1. Sampling Requirements. The date, time, and location of sampling will be agreed to by the Engineer and the Contractor. The Contractor will sample the aggregate stockpiles and RAP stockpiles to be used in the mix design in accordance with FOP for AASHTO R 90 and reduce in accordance with FOP for AASHTO R

76. Obtain samples from at least 6 distinct locations within each stockpile. When project millings are used, obtain samples of the project millings to be used in the mix design from the sampling location specified in the approved HMA quality control plan. Sample, combine, and reduce the material for each stockpile to the Department's required material submittal size in the Engineer's presence. Immediately give possession of the samples to the Engineer.

2. Submittal Requirements. Provide blend sheets for the mixture proportions and submit the following:
 - a. Aggregate Stockpile. For each aggregate stockpile, submit:
 - i. 100 pound minimum sample in clean 5-gallon plastic buckets with airtight lids.
 - (1) Each bucket must weigh no more than 50 pounds.
 - ii. A summary of all QC test data used to develop average stockpile gradation.
 - iii. A summary of all QC test data of G_{sb} , G_{sa} , and water absorption (by percent weight of dry aggregate) of the coarse and fine aggregate produced during stockpile production.
 - iv. Source number.
 - b. RAP Stockpile. For each RAP stockpile, submit:
 - i. 100 pound minimum sample in clean 5-gallon plastic buckets with airtight lids.
 - (1) Each bucket must weigh no more than 50 pounds.
 - ii. All QC test data used to develop average stockpile gradation.
 - iii. Report the asphalt binder/aggregate correlation factor for asphalt binder and gradation for each RAP stockpile as specified in 720.
3. Testing Timeframe. The Department will not begin testing until the complete submittal has been received. The Engineer will provide the Contractor with an aggregate test report (i.e., ITD-802 form) within 10 business days after receiving the complete submittal package. A Contractor's representative may be present during the G_{sb} testing, if requested. Retesting, at the Contractor's request, will require an additional 15 business days for re-evaluation. Additional materials and additional information may be required from the Contractor. The Contractor may request a retest only if the QC data submitted supports retesting.

The Contractor will use the established G_{sb} in the mix design calculation, the mix design report, and for production paving testing.

The Engineer will use the established G_{sb} and G_{sa} during the mix design submittal evaluation, acceptance test strip testing, production acceptance testing, and challenge testing.

If the G_{sb} changes during production more than 0.030, as determined by the Engineer, the Engineer will notify the Contractor. The Engineer will establish a new G_{sb} and re-evaluate the mix design as specified in 405.03.B. All subsequent mix produced after the Contractor has been notified of the new G_{sb} will use the newly established G_{sb} . If at any time testing indicates that G_{sa} is greater than or equal to G_{se} and/or G_{se} is greater than or equal to G_{sb} (i.e., $G_{sa} \geq G_{se}$ and/or $G_{se} \geq G_{sb}$) is not true, production will be halted and a new G_{sb} will be established in accordance with this section.

Following bid award, and before HMA mix design submittal, small areas within the project site may be milled to collect RAP for pre-mix design testing. Perform this work according to a 405.03.C. HMA quality control plan, approved by the Engineer, including the plan and methods to sample and process RAP.

At a minimum, for pre-milling the HMA quality control plan will include:

1. An approved traffic control plan that will minimize disturbance to traveling public.

2. Identification of no more than 6 RAP sampling locations within the project site. Each location must be less than 100 feet long with a maximum of 1 lane wide, unless otherwise approved.
3. The milling depth of each location must not be deeper than that shown in the plans for each location.
4. Patching plan.
5. Patch maintenance plan.
6. Detailed narrative of processing of milling and sampling locations to ensure representative samples are obtained.

After processing, sample for G_{sb} and asphalt content testing in accordance with the FOP for AASHTO R 90 and 405.03.A.

B. Mix Design. Develop a Superpave mix design in accordance with Idaho IR 150 to determine the appropriate combination of aggregate, approved additives, mineral filler (if required), RAP (if used), WMA additives or process (if used), and performance graded (PG) asphalt binder material meeting the requirements in 405, 703, and 720. The grade of asphalt is specified on the plans. The Contractor may choose to use the specified PG binder (or an adjusted binder as specified in Table 405.02-3. The Contractor may also “bump” this PG binder with the following restrictions: the selected PG binder may be one grade lower than the low PG grade temperature. A binder may be selected one grade higher than the upper PG grade temperature if it meets the intermediate testing ($G^*(\sin \delta)$) of the specified binder grade. Binder adjustments/”bumps” must meet the contract requirements at no additional cost to the Department. (Examples: A specified PG 58-28 may be bumped to PG 58-34. A specified PG 58-28 binder may be bumped to PG 64-28 if it meets the $G^*(\sin \delta)$ requirements of the specified binder. A specified PG 58-28 binder may be bumped to PG 64-34 if it meets the requirements of the specified binder.)

1. Approved Mix Design. A mix design must be approved before use using the following process:
 - a. Mix Design Submittal. Submit the mix design and all supporting documentation in accordance with Idaho IR 150 a minimum of 5 business days before paving is scheduled to begin. Email to mixdesigns@ITD.idaho.gov and submit to the Engineer. Only 1 mix design per email notification will be accepted.
 - b. Mix Design Submittal Evaluation. The Engineer in conjunction with the District Materials Engineer, the Construction and Materials section, and the Central Materials Laboratory will evaluate the mix design in accordance with Idaho IR 151. The Engineer will provide the Contractor with written approval or rejection of the mix design within 5 business days after receiving the full submittal package.
 - i. Mix Design Submittal Approval. Once the mix design submittal is approved by the Department, the Contractor may proceed with acceptance test strip placement using the JMF from the approved mix design submittal. The mix design will be approved for use for up to 2 calendar years from the date of test strip acceptance.
 - ii. Mix Design Submittal Rejection. Rejection of the mix design will require:
 - (1) The mix designer will amend the mix design to address the items noted in the notification of rejection. The Contractor will resubmit the mix design as specified in 405.B.2. The Department will re-evaluate the mix design for approval or rejection as specified in 405.B.3.
 - (2) Develop and submit a new mix design as specified in 405.B.
2. Approved Mix Design Expiration. An approved mix design, associated JMF, and any associated C-JMF will be considered expired when one of the following situations occur (but not limited to):

- a. More than 2 calendar year has elapsed from the time of test strip acceptance for the mix design.
 - b. Changes in stockpile gradation.
 - c. Changes in aggregate specific gravity or absorption.
 - d. Changes in RAP specific gravity.
 - e. Changes in aggregate, RAP, or binder sources.
 - f. Aggregate does not meet physical requirements specified in 703.
 - g. Changes in additives, including a change in the dosage rates.
 - h. Repeated non-conformance as defined in 405.03.M.1.
3. Asphalt Analyzer Offset Calibration Determination (see Flowchart 405.03-1).
- a. The Central Materials Laboratory will prepare 11 hand mixed JMF correction factor samples using aggregates and RAP from G_{sb} determination.
 - 1. Four (4) ITDProdAcceptanceLab (see Flowchart 405.03-1 Box 2.0, for information only).
 - 2. Three (3) ITDHQ Extractor (see Flowchart 405.03-1 Box 3.0 for Payment B).
 - 3. Four (4) Contractor CNCF (see Flowchart 405.03-1 Box 4.0).
 - b. ITDProdAcceptance lab will determine NCAT Correction Factor (INCF) using AASHTO T 308 (HQ lab produced samples), provide data to the Contractor, for information only.
 - c. The Department determines an offset between 3 Central Materials Laboratory Asphalt Analyzer samples and known asphalt content from hand batched blend sheets.
 The offset will be used to help quantify an asphalt binder quantity to be valued at the asphalt invoice price.
 If Asphalt Analyzer Offset is greater than 0.2, adjust bin percentages and target gradations as required to meet specifications and resubmit adjustments as an addendum to the mix design for approval within 1 business day.
 The Contractor may challenge upon request. Must use aggregate/RAP from G_{sb} testing. This challenge stands.
 - d. The Contractor may correlate NCAT ovens with AASHTO T 308 and CNCF to be used during the test strip.

C. HMA Quality Control Plan. Develop and submit for approval a HMA quality control plan that complies with the requirements of Idaho IR 152, Idaho IR 155, Idaho IR 160, and 106.03.A.2. The Contractor HMA quality control plan must be approved by the Engineer in accordance with 106.03.A.2, Idaho IR 152, Idaho IR 159, Idaho IR 160, and Idaho IR 155 before the material is incorporated into the work/project.

D. Weather Limitations for Permanent Paving. Do not place Superpave HMA on a wet or frozen surface or when weather or surface conditions will otherwise prevent the proper handling or finishing of the Superpave HMA material. Place Superpave HMA as specified in the temperature limitations in Table 405.03-2.

Table 405.03-2 – Air and Surface Temperature Limitations

| Compacted Thickness of Individual Courses | Top Course | Leveling and Courses Below the Top Course |
|--------------------------------------------------|-------------------|--------------------------------------------------|
| Less than 0.10 foot | 60 °F | 50 °F |
| 0.10 to 0.18 foot | 50 °F | 40 °F |
| Greater than 0.18 foot | 40 °F | 40 °F |

Provide a paved surface for travel if the work extends into the winter. Do not start construction on the pavement surface, unless the progress schedule realistically shows the pavement can be replaced or completed within the temperature limitations listed above.

E. Mixing Plants. Use an approved mixing plant that complies with Idaho IR 160 and in accordance with the approved HMA Quality Control Plan. Meet the requirements of Idaho IR 155, with the exception that the Contractor may calibrate the asphalt plant according to current National Asphalt Pavement Association (NAPA) manuals and documented best practices or in accordance to the manufacturer’s recommendations. The Contractor will provide the calibration documentation (e.g., manufacturer’s recommendation) to the Engineer.

F. Hauling Equipment. Provide hauling equipment in accordance with the approved HMA Quality Control Plan.

G. Paver. Provide a paver that complies with the approved HMA Quality Control Plan.

H. Pre-Paving Meeting. Immediately before paving, the Contractor, the asphalt supplier, the Engineer, and the Department personnel involved in the paving operation will hold a pre-operational paving meeting to discuss how to achieve the highest quality surface. The Engineer will prepare minutes of the pre-operational paving meeting and distribute them to the attendees. Any requests to revise the minutes must be made to the Engineer within 7 business days of receipt. These minutes will constitute the final record of the pre-operational paving meeting.

I. Acceptance Test Strip (Lot 1). Note: If a C-JMF has been accepted, this section does not apply because a test strip has already been accepted; continue to 405.03.O. Construct an acceptance test strip of 200 to 750 tons in accordance with Idaho IR 125 using the approved JMF (including offsite test strips). The Department does not require acceptance test strips on small quantity pavement less than 750 tons, nonstructural pavement, or temporary pavement.

The Engineer will base acceptance on the requirements in Table 405.03-4. Do not continue production paving until properties of the acceptance test strip are accepted and a C-JMF has been established as specified in 405.03.K.

1. **Test Strip Location.** The first day of production paving will be considered the acceptance test strip. The Contractor may elect to perform an offsite mix verification of the JMF. Do not use Department-owned or controlled sources for offsite testing.
2. **Testing Timeframe.** The Department will require 7 business days from the time of receipt of Superpave HMA mix samples, core samples, and cold feed samples to perform acceptance testing. Time will begin when all the required samples and associated paperwork needed to perform the specified testing are in the Engineer’s possession.
3. **Acceptance Testing Lab.** The Department’s Central Materials Laboratory will perform acceptance testing for the acceptance test strip.
4. **Test Strip Tolerance.** The Engineer will apply the tolerances to the acceptance test strip test properties as specified in Table 405.03-4 to establish the upper specification limit (USL) and lower specification limit (LSL) for quality level analysis.
5. **Test Strip Acceptance Criteria.** The Engineer will determine acceptance in accordance to Idaho IR 125.

6. The production paving lot following the accepted test strip will be based on Table 405.03-4 except the gradation requirements.

Table 405.03-4 – Acceptance Test Strip Tolerance

| Quality Characteristic | Test Strip Mix Tolerance |
|------------------------------------------|-------------------------------------------------------------|
| VMA, % | 703.05 minimum value |
| Laboratory Air Voids, % | 4.0 ± 1.5 |
| Asphalt Binder Content, % | If AAO > 0.3, JMF ± 0.40 If AAO ≤ 0.30, JMF ± 0.40 + AAO |
| Dust Proportion (DP) | Table 405.02-1 range ± 0.10 |
| VFA, % | Table 405.02-1 range ± 5 |
| No. 4 and larger sieves, % | JMF value ± 6.0 ^(a) |
| No. 8 to No. 30 sieves, % | JMF value ± 5.0 ^(a) |
| No. 50 to No. 100 sieves, % | JMF value ± 4.0 ^(a) |
| No. 200 and smaller sieves, % | JMF value ± 2.0 ^(a) |
| G _{mm} | JMF value at P _b ± 0.012 ^(d) |
| G _{se} | JMF value ± 0.012 ^(d) |
| Mainline Density, % Compaction | 92.0 – 100.0 |
| Rut Depth, mm ^(b) | 10.0 mm maximum ^(d) |
| Stripping, passes ^(c) | 12,500/15,000 ^(d) |
| Cracking Test, IDEAL-CT _{index} | 80 (index value) ^(d) |

^(a) The upper and lower specification limits are never allowed to be outside the control points specified in 703.05.

^(b) Maximum depth after 12,500/15,000 passes. For information only.

^(c) Minimum number of passes with no stripping inflection point.

^(d) For information only.

If the acceptance test strip is considered acceptable based on Idaho IR 125, the Contractor may proceed to production paving once a C-JMF is established as specified in 405.03.K.

If the acceptance test strip is not considered acceptable based on 106.03.B. for any quality characteristic, the Contractor will not be allowed to proceed with production paving. The Engineer will reject an unacceptable test section for SP 3 and SP 5 mixtures and require removal. The Department will not pay for the removal or the applicable contract pay item quantities. An unacceptable test section for an SP 2 mixture will be subject to rejection. If the Engineer determines the failed SP 2 test section may remain in place, the Contractor may leave the test section in place with a 50 percent reduction in price or remove the failed material and replace it with acceptable material and receive full payment. Remove the failed SP 2 test section if rejected. The Department will not pay for removal or for the applicable contract pay item quantities.

If the Contractor is unable to meet the requirements after 3 test strips, the Engineer will require a new mix design to meet specifications. Place a new acceptance test strip at no additional cost to the Department.

If the Contractor's testing determines the test strip fails and the Contractor chooses to proceed with another test strip before receiving the Engineer's results, the Engineer will complete testing of the test strip in question and

report the results before accepting material from the next test strip for evaluation.

PWL will be used to evaluate the test strip. The test strip will be paid at a 1.0 pay factor for a PWL greater than 40. If any quality characteristic, except G_{mm} or G_{se} , has a PWL less than 40, the asphalt mix will be rejected (i.e., G_{mm} or G_{se} with a PWL less than 40, will not be rejected but the cause will be evaluated by the Engineer). Plant settings may differ from the JMF or C-JMF in an effort to match actual plant output to the JMF or C-JMF.

J. Production Laboratory Comparison Process. The Contractor or the Engineer may request split sample comparison testing at any time during the project. The split sample comparison will be performed using Idaho IR 153.

1. The Department recommends that at a minimum the comparison be performed during test strip or before production.

K. C-JMF. Once a JMF is confirmed at acceptance test strip, the Contractor will establish an initial C-JMF.

1. Adjusting the C-JMF. C-JMF adjustments are allowed that will result in improved mix quality characteristics. If a lot is currently in progress, the adjustment will go into effect at the beginning of the next lot.
 - a. Adjustments within Table 405.03-5. Adjustments listed in Table 405.03-5 can be made to the JMF. Provide a detailed description of how these adjustments will be made and what quality characteristics will be affected. The Engineer will be notified within 24 hours of adjustments and descriptions.

Table 405.03-5 – C-JMF Adjustment Limit Table

| Parameter | Adjustment |
|-----------------------------------------------|-------------------------------------|
| No. 4 (4.75 mm) and greater | ± 3% from JMF |
| No. 8 (2.36 mm) | ± 2% from JMF |
| No. 100 to No. 30 (0.600 mm) | ± 2% from JMF |
| No. 200 (0.075 mm) | ± 0.3% from JMF |
| Asphalt Content | ± 0.2% from JMF |
| G_{mm} | ± 0.010 from C-JMF ^(c) |
| G_{se} | ± 0.010 from C-JMF ^(c) |
| Individual Cold Feed Percentage for Aggregate | ± 10.0% from JMF ^{(a) (d)} |
| Cold Feed Percentage for RAP | - 10.0% from JMF ^{(b) (d)} |

^(a) The cold feed percentage of any aggregate may be adjusted up to 10 percentage points from the amount listed on the JMF, however no aggregate listed on the JMF will be eliminated.

^(b) The cold feed percentage for RAP may be reduced up to 10 percentage points from the amount listed on the JMF and must not exceed the percentage of RAP approved in the JMF or for the specific application under any circumstances.

^(c) Based on the initial C-JMF.

^(d) Individual cold feed percentages for aggregate and RAP greater than 5.0% for a single stock pile of the same product must have a new correction factor established in accordance with IR 157.

- b. Adjustments outside of Table 405.03-5. Adjustments outside the limits listed in Table 405.03-5 can be requested, but these adjustments are considered significant adjustments and will require the Contractor to document any differences in the asphalt plant settings necessary to achieve the designed asphalt plant output as documented by acceptance test results. Thus, additional supporting documentation and justification must be submitted and how these adjustments will affect on the quality characteristics of the asphalt mix. Adjustments and descriptions must be submitted for the Engineer's prior approval and the Engineer will have 1 business day after the date the request was

submitted.

Use the C-JMF to establish target values and control limits when producing control charts during production paving.

L. Tack Coat. Apply an asphalt tack coat as specified in 402 to the following surfaces:

1. Existing plant mix surfaces and to the surface of each course constructed, except the final course.
2. Surfaces of curbing, gutters, manholes, portland cement pavement, and other structures. Paint or spray a thin, uniform tack coat of asphalt before placing pavement against the surfaces.
3. Contact surfaces of transverse joints and cold longitudinal joints just before additional mixture is placed against previously laid material.

M. Production Paving. Before production milling, obtain approval for Superpave HMA mix design(s). Milling, coring, or sampling for preliminary sample collection will be allowed for mix design development in accordance with the QCP.

The Contractor may request to continue production paving in accordance with the C-JMF after the acceptance test strip (Lot 1) is approved. Superpave HMA paving acceptance during production is based on the requirements in Table 405.03-6. The production paving lot (Lot 2) following the accepted test strip will be based on Table 405.03-4 except the gradation requirements. The Contractor will produce and place mix in accordance with the approved QCP.

If aggregate or asphalt binder sources change from the approved mix design, develop a new mix design as specified in 405.03.B. at no additional cost to the Department. If the G_{sb} changes during production more than 0.030, the Engineer may establish a new G_{sb} and re-evaluate the mix design.

1. Conformance to the C-JMF. The Contractor will produce mix that meets the requirements of Table 405.03-6. The Contractor may elect to remove defective material and replace it with new material on a lot basis, at no additional cost to the Department to ensure conformance to the C-JMF.
 - a. Isolated Non-Conformance. If the Contractor is unable to meet the requirements on a single lot, the Engineer will require the Contractor to stop production and/or delivery until a corrective action plan can be developed and implemented to remedy the non-conformance. Submit the corrective action plan to the Engineer before resuming work.
 - b. Repeated Non-Conformance. If the Contractor is unable to meet the requirements on 2 consecutive lots, the C-JMF, mix design, and associated JMF will be considered expired as defined in 405.03.B.2. The Engineer will require a new mix design to meet the specifications in 405.03.B. at no additional cost to the Department.

If aggregate or asphalt binder sources change from the approved mix design, develop a new mix design to meet the specifications in 405.03.B. at no additional cost to the Department.

2. Production Limits. The properties listed in Table 405.03-6 will be used for purpose of quality analysis calculations, acceptance, and payment. The Engineer will apply the tolerances to the properties as specified in Table 405.03-6 to establish the upper specification limit (USL) and lower specification limit (LSL) for quality level analysis.
3. Production Acceptance Criteria. The Engineer will perform quality level analysis and determine acceptance as specified in 106.03.B using the quality characteristics specified in Table 405.03-6.

Table 405.03-6 – Production Paving Quality Limits

| Mix Quality Characteristic | Limits |
|---------------------------------------|----------------------------------------------|
| SP 2 Mixture | |
| No. 4 sieve and larger sieves, % | C-JMF value \pm 5.0 ^(a) |
| No. 8 to No. 30 sieves, % | C-JMF value \pm 4.0 ^(a) |
| No. 50 to No. 100 sieves, % | C-JMF value \pm 3.0 ^(a) |
| No. 200 sieve and smaller sieves, % | C-JMF value \pm 1.5 ^(a) |
| Asphalt Binder Content, % | C-JMF value \pm 0.3 |
| SP 3 and SP 5 Mixtures | |
| Laboratory Air Voids, % N_{design} | SP 3: 2.5 – 5.0% SP 5: 2.8 – 5.0% |
| VMA, % N_{design} | 703.05 minimum value |
| Dust Proportion | Table 405.02-1 Range |
| G_{se} ^(f) | C-JMF value \pm 0.012 ^(g) |
| G_{mm} ^(e, f) | C-JMF value @ $P_b \pm$ 0.012 ^(g) |
| Rut Depth, mm | 10.0 maximum ^(b, c) |
| Stripping, passes | 12,500/15,000 ^(b, d) |
| Cracking Test, IDEAL-CT $Index$ | 80 (index value) ^(b) |
| Roadway Quality Characteristic | |
| Mainline Density, % Compaction | 92.0 – 100.0 |

^(a) The upper and lower specification limits are never allowed to be outside the control points specified in 703.05.

^(b) Hamburg and Ideal-CT are for information only at this time.

^(c) Maximum depth after 15,000 passes.

^(d) Minimum number of passes with no stripping inflection point.

^(e) G_{mm} tests must be performed only after a 2-hour oven cure time in accordance to the mix design requirements to limit test result variability.

^(f) G_{mm} and G_{se} values are indicators of consistency of the asphalt mix and are tracked using PWL. G_{mm} and G_{se} will be monitored for information only and, if the PWL is less than 40, the Engineer and the Contractor will review the data and take appropriate action (e.g., review plant settings, review test results). There will be no deduction for a low PWL based on G_{mm} or G_{se} .

^(g) Based on the initial C-JMF.

N. Spreading and Finishing. Place the mixture on an approved surface. Use pavers to distribute the mixture over the entire width or over a partial width as practical. Do not extend partial width paving beyond one day's production. Minimum lift thickness will be no less than 3.5 times nominal maximum aggregate size (NMAS) of the mix design.

Use pavement marking tape to temporarily mark roadway centerline on pavements being used by traffic as specified in 626.03.

Unless otherwise specified, equip the paver with a shoe on the outside to provide slopes as follows:

The Engineer will allow an 18-inch-wide shoe for depths 0.2 foot or less on initial pavement placement. The shoe must be 24 inches wide for depths greater than 0.2 foot. The shoe must be 24 inches wide on pavement overlays.

Meet-lines must be within 1 foot of lane lines or within 1 foot of center of lanes. Meet-lines are not allowed within a wheel path. Ensure transverse and longitudinal joints are smooth and match the adjacent surfaces.

O. Compaction. Compact the pavement to a density between 92.0 percent and 100.0 percent of maximum theoretical density for SP 2, SP 3, and SP 5 asphalt mixes. Determine G_{mm} using Idaho IR 156.

Following acceptance test strip approval or C-JMF approval, pavement density testing for acceptance will be performed by the Department using a nuclear density gauge with the readings corrected by cores in accordance with AASHTO T 355. The G_{mm} for determining the percent compaction will be determined using a rolling, consecutive 2-lot average (i.e., the most recent 2 completed lots) of the Department's acceptance test results. For the first lot of production paving, the test strip's G_{mm} corresponding to the C-JMF is used for determining the percent compaction. The Contractor is responsible for quality control testing.

Density Gauge Correlation. When nuclear density gauges are used for acceptance, the Engineer will correlate the gauges in accordance with Idaho IR 154. A new gauge correlation will be established for each mix design, each paving lift, each paving lift thickness, and each underlying material (e.g., $\frac{3}{4}$ " base, CRABs, 0.25' underlying lift of HMA).

Repair holes left in the pavement by the coring operation with non-shrink grout at no additional cost to the Department. Do not begin coring until repair methods and materials have been approved.

P. Joints. Do not roll over the unprotected end of freshly laid mixture. Form transverse joints by cutting back on the previous run to expose a vertical edge the full depth of the course.

Slope the cold transverse construction joints open to public traffic at 20H:1V. Remove the sloped surface (ramp) without damage to the base just before paving is resumed. Test the new joint for smoothness as specified in 405.03.S.

Construct end transitions between overlays and the adjoining pavement by milling a wedge out of the adjoining pavement, starting at the surface and continuing into the adjoining pavement on a 200H:1V slope or flatter until a vertical edge equal to 0.15 foot or the depth of overlay is reached. Transitions to ramps and crossroads are transverse joints. The milled wedge is a transverse joint when the adjoining pavement is concrete. Mill the wedge from the pavement to be overlaid, with the vertical edge against the concrete, when the adjoining pavement is concrete. Taper transitions between overlays and approaches to form a smooth transition while maintaining drainage.

Provide a positive bond, density, and a finish surface to the new mixture at longitudinal joints that is equal to the mixture against which it is placed. The Engineer may take density tests at longitudinal joints to ensure the integrity of material in the joint area.

Locate the longitudinal joint in the top course at the centerline of the traveled way if the roadway is two lanes wide or at the lane lines if the roadway is more than 2 lanes wide. On the lower courses, stagger the longitudinal joint and offset it 6 inches to 1 foot from the centerline of the traveled way if the roadway is 2 lanes wide or from the lane lines if the roadway is more than 2 lanes wide. Match the pavement surface across a longitudinal joint with the transverse slope shown on typical sections.

Test joints, except crowns, for smoothness in accordance with Idaho IR 87. Use an approved 10-foot straightedge. Complete the test and necessary corrections before the material temperature drops below 175 °F.

Place longitudinal joints straight and true. Use approved methods to bring back to straight and true unacceptable deviations. Make adjustments as needed to achieve the specified results.

Obtain approval for Superpave HMA mix design(s) before the start of milling operations.

Q. Miscellaneous Pavement. Place miscellaneous Superpave HMA pavement in irregular areas (e.g., raised or depressed medians, gores, tapers, radii (excluding approach radii), tapered paving for guardrail terminal widening). Include areas that taper from 0 to 8 feet maximum width and gore areas from roadway shoulders to termini in this work. Do not include pavement widening for installation of guardrail in this work.

R. Small Quantities. Small quantities will be accepted in accordance with the QA Manual 270.XX. When an acceptance test strip is not required as per 405.03.I, the Department will base acceptance for pavement density on the density of cores taken from the finished pavement. Obtain 5 randomly located core samples in accordance with the FOP for AASHTO R 67 from the compacted Superpave HMA in the Engineer's presence. The Engineer will determine the random core locations. Immediately submit the cores for testing. The Department will determine the density of the cores the FOP for AASHTO T 166 Method A or AASHTO T 331. In addition, obtain 3 randomly located mix samples during HMA placement, in the Engineer's presence, and immediately submit samples for testing. Obtain the samples in accordance with the AASHTO R 97 (see the QASP Table 106.03-1 Note 1.c.). The Engineer will randomly locate the mix samples and the Department will test the mix samples to determine the G_{mm} value in accordance with the FOP for AASHTO T 209 or ASTM D6857. The Department will use the average of the 3 G_{mm} values to compute in-place density of the cores taken for density acceptance. If paving will be performed in different construction seasons (e.g., bridge approaches), obtain 5 additional cores from the compacted Superpave HMA and 3 additional mix samples for density acceptance when paving resumes. The Contractor is responsible for quality control testing.

S. Leveling Course. Construct the leveling course of Superpave HMA, with a compacted thickness greater than 0.2 foot, in multiple courses.

Place the leveling course on the existing surface in quantities as approved. Use pavers and/or motor graders and a sufficient number of pneumatic tire rollers to adequately place and compact the leveling course to the required cross-section and grade. Use a steel-wheel roller for final rolling if the leveling course is to be used as a wearing course or if a seal coat is to be applied.

When blade laid leveling course is specified, place Superpave HMA in wheel ruts and other surface irregularities. Blade Superpave HMA into the low areas using a motor grader. Normally, 2 passes are required to fill depressions. Follow each pass of the motor grader with a pneumatic tired roller to provide compaction. Position the blade of the motor grader so light contact with the existing pavement surface is maintained. The Contractor may dispose of excess coarse aggregate resulting from placing the blade laid leveling course along the edge of the roadway.

When machine laid leveling course is specified, place Superpave HMA on the roadway with a paver to restore crown, super elevation, or rideability. Operate the screed close to the existing pavement surface. The Engineer will accept minor surface tears from this operation. Use pneumatic and vibratory rolling for compaction.

T. Surface Smoothness. Place pavement complying with Schedule II unless otherwise specified.

For Schedule III only, perform pre-paving, quality control, and acceptance surface smoothness testing, analyze the results of this testing, and submit the results. Submit pre-paving results. Before paving, submit a plan showing how Schedule III smoothness will be achieved.

Perform acceptance testing on the final lift and submit the results before corrective action. Complete acceptance testing within 1 week of paving completion.

Perform quality control testing in international roughness index (IRI). Request to use quality control testing for acceptance before the start of paving.

Submit quality control results by the next business day following placement.

If the quality control testing results show surface smoothness is not within the acceptable specification limits, suspend paving operations until it can be shown the steps taken to modify operations will result in acceptable smoothness.

Acceptance surface smoothness testing must be verified by the Engineer. The profile run must be witnessed by the Engineer and a preliminary copy of the report submitted immediately after the end of the run. The Engineer will not accept the testing, unless witnessed. Submit the profile data in a format suitable for evaluation using ProVAL or other industry standard software. In addition, each week or as requested by the Engineer, submit to the Engineer an electronic, editable Microsoft Excel spread sheet containing the data produced from the acceptance smoothness

testing. Do not perform corrective action until approved.

The Engineer may elect to perform additional testing for verification. If the results vary from the Contractor's IRI results by more than 10 percent, the Engineer will use the Department's IRI results for acceptance.

Measure the finished pavement as follows:

1. Test the surface with a 10-foot straightedge at locations determined by the Engineer. Identify the locations that vary more than $\frac{1}{4}$ inch from the lower edge when the straightedge is laid on finished pavement in a direction parallel with centerline or perpendicular to centerline. Remove the high points that cause the surface to exceed the $\frac{1}{4}$ inch tolerance by grinding with equipment specified in Corrective Action below.
2. Profile the surface 3 feet from and parallel to each edge of each traffic lane. The Engineer will use the average of the results for each 0.1 mile section to calculate incentive payments and determine sections requiring corrective action.

Use Class 1 or Class 2 profilers as defined in ASTM E950. Operate profilers in accordance with the manufacturer's instructions and AASHTO R 57. Set the profiler as follows:

1. High pass or pre-filter: off or at least 200 feet.
2. Bump detection: on
3. Dip detection: on
4. Resolution: 0.01 inch
5. Low pass filter: off
6. Other filters: off

Operate the profiler according to the manufacturer's recommended speed. Calibrate the profiler at the beginning of the work and as needed thereafter.

The Department requires the pavement to comply with the following surface smoothness schedule requirements:

- a. Where longitudinal grade is 6.5 percent or less, pavement on tangent alignment and pavement on horizontal curves having centerline radius of curve 1,000 feet or more must meet the surface smoothness requirements for the smoothness schedule specified. The Engineer will add consecutive 0.1 mile sections of roadway tested together to obtain the mile section. There will be no overlapping of the 0.1 mile or 1 mile sections to change cumulative test results.

(1) Smoothness Schedule using IRI:

- (a) Schedule I Projects: Target IRI values range from 60.0 to 70.0 inches per mile per 0.1 mile. Corrective action required above 95.0 inches per mile per 0.1 mile.
- (b) Schedule II Projects: Target IRI values range from 71.0 to 80.0 inches per mile per 0.1 mile. Corrective action required above 95.0 inches per mile per 0.1 mile.
- (c) Schedule III Projects: Target IRI value range defined as one of the following:
 - i. For sections with a pre-paving IRI less than 160.0 inches per mile per 0.1 mile the final index must not exceed 80.0 inches per mile per 0.1 mile.
 - ii. For sections with a pre-paving IRI of 160.0 inches per mile per 0.1 mile or greater, use the smoother of either:
 1. A 50 percent improvement of the pre-paving index.

2. A maximum final index of 100.0 inches per mile per 0.1 mile. Corrective action is required above the target IRI.
- b. The Engineer will exclude acceptance test strips, pavement on horizontal curves having a centerline radius of curve of less than 1,000 feet and pavement within the super elevation transition of such curves, or pavement with a longitudinal grade greater than 6.5 percent from incentive/disincentive payments. Meet the corrective action requirements for the smoothness schedule specified.
- c. Profile the pavement to provide continuous, uninterrupted profile data. The Department will not apply profile smoothness tolerances and incentive/disincentive payments to the following:
 - (1) Pavement within 50 feet of a transverse joint that separates the pavement from a structure deck, an approach slab, or an existing pavement not constructed under the contract.
 - (2) Pavement for approaches and structure decks.
 - (3) Roadways with a speed limit less than 40 mph.
 - (4) Interstate ramps.

Smoothness acceptance for these areas will be as specified with straightedge requirements.

Surface Smoothness Corrective Action:

Use power-driven grinding equipment that is specifically designed to smooth portland cement concrete pavement with diamond blades. Use a machine with an effective wheelbase at least 12 feet and a cutting width of at least 3 feet. Restrict the machine forward speed to 5 feet per minute while milling. Provide grinding equipment of a shape and dimension that does not encroach on traffic movement.

Grind parallel to centerline. Extend adjacent grinder passes, within ground area, to produce a neat rectangular area having a uniform surface appearance. Make smoothly feathered transitions at transverse boundaries between ground and unground areas. Apply a fog coat to the ground pavement surface as specified in 408 after grinding has been completed.

Grind individual high points in excess of 0.3 inch within 25 feet or less, as determined by the California Profilograph simulation, until such high points do not exceed 0.3 inch.

After individual high point grinding has been completed, perform additional grinding in sections requiring corrective action to reduce the IRI to a maximum of 80.0 inches per mile per 0.1 mile section along lines parallel with the pavement edge.

Individual low points are areas in excess of 0.3 inch within 25 feet or less, as determined by the California Profilograph simulation. Low points will be subject to rejection and replacement at no cost to the Department. Under these circumstances, the Engineer's decision whether to accept the completed pavement or to require corrections is final.

Check the pavement for smoothness after grinding as specified in this subsection and make additional corrections necessary to achieve smoothness. Submit a report and graph showing compliance of the final surface to the smoothness requirements. The Department will not pay for the cost of grinding, milling or related work (e.g., fog coat), disposal of milled material, traffic control, flagging, profiling, surface repair of ground or milled areas, or temporary striping.

Surface Smoothness Deductions, Incentives, and Disincentives:

1. Straight-Edge Evaluation.

If correction of the roadway as specified will not produce satisfactory smoothness results or it reduces pavement thicknesses and serviceability, the Engineer may accept the completed pavement and will deduct

from monies due or may become due to the Contractor the sum of \$500.00 for each individual high point exceeding ¼ inch tolerance or \$3,000.00 for each 0.1 mile section. \$500.00 per individual low point exceeding ¼ inch tolerance will be deducted from monies due or may become due to the Contractor. Low points exceeding ½ inch will be subject to rejection and replacement at no cost to the Department. Under these circumstances, the Engineer's decision whether to accept the completed pavement or to require corrections is final.

2. Profilograph Evaluation.

For each evaluation section, the Contractor is entitled to a payment adjustment excluding acceptance test strips and Schedule III surface smoothness work. An evaluation section is defined as a 0.1 mile per traffic lane or fraction as applicable. The Department will not pay an incentive for pavement on the roadway shoulders, center turn lanes, turn bays, crossovers, tapers, or other miscellaneous pavement. The Department will pay incentive as specified in Table 405.03-7.

The Department will base incentive payments on initial profiles before corrective work on the top course of paving.

**Table 405.05-1 – IRI
Initial Index inches per mile per 0.1 mile section**

| Payment \$ per 0.1 mi | Schedule I | Schedule II |
|---------------------------------|---------------------------------------|---------------------------------------|
| \$500.00 | 40.4 or less | 45.4 or less |
| \$300.00 | 40.5 to 50.4 | 45.5 to 60.4 |
| \$100.00 | 50.5 to 60.4 | 60.5 to 70.4 |
| \$0.00 | 60.5 to 70.4 | 70.5 to 80.4 |
| -\$100.00 | 70.5 to 75.4 | 80.5 to 85.4 |
| -\$300.00 | 75.5 to 85.4 | 85.5 to 95.4 |
| -\$500.00 | 85.5 to 95.4 | — |
| -\$500.00 and corrective action | 95.5 or greater | 95.5 or greater |
| -\$500.00 and corrective action | Individual high points ^(a) | Individual high points ^(a) |
| -\$500.00 and corrective action | Individual low points ^(a) | Individual low points ^(a) |

^(a) In addition to the incentive/disincentive payment applied to the 0.1 mile section, the Engineer will deduct from monies due or may become due to the Contractor the sum of \$500.00 for each individual high point or low point up to a maximum of \$3,000.00 for each 0.1 mile section.

The Department will make only 1 incentive payment per evaluation section. An evaluation section runs consecutively from the point paving begins to the point paving is interrupted (e.g., at bridges, the end of lane paving areas specifically excluded by the specifications). The Department will prorate partial sections based on their percentage of a full section.

The Department will base incentive payments on initial profiles before corrective work on the top course of paving.

405.04 Method of Measurement. The Engineer will measure acceptably completed work as follows:

1. Pavements, leveling courses, and asphalts by the ton. The Engineer will not permit batch weights as a method of measurement. The Superpave HMA quantity will be the weight used in the accepted pavement and will include the weight of the aggregate, asphalt, and additives in the mixture.
2. Anti-stripping additive by the percentage of additive per ton of asphalt.

3. Miscellaneous pavement by the square yard. Final measurement will be based on plan quantities, unless changed by the Engineer. Miscellaneous pavement measurement is in addition to the measurement of asphalt and Superpave HMA material.
4. Approaches per each regardless of width or length. Separate mailbox turnouts will be measured as an approach. Mailbox turnouts adjacent to an approach will be considered as part of the approach and no separate measurement will be made. Approach measurements are in addition to the measurement of asphalt and Superpave HMA material.
5. Wedge milling for the transition section by the square yard.
6. Tack coat will be paid for as specified in 401.

405.05 Basis of Payment.

1. Superpave SP3 and SP5.

Composite mix pay factor will be computed for each lot using the following equation:

$$CPF_{405Mix} = (0.4 \times PF_{AIRVOIDS}) + (0.4 \times PF_{VMA}) + (0.2 \times PF_{DP})$$

Where:

CPF_{405Mix} = Composite pay factor for mix quality characteristics.

$PF_{AIRVOIDS}$ = Pay factor for air voids.

PF_{VMA} = Pay factor for VMA.

PF_{DP} = Pay factor for dust proportion.

Calculation of Composite Incentive/Disincentive. The composite incentive/disincentive dollar amount to be paid or deducted for Superpave plant mix pavement accepted by the Department, excluding plant mix pavement for test strips, small quantity, approaches, and miscellaneous paving not placed with mainline paving, will be computed for each lot using the formula:

$$PA_{405} = (CPF_{405Mix} + PF_{MLD} - 2) \times Q_i \times P$$

Where:

PA_{405} = Pay adjustment for material and main line density in dollars for the lot.

CPF_{405Mix} = Composite pay factor for material characteristics for the lot.

PF_{MLD} = Pay factor for main line density for the lot.

Q_i = Quantity represented by individual lot.

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

A pay factor of 1.00 will be used for all acceptable Superpave plant mix pavement incorporated into the onsite acceptance test strip for volumetrics.

Density pay factor for the Superpave plant mix leveling course will be 1.00.

Pay factors for approaches and miscellaneous paving not placed with mainline paving will be 1.00.

2. Superpave SP2.

Composite pay factors will be computed for each lot using the following equations:

$$CPF_{405} = (0.3 \times PF_{AC}) + (0.3 \times PF_{AGG}) + (0.4 \times PF_{MLD})$$

Where:

CPF_{405} = Composite pay factor for mix quality characteristics.

PF_{AC} = Pay factor for asphalt content.

PF_{AGG} = Pay factor for plant mix aggregate.

PF_{MLD} = Pay factor for main line density.

Calculation of Composite Incentive/Disincentive. The composite incentive/disincentive dollar amount to be paid or deducted for Superpave plant mix pavement accepted by the Department, excluding plant mix pavement for test strips, small quantity, approaches, and miscellaneous paving not placed with mainline paving, will be computed for each lot using the formula:

$$PA_{405} = (CPF_{405} - 1) \times Q_i \times P$$

Where:

PA_{405} = Pay adjustment for material and main line density in dollars for the lot.

CPF_{405} = Composite pay factor for material characteristics for the lot.

Q_i = Quantity represented by individual lot.

P = Contract unit price.

Note: The incentive may be a negative amount (i.e., a deduction from the total amount bid for the item).

Density pay factor for the Superpave plant mix leveling course will be 1.00.

Pay factors for approaches and miscellaneous paving not placed with mainline paving will be 1.00.

A pay factor of 1.00 will be used for calculating a pay factor for all acceptable Superpave plant mix pavement incorporated into an onsite acceptance test strip for volumetrics.

The Department will pay for accepted quantities as follows:

| Pay Item | Pay Unit |
|------------------------------------------------------------------|-----------------|
| Superpave HMA Pavement Class SP..... | Ton |
| Superpave HMA Pavement, including asphalt and additives | |
| Class SP | Ton |
| Leveling Course Class SP | Ton |
| Leveling Course, including asphalt and additives, Class SP | Ton |
| ___Asphalt Binder for Superpave HMA Pavement..... | Ton |
| ___Percent Anti-stripping Additive for Superpave HMA Pavement... | TOA |
| Miscellaneous Pavement..... | SY |
| Approaches | Each |
| Wedge Milling..... | SY |

The cost to produce the required aggregate in each stockpile to accommodate blends is incidental and included in the contract unit price for the Superpave HMA contract pay item.

When Superpave HMA includes RAP, in any proportion, the Department will not include the asphalt binder contributed by the RAP in the quantity for asphalt and additives when asphalt and additives are paid for separately.

3. Payment B, Additional Binder Content determined from Asphalt Analyzer Offset (AAO).

The offset between 3 extractor samples and the known AC from hand batched blend sheets will be used to quantify an Asphalt Analyzer Offset binder quantity (offset) to be valued at asphalt invoice prices, Payment B.

Payment B will be calculated for each accepted lot throughout project including the test strip if plant printouts for that lot indicate additional liquid binder was used from design. For any lot that plant printouts do not indicate equal or additional total binder and liquid binder was used compared to the JMF, no Payment B will be made. The Department may verify plant calibrations at any time.

4. Pre-milling, Coring, or Sampling for RAP.

All work and maintenance associated with the pre-mix design RAP sampling is incidental.

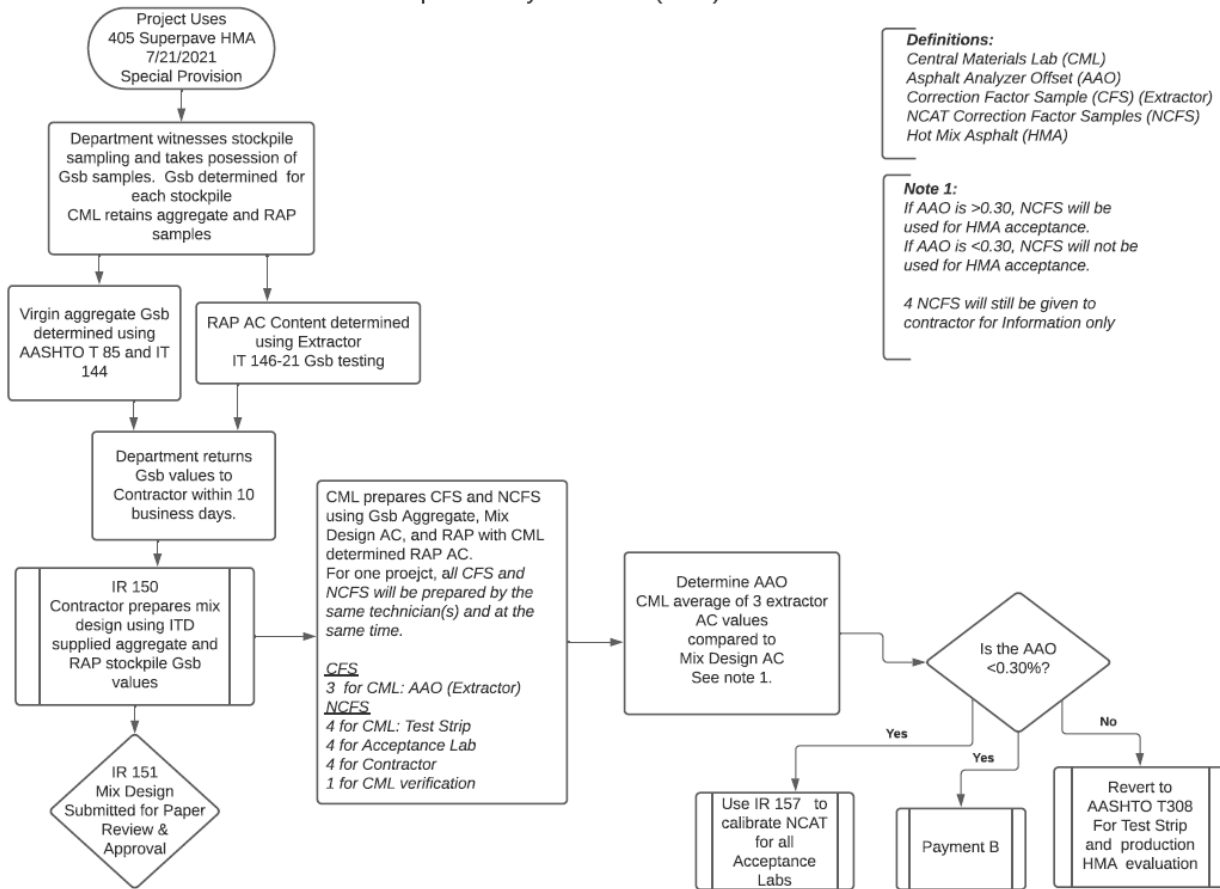
ON SHEET 10 OF 15 QASP (10/21/2019) – 109.09 PAY FACTOR EQUATIONS

Add to the beginning of the second paragraph: “For all pay items, except 405 pay items,”

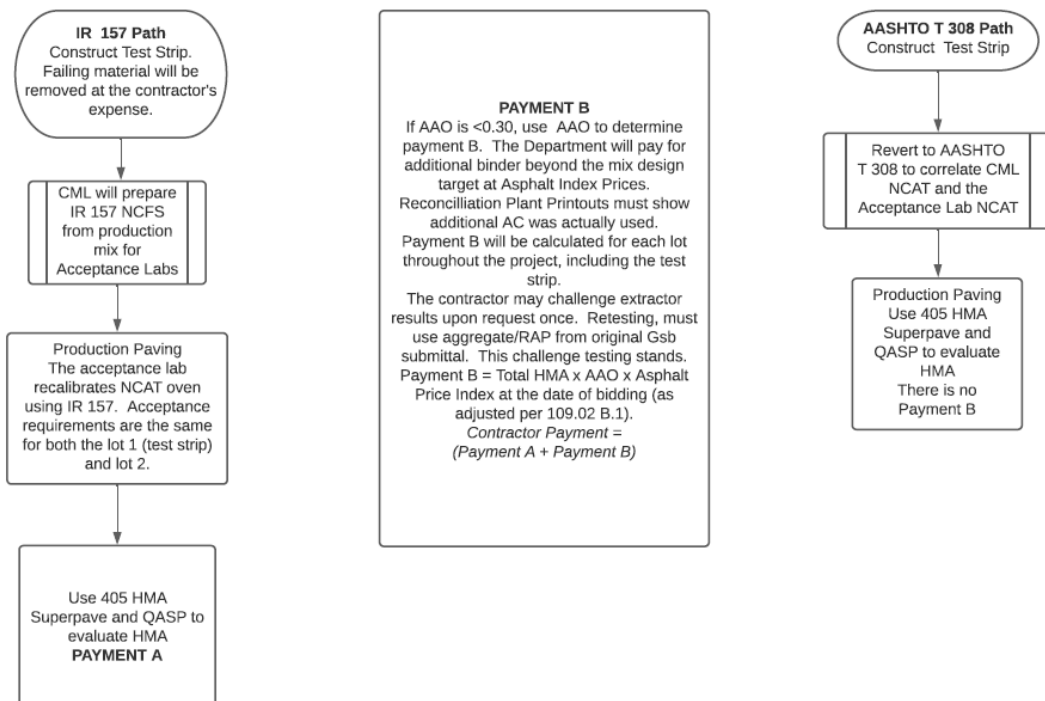
Following the second paragraph add the following:

For 405 items, with the exception of reject quality level material, if any two quality characteristic used in calculating the pay factor for the lot fall below 60 PWL, all quality characteristics will be paid corresponding to the average two lowest, unrounded PWL.

Asphalt Analyzer Offset (AAO) Process



Test Strip Control, Evaluation and Payment



Example Calculation for Payment B

| | |
|--------------------------------------------------------------|-------------------|
| Total 405 HMA for the lot | 3,000 Tons |
| Asphalt Analyzer Offset (AAO) | 0.29% |
| Total Additional Asphalt Binder from AAO for the Lot | 8.7 tons |
| Bid Price of Asphalt Binder (as documented on Invoices) | \$500.00 per ton |
| Total Payment B for the Lot (3,000 tons x 0.29% x \$500/ton) | \$4,350.00 |

Idaho Standard Practice for**Acceptance Test Strip for Asphalt Mixtures****IDAHO Designation: IR-125-21**

1. SCOPE

- 1.1. This Standard Practice is used to evaluate hot mix asphalt (HMA) and warm mix asphalt (WMA) produced through a hot plant for conformance to the mix design and JMF and for acceptance. This IR includes responsibilities of the Engineer, the Central Materials Laboratory, and the Contractor.
- 1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS2.1 *AASHTO Standards*

- FOP for T 27, Particle Size Distribution of Aggregate
- FOP for T 11 Method A or B, Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing
- FOP for T 30, Mechanical Analysis of Extracted Aggregate
- FOP for T 312, Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyrotory Compactor
- R 35, Superpave Volumetric Design for Hot Mix Asphalt (HMA)
- FOP for T 335, Method 1, Determining the Percentage of Fracture in Coarse Aggregate
- T 269, Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
- FOP for AASHTO T 209, Bowl Method, Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- FOP for AASHTO R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)
- R 57, Standard Practice for Operating Inertial Profilers and Evaluating Pavement Profiles
- FOP for T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- R 97, Sampling Asphalt Mixtures
- FOP for R 47, Reducing Samples of Hot Mix Asphalt to Testing Size
- FOP for T 329, Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
- FOP for T 176, Alternate Method #2 Mechanical Pre-Wet, Plastic Fines in Graded Aggregate and Soils By Use of the Sand Equivalent Test
- T 304, Method A, Uncompacted Void Content of Fine Aggregate

- FOP for R 66, Sampling Asphalt Materials
- M 323, Superpave Volumetric Mix Design
- T 344, Evaluation of the Superpave Gyrotory Compactor (SGC) Internal angle of Gyration Using Simulated Loading
- T 331, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method
- R 79, Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus
- T 164, Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
- T 319, Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures
- FOP for T 166, Method A, Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens
- FOP for T 355, In-Place Density of Asphalt Mixtures by Nuclear Methods
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)

2.2

ASTM Standards

- D 1075, Standard Test Method for Effect of Water on Compressive Strength of Compacted Bituminous Mixtures (Immersion-Compression)
- D 4791, Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
- D 6857, Standard Test Method for Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method
- 8159, Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™)
- 8225, Standard Method of Test for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature

2.3

Idaho Standards

- Idaho IR 87, Pavement Straightedge Procedures
- IT 120, Determining Volume of Liquids in Horizontal or Vertical Storage Tanks
- IR 125, Acceptance Test Strip for Hot Mix Asphalt (HMA) Pavement
- IT 144, Specific Gravity and Absorption of Aggregate Using Automatic Vacuum Sealing Method
- IT 146, Determination of Recycled Asphalt Pavement (RAP) Aggregate Dry Bulk Specific Gravity (G_{sb})
- IR 148, Stratified Random Sampling
- IR 150, Superpave Mix Design
- IR 151, Superpave Mix Design Evaluation
- IR 152, HMA Quality Control Plan Development and Implementation
- IR 153, Split Sample Comparison
- IR 154, Nuclear Density Gauge Correlation
- IR 155, Procedures for Checking Asphalt Drum Mix Plant Calibrations

- IR 156, Method for Determining Rolling G_{mm}
- IR 157, Determining Ignition Furnace Correction Factor
- IR 158, Quality Control Plan (QCP) Development and Implementation
- IR 159, Quality Control Plan (QCP) Review Process
- IR 160, Development, Evaluation, and Approval of HMA Plant Quality Control Plans

2.4 Standard Specifications, Subsection 106.03

2.5 Standard Specifications, Section 405

2.6 Quality Assurance Manual, Section 220

3. GENERAL TEST STRIP REQUIREMENTS

- 3.1. The Contractor will notify the Engineer of the date, time, and location of the acceptance test strip before or during the pre-pave meeting. The Engineer will immediately notify the Central Materials Laboratory.
- 3.2. The Engineer must witness all sampling of material to be used for acceptance. Any acceptance sample obtained that is not witnessed by the Engineer will be rejected.
- 3.3. The Contractor is responsible for material sampling. The Contractor will have a qualified technician available for the duration of the test strip. The Contractor will immediately give the samples to the Engineer.

4. IDENTIFYING THE TYPE OF ACCEPTANCE TEST STRIP

- 4.1. There are 2 types of test strips, an onsite test strip and an off-site test strip (i.e., off-site mix verification). The onsite test strip is performed at the start of production paving operations and encompasses the first lot of production paving. The off-site test strip is performed before beginning production paving.
- Note:* For the density correlation, reference IR-154. Density correlation is not a test strip.
- 4.2. Determine if the Contractor will perform an onsite test strip or off-site test strip to verify the JMF.
- 4.3. For an onsite test strip, the test strip will be the first day of production with the following exception:
- 4.3.1. If the total estimated quantity of material for the bid item is between 750 and 2,250 tons, the entire quantity of material will be considered the test strip, use the modified sampling schedule found in Annex 1 – On-Site Test Strip Procedure for Smaller Production Runs.
- 4.4. For an off-site test strip (i.e., offsite mix verification), the test strip sampling will be performed while the Contractor is targeting the JMF.

5. DETERMINING THE TEST STRIP SAMPLING SCHEDULE

- 5.1. Before the test strip, determine, in conjunction with the Contractor, the anticipated quantity of material that will be produced for the test strip.

Note: It is recommended to do this via email or other written communication to ensure adequate documentation for the project records.

- 5.2. Calculate the testing frequency by dividing the anticipated quantity of material that will be produced for the test strip by the required number of samples needed.
- 5.3. Using the value calculated in 5.2, perform Idaho IR 148 to determine the sampling schedule to obtain the required number of stratified, random samples.
- 5.4. Repeat step 5.2 and step 5.3 for each material to be sampled. See Example of Determining the Test Strip Sampling Schedule.

6. MATERIAL SAMPLING REQUIREMENTS

- 6.1. Before obtaining the first sample, confirm at the hot plant that the approved JMF is being targeted in the hot plant control system and that the most current hot plant calibrations have been verified in accordance with Idaho IR 155.
- 6.2. The Contractor will sample the required materials as shown in Table 6.1 at the intervals given in the test strip sampling schedule.
- 6.2.1. Each sample must be clearly labeled and secured in the Engineer's possession immediately after the sample is taken. If a sample consists of multiple containers, label each container in such a way that the samples and the increments are readily distinguishable (i.e., if there are 2 boxes of material for Sample 1: label one box "Box 1 of 2", and the other box "Box 2 of 2").
- 6.2.2. Each sample must be accompanied by the appropriate sample tracking form with all sampling information included and signed by the WAQTC sampling technician.
- 6.3. Continue to monitor that the proper mix is being produced throughout the test strip.
- 6.4. Immediately after completion of the test strip, obtain the hot plant printouts showing production totals for each mix constituent and the most current calibration records (e.g., take a snap shot or provide a written note on the plant printout of where the test strip begins/ends and the next lot begins).
- 6.5. The testing timeframe begins once the Engineer has received all test strip samples, sample tracking forms, and hot plant printouts and calibration records. The Engineer will submit samples, and original sample tracking forms to the acceptance lab for testing.

Table 6.1-Sampling Requirements

| Material | Sampling Procedure | Number of Samples | Minimum Sample Size | Sample Container |
|---------------------|---------------------|-------------------|--------------------------|----------------------------------------------|
| Mix | AASHTO R 97 | 6 | 100 lbs | Cardboard box ^(a) |
| Aggregate | AASHTO R 90 | 2 | 50 lbs | 5-gallon bucket ^(b) |
| RAP | AASHTO R 97 | 2 | 50 lbs | 5-gallon bucket ^(b) |
| Binder | FOP for AASHTO R 66 | 1 | Three 1-quart containers | Screw top can ^(a) |
| Field Compacted Mix | FOP for AASHTO R 67 | 10 ^(d) | One 6-inch diameter core | Suitable protective container ^(c) |

^(a) See Quality Assurance Manual Table 220.01.1.

^(b) Clean 5-gallon bucket with a snap-on lid.

^(c) See FOP for AASHTO R 67 for guidance on packaging and transporting samples.

^(d)No cores required for offsite test strips.

7. SAMPLING AND TESTING FIELD COMPACTED MIX

- 7.1. For on-site test strips, field compacted mix acceptance will be based on the results of cores sampled in accordance with AASHTO R 67. Sample locations cannot be closer than 1.0 foot from a cold joint.
 - 7.1.1. When nuclear density gauge results are to be used for acceptance for lots after the completion of the acceptance test strip, correlate the nuclear density gauge(s) in accordance with Idaho IR 154.
- 7.2. For off-site test strips, there is no field compacted mix acceptance performed during test strip.
 - 7.2.1. When nuclear density gauge results are to be used for acceptance for lots after the completion of the acceptance test strip, correlate the nuclear density gauge(s) in accordance with IR 154.

8. TEST STRIP DOCUMENTATION

- 8.1. Maintain in ProjectWise the following records, *at a minimum*, for the test strip sampling:
 - 8.1.1. Sampling schedule.
 - 8.1.2. The carbon copy of the appropriate sample tracking form for each sample obtained.
 - 8.1.3. A daily work report (DWR) or daily diary documenting the day's events.
 - 8.1.4. A copy of the hot plant calibration records and a hot plant printout showing recorded data every 15 minutes.
- 8.2. Ensure the documentation listed under 8.1 is available in ProjectWise within 2 business days after the completion of the test strip.

9. ACCEPTANCE LAB RECEIVING PROCEDURE

- 9.1. Upon receiving the samples and associated sample tracking forms, ensure that all required documentation is included.
- 9.2. Document condition of samples, and date and time received.
- 9.3. Notify the Engineer of receipt and provide a time of estimated completion and review of all testing.
- 9.4. *With the mix samples:*
 - 9.4.1. Select 1 sample for Idaho IT 157.
 - 9.4.2. Select 3 samples for volumetric testing shown in Table 10.1.
 - 9.4.3. Select 2 samples for performance testing shown in Table 10.2.
 - 9.4.4. Test the mix samples in accordance with Section 10.
- 9.5. *With the aggregate samples:*

- 9.5.1. Test the aggregate samples in accordance with Section 11.
- 9.6. *With the RAP samples:*
- 9.6.1. Test the RAP samples in accordance with Section 12.
- 9.7. *With the binder sample:*
- 9.7.1. Test the binder sample in accordance with Section 13.
- 9.8. *With the field compacted mix samples:*
- 9.8.1. Test the field compacted mix samples in accordance with Section 14.

10. ACCEPTANCE LAB MIX TESTING REQUIREMENTS

- 10.1. With the 1 sample selected in Section 9.4.1, perform Idaho IT 157.
- 10.2. With each of the 3 samples selected in Section 9.4.2 retain 1 box of each sample for dispute resolution testing. With the remaining box from each sample, reduce in accordance with FOP for AASHTO R 47 and perform the volumetric testing shown in Table 10.1.
- 10.2.1. Report results on the most current ITD-773 form and include copies of all original source documents.

Table 10.1 – Test Strip Mix Volumetric Testing Requirements.

| Test Method | Increments Per Sample |
|----------------------------------|-----------------------|
| FOP for AASHTO T 308 | 1 |
| FOP for AASHTO T 30 | 1 |
| FOP for AASHTO T 312 | 2 |
| FOP for AASHTO T 166 Method A | 2 |
| FOP for AASHTO T 209 | 2 |
| FOP for AASHTO T 329 | 1 |

- 10.3. With the 2 samples selected in Section 9.4.3 retain 1 sample for dispute resolution testing.
- 10.3.1. With the remaining sample, blend and reduce in accordance with FOP for AASHTO R 47 to within (plus or minus) 15.0 grams of the desired sample size. Fine tune by hand to the desired sample size and perform the performance testing shown in Table 10.2.
- 10.3.2. Report results on the most current ITD-773 form and include copies of all original source documents.

Table 10.2 – Test Strip Mix Performance Testing Requirements.

| Test Method | Increments ^(a) Per Sample |
|--------------|--------------------------------------|
| AASHTO T 324 | 4 |
| ASTM D 8225 | 3 |

^(a) An increment is considered a single SGC puck.

11. ACCEPTANCE LAB AGGREGATE TESTING REQUIREMENTS

- 11.1. With one of the 2 samples selected in Section 9.5.1, reduce in accordance with FOP for AASHTO R 76 and perform the testing shown in Table 11.1.
- 11.1.1. Retain remaining 1 sample for testing, test remaining 1 sample if the first sample fails.
- 11.1.2. Report results on the most current Department forms, include copies of all original source documents.

Table 11.1 – Test Strip Aggregate Testing Requirements.

| Test Method | Increments Per Sample |
|-------------------------------------------------------------|-----------------------|
| FOP for AASHTO T 335 | 1 |
| FOP for AASHTO T 255 | 1 |
| AASHTO T 304 Method A | 1 |
| FOP for ASTM D 4791 | 2 |
| FOP for AASHTO T 176 (Alternate Method 2, Mechanical) | 2 |
| AASHTO T 85 ^(a) | 3 |
| Idaho IT 144 ^(a) | 3 |

^(a) Department may elect to perform to confirm G_{sb} .

12. ACCEPTANCE LAB RAP TESTING REQUIREMENTS

- 12.1. With 1 of the samples selected in Section 9.6.1, reduce in accordance with FOP for AASHTO R 76 and perform the testing shown in Table 12.1.
- 12.1.1. Report results on the most current Department forms include copies of all original source documents.

Table 12.1 – Test Strip RAP Testing Requirements.

| Test Method | Increments Per Sample |
|--------------------------------------------------|-----------------------|
| FOP for AASHTO T 255 (Controlled Heat Source) | 1 |
| Idaho IT 146 ^(a) | 1 |
| ASTM D8159 ^(a) | 1 |
| AASHTO T 30 ^(a) | 1 |
| AASHTO T 308 ^(a) | 1 |

^(a) The Department may confirm the RAP G_{sb} .

13. ACCEPTANCE LAB BINDER TESTING REQUIREMENTS

- 13.1. With the one sample selected in Section 9.7.1, select 2 quarts for Department acceptance testing and 1 quart for challenge resolution. Perform the testing shown in Table 13.1.
- 13.1.1. Report results on the most current Department forms, include copies of all original source documents.

Table 13.1 – Test Strip Binder Testing Requirements.

| Test Method | Increments Per Sample |
|-----------------------------|-----------------------|
| Idaho IT 99 | 1 |
| AASHTO M 320 ^(a) | 1 |
| ASTM D 8159 ^(a) | 1 |

^(a) See QA Manual Sections 230.10. Meet the requirements of Standard Specifications Sections 702.01 and 702.06.

14. ACCEPTANCE LAB FIELD COMPACTED MIX TESTING REQUIREMENTS

14.1. With the each of the 10 samples selected in Section 9.8.1, separate two or more pavement courses, lifts, or layers per FOP for AASHTO R 67. Perform the testing shown in Table 14.1.

14.1.1. Report results on the most current Department forms, include copies of all original source documents.

Table 14.1 – Field Compacted Mix Testing Requirements.

| Test Method | Increments Per Sample |
|--------------------------------------------------------------|-----------------------|
| FOP for AASHTO T 166 Method A or AASHTO T 331 ^(a) | 1 |

^(a) Use the average G_{mm} from testing performed in Section 10 to compute the in-place density of the cores.

15. ACCEPTANCE LAB TEST STRIP RESULTS REPORTING PROCEDURE

15.1. Report the results of each test performed on the most current Department forms, include copies of all original source documents and sample tracking forms in the report.

15.1.1. Each original source document will be signed by the testing technician.

15.2. The lab manager or the lab manager's qualified designated agent will fully review the report and all supporting documents for completeness.

15.3. Submit a complete electronic copy of the report to the Engineer for distribution with ample time to allow the Engineer time to review and determination of test strip acceptance.

16. EVALUATING ACCEPTANCE TEST STRIP RESULTS

16.1. The Engineer, upon receipt of the results from 15.3, will determine acceptance of the test strip as follows:

16.1.1. Use the Department approved method (e.g., Department provided spreadsheet or web portal) to perform the quality level analysis and determine acceptance as specified in 106.03.B and 405.03.I.

16.2. *Review of hot plant calibration records:*

- 16.2.1. Verify that the calibration records meet Idaho IR 155. If they do not match the most recent plant calibration record that was witnessed, perform a calibration verification in accordance with Idaho IR 155.
- 16.3. *Review of hot plant printout:*
- 16.3.1. Use the ITD-774 form to verify that the hot plant printout indicates the individual cold feed percentage for aggregate, cold feed percentage for RAP, asphalt content for the RAP, and virgin binder meet the requirements of 405.03.I.

17. ACCEPTANCE OF THE TEST STRIP

- 17.1. The test strip is considered acceptable when it meets 405.03.I.6.

18. EXAMPLE OF DETERMINING THE TEST STRIP SAMPLING SCHEDULE

Example: During the pre-paving meeting, the Contractor informs the Engineer that they will be performing an onsite test strip on April 19th. They anticipate paving 2,130 tons.

The Engineer will use this information to develop a test strip sampling schedule as follows:

For plant mix:

- The plant mix sampling frequency is calculated by dividing 2,130 by 6.
- Sampling frequency for plant mix is 1 sample per 355 tons.
- Use a 355 ton sample frequency and 6 samples, perform Idaho IR 148 to determine the sampling schedule to obtain 6 stratified random, samples of plant mix.
- Obtain plant mix samples in accordance with AASHTO R 97 per the sampling schedule.

For cold feed aggregate:

- Before sampling asphalt mix, obtain 1 cold feed aggregate sample by Conveyor Belt Method A or Method B of FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.
- After sampling asphalt mix, obtain 1 cold feed aggregate sample by Conveyor Belt Method A or Method B of FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.

For RAP (if used):

- Before sampling asphalt mix, obtain 1 RAP sample by FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.
- After sampling asphalt mix, obtain 1 RAP sample by FOP for AASHTO R 90. Conveyor Belt Method B is the preferred method if automatic sampling devices are available.

For binder:

- Use a 2,130 ton sample frequency and 1 sample, perform Idaho IR 148 to determine the sampling schedule to 1 stratified, random samples of binder.
- Obtain 1 binder sample (consisting of 3, 1-quart cans) in accordance with FOP for AASHTO R 66 per the sampling schedule.

For field compacted mix:

- The field compacted mix sampling frequency is calculated by dividing 2,130 by 10.
- Sampling frequency for plant mix is 1 sample per 213 tons.
- Use a 213 ton sample frequency and 10 samples, perform Idaho IR 148 to determine the sampling schedule to obtain 10 stratified random, samples of field compacted mix.
- Obtain field compacted mix samples in accordance with AASHTO R 67 per the sampling schedule.

Idaho Standard Practice for**Superpave Volumetric Mix Design**

IDAHO Designation: IR-150-21

1. SCOPE

- 1.1. This practice describes the requirements for developing a Superpave mix design.
- 1.2. *This standard practice may involve hazardous materials, operations, and equipment. This standard practice does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. BACKGROUND

- 2.1. Developing a mix design is a function of quality control (QC). A mix design is developed to find a combination of aggregates, recycled materials, asphalt, and additives to produce a roadway that meets the Department's specifications.
- 2.2. The end result of a successful mix design is a recommended mixture of aggregate and asphalt binder. This recommended mixture, which also includes aggregate gradation and asphalt binder type, is the job mix formula (JMF).
- 2.3. A JMF is a recipe for the plant to make. The mix design is the development of that recipe. A mistake in the design process can disrupt a project's schedule dramatically and have a big impact to the overall quality of the finished roadway. The development of the JMF is a QC process. It is the Contractor's responsibility to ensure that their mix design and resulting JMF will result in a mix that meets the contract requirements as determined by the Department's testing.
- Note:** A JMF is only as good as the information that was used to develop it. A good mix design can help limit issues in production.
- 2.4. The mix design evaluation is for the Department to use to validate that the recipe was properly developed and the resulting JMF appears that the mix produced will meet the contract requirements.

3. REFERENCE DOCUMENTS

- 3.1. AASHTO Standards
- M 323, Superpave Volumetric Mix Design
 - R 30, Mixture Conditioning of Hot-Mix Asphalt (HMA)
 - R 35, Superpave Volumetric Design for Asphalt Mixtures
 - R 76, Reducing Samples of Aggregate to Testing Size
 - R 90, Sampling Aggregate Products
 - T 11, Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
 - T 27, Sieve Analysis of Fine and Coarse Aggregates

- T 84, Specific Gravity and Absorption of Fine Aggregate
- T 85, Specific Gravity and Absorption of Coarse Aggregate
- T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
- T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
- T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)
- T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method

3.2. Idaho Standards:

- IT 144, Specific Gravity and Absorption of Fine Aggregate Using Automatic Vacuum Sealing Method
- IT-146, Determination of Recycled Asphalt Pavement (RAP) Aggregate Dry Specific Gravity G_{sb}
- Standard Specifications for Highway Construction

3.3. WAQTC/Idaho FOPs

- R 76, Reducing Samples of Aggregate to Testing Size
- R 90, Sampling Aggregate Products
- T 11, Materials Finer Than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
- T 27, Sieve Analysis of Fine and Coarse Aggregates
- T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
- T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
- T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor
- WAQTC TM 13, Volumetric Properties of Hot Mix Asphalt
- WAQTC TM 14, Laboratory Prepared Asphalt Mixture Specimens

3.4. ASTM Standards

- D8159, Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer)
- D8255, Determination of cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile cracking Test at Intermediate Temperature

3.5. *Other Standards*

- Asphalt Institute MS-2, Asphalt Mix Design Methods, 7th Edition

4. SPECIFIC GRAVITY OF AGGREGATE AND RAP

- 4.1. Use the bulk dry specific gravity of aggregate (G_{sb}) established by the Department for each stockpile when developing the mix design and performing calculations.

5. MIX DESIGN REQUIREMENTS

- 5.1. Develop a Superpave mix design in accordance with AASHTO R 35 that will result in a plant-produced mixture that meets the contract requirements.
- 5.2. The mix design must be developed by an individual that is qualified by the Department as a Superpave mix design technician (SPMDT).
 - 5.2.1. The specific tests required during the mix design process must be performed by an individual qualified by the Department for the specific test method.
- 5.3. The mix design must be reviewed, approved, signed, and sealed by an Idaho-licensed professional engineer responsible for the mix design.
- 5.4. Use a Department-qualified Superpave mix design laboratory for developing the design.

6. MIX DESIGN REPORT REQUIREMENTS

- 6.1. Provide a single job mix formula (JMF) reported on an ITD-774 form.
- 6.2. Attach all supporting documentation and data used in developing the JMF.
 - 6.2.1. Include signature(s) and WAQTC/PE license number(s) for testers and reviewers on each sheet.
Note: The design will be reviewed by the Department in accordance with Idaho IR 151. Ensure that the report has all information required to complete the review. Incomplete or missing information will result in rejection of the mix design.

7. MIX DESIGN SUBMITTAL

- 7.1. Submit the mix design and all supporting documentation via email to mixdesigns@itd.idaho.gov and the Engineer.
- 7.2. Each mix design submitted for approval must be accompanied by a Microsoft® Excel® electronic version of the ITD-774 form specific to the mix design.
- 7.3. Only 1 mix design per email notification will be accepted. Submit the mix design for evaluation a minimum of 5 business days before paving is scheduled to begin.
- 7.4. Upon submittal, the Department will give the mix design a unique identifier number. This will be the mix design number. Keep this number for your records.

8. AMENDING THE MIX DESIGN

- 8.1. If the mix design is required to be amended per 405.03.B.1.b.i.1, amend the mix design the following process:
 - 8.1.1. Each page of the mix design that is revised or added is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The amendment is required to be signed and dated by the Contractor's representative who is responsible for developing the mix design and subsequently signed and dated when approved by the Engineer.
- 8.2. Amending the mix design or JMF is not allowed once the mix design has been approved by the Department.

9. APPROVED MIX DESIGNS

- 9.1. The Department will maintain a list of approved mix designs listed by Department generated mix design number. Mix designs are not approved for use unless they are listed.

Idaho Standard Practice for**Superpave Mix Design Evaluation**

IDAHO Designation: IR-151-21

1. SCOPE

- 1.1. This practice describes the procedures for evaluating a Superpave mix design, mix design requirements, and the time required to perform the evaluation.
- 1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. BACKGROUND

- 2.1. When reviewing a mix design, it is important to keep in mind the following:
- 2.2. A mix design is solely a function of quality control (QC). A mix design is developed to find a combination of aggregates, recycled materials, asphalt, and additives to use to produce a roadway that meets the Department's specifications.
- 2.3. The end result of a successful mix design is a recommended mixture of aggregate and asphalt binder. This recommended mixture, which also includes aggregate gradation and asphalt binder type is the job mix formula (JMF).
- 2.4. A JMF is a recipe for the plant to make. The mix design is the development of that recipe. A mistake in the design process can disrupt a project's schedule dramatically and have a big impact to the overall quality of the finished roadway. However, developing the JMF is a QC process. It is the Contractor's responsibility to ensure that their mix design and resulting JMF will result in mix that meets the contract requirements.
Note: A JMF is only as good as the information that was used to develop it. A good mix design can help limit issues in production.
- 2.5. The mix design evaluation is for the Department to use to validate that the recipe was properly developed and the resulting JMF appears that the mix produced will meet the contract requirements.

3. REFERENCE DOCUMENTS

- 3.1. *Idaho Procedures:*
- IT-150, Superpave Volumetric Mix Design
 - Standard Specifications for Highway Construction

4. SUBMITTAL OF MIX DESIGN

- 4.1. The Contractor must submit the asphalt mix design in accordance with Idaho IR 150.

5. RECEIPT OF MIX DESIGN SUBMITTAL

- 5.1. Upon receipt of the mix design submittal, the mix design will be given a unique identifier number.

6. REVIEW OF MIX DESIGN SUBMITTAL

- 6.1. The Department will review all Superpave mix designs proposed for use before use. The Department recognizes the risk associated with each paving application varies. Therefore, the extent of each mix design review will be in accordance with these potential risks.
- 6.2. The mix design will be reviewed by the Engineer, the Central Materials Laboratory, and the State Construction and Materials Engineer.
- 6.3. The reviewers may contact the mix designer or the professional engineer responsible for the mix design during the review process for further information or clarifications.
- 6.4. All mix designs will be reviewed for the following:
- 6.4.1. Accuracy.
- 6.4.2. Completeness.
- 6.4.3. Reasonableness. Examples of items that will be check for reasonableness include, but are not limited to, ensuring that calculations were done correctly and that the volumetric data follows the expected trends (i.e., binder absorption not being dependent on asphalt content).
- 6.4.4. Compliance with specifications.
- 6.4.5. Compliance with Idaho IR 150.
- 6.5. When amendments are made to the mix design submittal, the current review will be ended and the amended mix design will be considered a new submittal.
- 6.5.1. Amendments must meet the requirements of Idaho IR 150.

7. REVIEW OF PREVIOUSLY USED MIX DESIGNS

- 7.1. A mix design reviewed and accepted for a previous or current project may be submitted in writing for use on a new project. Acceptance of the mix design will be based on meeting the following requirements in addition to the requirements of Section 3:
- 7.1.1. The proposed mix design is of the type required for the new project.
- 7.1.2. The mix produced on previous projects utilizing the proposed mix design was of good quality (e.g., the combined average PWL on all the previous project(s) was ≥ 90 PWL for all mix quality characteristics).
- 7.1.3. The mix design is not classified as expired in accordance with 405.03.B.2 of the Standard Specifications.

8. MIX DESIGN REVIEW TIMEFRAME

- 8.1. The Department will review the mix design within 5 business days after receiving the full submittal package.

9. APPROVAL OF MIX DESIGN

- 9.1. The Department will maintain a list of approved mix designs. Upon approval, the mix design will be placed on this list.

10. REJECTION OF MIX DESIGN

- 10.1. The Department will notify the Contractor upon rejection of a mix design via email.
- 10.1.1. The Department will provide details as to why the mix design was rejected.
- 10.2. Notification of the rejection will be sent to the email address given on the ITD-774 form.

Idaho Standard Practice for**ASPHALT MIXTURES QUALITY CONTROL PLAN (QCP)
DEVELOPMENT AND IMPLEMENTATION****IDAHO Designation: IR-152-21**

1. PURPOSE

- 1.1. The purpose is to establish minimum requirements for the Contractor's quality control system and quality control plan (QCP) for asphalt mixtures. It is intended that these requirements be used as a procedural guide in detailing the inspection, sampling, and testing deemed necessary to maintain compliance with the Department's specifications. The Department and the Contractor must hold a pre-pave meeting and document the decisions and agreements made. An example of a pre-pave meeting agenda is provided in the Appendix. Conducting a thorough pre-pave meeting increases partnership as well as it can only increase the likelihood of success of each party.

2. SCOPE

- 2.1. This procedure is applicable to the production and construction of asphalt mixtures.

3. REFERENCE DOCUMENTS

- 3.1. Idaho Standards
- IR 158, Quality Control Plan Development.
 - IR 160, Evaluation and Approval of HMA Plants and Equipment.
 - IR 155, Procedures for Checking Asphalt Drum Mix Plants

4. GENERAL REQUIREMENTS

- 4.1. As stated in the Standard Specifications for Highway Construction, a QCP must be developed by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method. For this reason, the QCP will clearly describe the methods by which the quality control program will be conducted. For example, the items to be controlled, tests to be performed, testing frequencies, sampling locations, and techniques will be included with each item listed separately. Also include a table stating what actions will occur when test results indicate specification limits are approached or exceeded. See Table 1 at end of this guide for an example. Also, a detailed plan of action regarding disposition of non-specification material will be included. Such a plan will provide for immediate notification of all parties involved in the Quality Assurance process in the event nonconforming situations are detected. Example 1. HMA Quality Control Plan may be used as an example.
- 4.2. Inspection and testing records must be maintained, kept current, and made available for review by Department personnel throughout the life of the contract. All other documentation (e.g., date of inspections, tests performed, temperature measurements, and accuracy, calibration or re-calibration checks performed on production of testing equipment) will be recorded.
- 4.3. The Contractor will maintain standard equipment and qualified personnel in accordance with the contract and specification requirements for the item(s) being produced.

5. QUALITY CONTROL PLAN

- 5.1. Operation quality control plans will be submitted for each contract/project to the Engineer for review and approval. Include a Plant Quality Control Plan that meets the requirements of Idaho IR 160. Distribution of the approved quality control plans will be made by the Engineer.
- 5.2. Example 1. HMA Quality Control Plan is provided only as an acceptable template that contains the required information is attached.

6. ADDENDA TO THE QUALITY CONTROL PLAN

- 6.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with Department Specifications and subsequently signed and dated when approved by the Engineer.

Table 1: Example of QC Actions to Implement When Approaching or Exceeding Specification Limits

| Test Description | Test Method | QC Action Limits | | Situation | | Action |
|--------------------------------------------------|------------------------------------------------------------------------------------------------|------------------|-----------------------------------|--------------------------------------|-----------------------------------|-------------------------------------------------------------------------------|
| | | Single Test | 4-Point Moving Avg. or Daily Avg. | Single Test | 4-Point Moving Avg. or Daily Avg. | |
| Binder Content, P _b | FOP for AASHTO T 168 and FOP for AASHTO R 47 and FOP for AASHTO T 308 and FOP for AASHTO T 329 | ± 0.6 | ± 0.3 | Approaching Limit | Approaching Limit | Discuss with hot mix plant, operator, and may suspend construction process |
| Aggregate Gradation | FOP for AASHTO T 30 (wash method used for all gradation measurements) | NA | C-JMF | 4 percent on +#4 2 percent on -#4 | Approaching Limit | Increase frequency of tests and prepare for process modification |
| Air Voids @ N _{design} , P _a | WAQTC TM 13 | ± 1.0% | NA | 2 tests over ± 1% | NA | Initiate C-JMF Modifications |
| VMA @ N _{design} | WAQTC TM 13 | ≤ 1% min | ≥ min | 3 tests over ± 1% | Approaching Limit | Discuss with the Engineer & Process Modification |
| Dust Proportion, DP | WAQTC TM 13 | NA | ≥ min ≤ max | Approaching Limit | Approaching Limit | Modify C-JMF |
| G _{mm} | FOP for AASHTO T 168 and FOP for AASHTO R 47 and FOP for AASHTO T 209 (Bowl Method) | C-JMF | C-JMF | Approaching Limit | Approaching Limit | Modify C-JMF or Redesign |
| G _{se} | WAQTC TM 13 | C-JMF | C-JMF | Approaching Limit | Approaching Limit | Modify C-JMF or Redesign |
| Rut Depth, mm | AASHTO T 324 | ≥ min | NA | Approaching Limit | NA | Discuss with the Engineer & initiate investigation, modification, or redesign |
| Stripping, passes | AASHTO T 324 | ≥ min | NA | Approaching Limit | NA | Discuss with the Engineer & initiate investigation, modification, or redesign |
| Cracking, FI | AASHTO TP 124 | ≥ min | NA | Approaching Limit | NA | Discuss with the Engineer & initiate investigation, modification, or redesign |
| Mainline Density | Idaho IR 156, and FOP for AASHTO T 355 or FOP for AASHTO T 343 | NA | ≥ min | Approaching < 92% | ≤ 100% Pay | Notify the Engineer |

Note: When 2 consecutive test results fail or if any of the 4-point moving average values fail, production will be suspended and the situation discussed with the Engineer. The process will be corrected before production resumes.

EXAMPLE 1
HMA Quality Control Plan – General Overview (Details provided in PrePave Meeting/Project Specific)

NOTE: This is provided only as an acceptable template; other options/formats are acceptable

Date:

To: (RESIDENT ENGINEER)

From: (CONTRACTOR(s) NAME)

Subject: HMA Quality Control Plan

1. Project Information

1.1. We are submitting our HMA Quality Control Plan, developed in accordance with Idaho IR 152, Idaho IR, 158, and Idaho IR 160 for:

Project Number: _____

Lead Key Number: _____

Date Submitted: _____

1.2. (NAME) is responsible for ensuring that all items of work will comply with the contract and Department specifications.

2. Hot Plant

2.1. General Information:

Make: _____

Type: _____

Address of Plant: _____

2.2. The hot plant operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

2.3. Current calibration and verification status of plant and history of plant inspection program attached in Exhibit A.

2.4. The Hot Plant Quality Control Plan, developed in accordance with Idaho IR 160 and approved on (DATE) by (NAME OF PERSON(s)) is attached in Exhibit B.

3. Mix Designs

3.1. Mix designs will be the responsibility of (NAME OF PERSON(s)), WAQTC number (NUMBER(s)).

3.2. The HMA design(s) to be used are attached in Exhibit C.

- 3.3. Before production, (NAME), (WAQTC NUMBER), will submit our HMA mix design for each type of mix in accordance with the contract and specifications by (DATE). Only allowable and approved materials will be incorporated in the mix.

4. Delivery and Placement

- 4.1. The field operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).
- 4.2. (LIST OF EQUIPMENT TYPE, MAKE).
- 4.3. (DETAILED DESCRIPTION OF THE PRODUCTION AND PLACEMENT PROCESS).

5. Quality Control Sampling and Testing,

- 5.1. The laboratory performing quality control testing is (LAB QUALIFICATION NUMBER), located at (LOCATION).
- 5.2. The quality control program is under the direction of (NAME OF PERSON), who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).
- 5.3. During the placement operations of the HMA pavement we will perform at a minimum quality control tests per attached schedule. Sampling and testing is the responsibility of (NAME(s), WAQTC number (NUMBER(s))).
- 5.4. Sampling and testing is the responsibility of (NAME OF PERSON(s)), WAQTC number (NUMBER(s)).
- 5.5. During the production operations of the HMA (NAMES) will perform, at a minimum, quality control tests in accordance with the attached schedule. Also attached are the proposed method to select locations and/or times for sampling. See Exhibit D.
- 5.6. All testing will be completed by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of sampling and all original documentation of results will be completed on the attached original documentation forms. See Exhibit E.
- 5.7. Testing reports and original source documents will be reviewed and checked by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of testing being completed. All reporting will be completed on the attached forms. See Exhibit F.

EXAMPLE 1 (CONTINUED)
HMA Quality Control Plan

6. Records.

- 6.1. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) during the life of the contract/project.
- 6.2. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) for (YEARS) after the completion of the project.

7. Notifications.

- 7.1. Any material found to be noncomplying will be addressed by (NAME) who will notify the Engineer immediately.
- 7.2. (NAME) will notify appropriate Department personnel at least 48 hours before any work is to begin.

8. Nonconforming Material.

- 8.1. (STATE THE PROCESS FOR DISPOSITION OF NONCONFORMING MATERIAL)
- 8.2. See the Exhibit G for what actions will occur when test results indicate specification limits are approached or exceeded.

Attachments:

Exhibit A – Current calibration and verification status of plant and history of plant inspection program

Exhibit B – Hot Plant Quality Control Plan

Exhibit C – HMA Mix Design

Exhibit D – Minimum QC Testing Schedule, Sampling and Testing Methods, and Location(s)

Exhibit E – Original Test Documentation Form Template(s)

Exhibit F – Test Reporting Form Template(s)

Exhibit G – Table of QC actions when approaching or exceeding specification limits

Idaho Standard Practice for Split Sample Comparison



IDAHO Designation: IR-153-21

1. SCOPE

- 1.1. This Standard Practice is used to compare 2 or more sets of test results in order to measure the testing variability of different parties (e.g., Department vs. Contractor).

2. BACKGROUND

- 2.1. There are 4 primary components or sources of inherent variability in individual test results for material samples. These components of inherent variability are:

- Sampling Variability
- Testing Variability
- Material Variability
- Construction Variability

- 2.1.1. **Sampling variability** is caused by variation that is inherent in the sampling methods or procedures used to obtain a material sample. Even when the person obtaining a sample carefully follows standard sampling methods or procedures, some amount of sampling variability will occur.

- 2.1.2. **Testing variability** is the result of variation inherent in performing a test method and variation inherent in the test equipment. Even when the person performing a test carefully follows standard testing methods and even when the test equipment is properly calibrated, some amount of testing variability will occur.

- 2.1.3. **Material variability** is essentially due to the inherent variation that naturally exists in a given material. It is quite unrealistic to expect perfect homogeneity in any raw or processed source of construction materials (e.g., soils, aggregate, HMA, PCC, steel, paint). The inherent variation for most construction materials, on a relative basis, is usually small.

- 2.1.4. **Construction variability** is the result of variation that is inherent in production methods and construction operations. The largest amount of construction variability is generally attributed to the production and placement process.

- 2.1.5. Additional construction variability (i.e., beyond the expected or accepted range) can be introduced through inconsistent production methods and construction operations. This is why good, consistent quality control, both at the source/plant and in the field, is essential in minimizing the amount of construction variability as a component of overall inherent variability.

- 2.1.6. Additional sampling variability and testing variability (i.e., beyond the expected or accepted range) can be introduced through deviations from standard sampling method and test procedures by the person(s) performing the sampling and testing, or as a result of test equipment that is not properly calibrated or properly functioning. Sampling and testing variability, combined, have been stated as comprising up to 50 percent of the total overall variation in test results. Specification

limits were developed to take standard sampling and testing variability into account. However, it is important not to compound or add to the expected range of inherent variability due to sloppy practices. Consistent and careful adherence to proper sampling and testing procedures can minimize these two components of overall inherent variability.

3. REFERENCE DOCUMENTS

2.1 *AASHTO Standards*

- FOP for R 90, Sampling of Aggregates
- R 76, Reducing Samples of Aggregates to Testing Size
- T 255, Total Evaporable Moisture Content of Aggregate by Drying
- FOP for T 27, Particle Size Distribution of Aggregate
- FOP for T 11, With Materials Finer than 75um (No. 200) Sieve in Mineral Aggregate by Washing
- T 335, Determining the Percentage of Fracture in Coarse Aggregate
- T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test
- R 97, Sampling Asphalt Mixtures
- R 47, Reducing Samples of Hot Mix Asphalt (HMA) to Testing Size
- T 329, Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
- T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- T30, Mechanical Analysis of Extracted Aggregate
- T 209, Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt Paving Mixtures
- T 167, Standard Method of Test for Compressive Strength of Hot Mix Asphalt
- T 166, Bulk Specific Gravity of Compacted Hot Mix Asphalt using Saturated Surface-Dry Specimens
- R 30, Mixture Conditioning of Hot-Mix Asphalt (HMA)
- FOP for R 66, Sampling Asphalt Materials
- T 164, Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
- T 319, Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures
- T 303, Lime for Asphalt Mixtures
- T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor
- T 324, Hamburg Wheel-Track Testing of Compacted Hot Mix Asphalt (HMA)
- T 33, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method
- R 79, Standard Practice for Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus
- T 269, Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
- T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage
- TM 13, Volumetric Properties of Hot Mix Asphalt

- R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)
- T 309, Temperature of Freshly Mixed Portland Cement Concrete
- T 119, Slump of Hydraulic Cement Concrete
- T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
- T 152, Air Content of Freshly Mixed Concrete by the Pressure Method
- T 23, Method of Making and Curing Concrete Test Specimens in the Field
- T 265, Laboratory Determination of Moisture Content of Soils
- T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and 305-mm (12-in.) Drop
- T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and 457-mm (18-in.) Drop
- T 85, Specific Gravity and Absorption of Course Aggregate
- T 355, Determining the Percentage of Fracture in Coarse Aggregate
- T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture
- T 304, Uncompacted Void Content of Fine Aggregate
- R 64, Standard Practice for Field Sampling and Fabrication of 50-mm (2-in) Cube Specimens using Grout (Non-Shrink) or Mortar
- T 359, Pavement Thickness by Magnetic Pulse Induction

ASTM Standards

- FOP for D 4791, Flat and Elongated Particles in Coarse Aggregate
- D 1075, Standard Test Method for Effect of Water on Compressive Strength of Compacted Bituminous Mixtures (Immersion-Compression)
- D 6857, Standard Test Method for Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method
- D 8159, Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™)
- D 8225, Standard Method of Test for Determination of Cracking Tolerance Index of Asphalt Mixture Using the Indirect Tensile Cracking Test at Intermediate Temperature

Idaho Standards

- IT 13, Measuring Mortar-Making Properties of Fine Aggregate Idaho
- IT 15, Degradation
- IT 72, Evaluating Cleanness of Cover Coat Material
- IT 74, Vibratory Spring-Load Compaction for Coarse Granular Material
- IT 116, Disintegration of Quarry Aggregates (Ethylene Glycol)
- IT 144, Specific Gravity and Absorption of Fine Aggregate Using Automatic Vacuum Sealing (CoreLok) Method
- IT 61, Sampling and Viscosity Testing Emulsified Asphalt Binders in the Field

- IT 146, Determination of Reclaimed Asphalt Pavement (RAP) Aggregate Bulk (Dry) Specific Gravity (G_{sb})
- IR 128, Sampling Concrete for Chloride Analysis
- IT 131, Total Chloride Content of Hardened Concrete by Gran Plot Method
- IT 133, Determination of the Rate of Evaporation of Surface Moisture from Concrete
- IR 143, Field Sampling of Hydraulic Cement and Fly Ash
- IT 147, Measuring Texture Depth of Portland Cement Concrete Using a Tire Tread Depth Gauge
- IR 7, Inspecting/Sampling Paint and Curing Compound
- IT 121, Determining Total Solids-Latex Percent
- IT 8, Resistance R-Value and Expansion Pressure of Compacted Soils and Aggregates
- IR 162, Taking Undisturbed Soil Samples for Laboratory Consolidation, Shear and Permeability Tests
- Idaho Transportation Department Quality Assurance Manual

WAQTC Standards

- TM 13, Volumetric Properties of Hot Mix Asphalt
- TM 2, Sampling Freshly Mixed Concrete
- IR 87, Pavement Straightedge Procedures
- IT 120, Determining Volume of Liquids in Horizontal or Vertical Storage Tanks

4. SUMMARY OF THE PRACTICE

- 4.1. This practice describes the testing and analysis needed to perform a comparison of split samples tested by different parties against an allowable degree of test result difference attributed to testing variability.

5. TERMINOLOGY

- 5.1. *Individual Split Sample Acceptable Range*— The allowable tolerance between individual split sample test results when properly sampled and split.
- 5.2. *Paired t-Test*— Uses the difference between each pair of tests of the split samples and determines whether the difference is much different from zero.
- 5.3. *Split Increment*— A representative portion of a split sample that is larger than the minimum size needed for a single party to perform the desired testing.
- 5.4. *Split Sample*— A sample that will be used for split sample comparison testing.

6. MATERIAL SAMPLING AND SPLITTING AND TESTING

- 6.1. Obtain a sample in accordance with the Department's approved sampling procedure.

- 6.1.1. Ensure that the sample is large enough for each party to receive a split increment larger than the minimum sample size.
- 6.2. Split each sample in accordance with the Department's approved splitting procedure.
- 6.2.1. Ensure that each split increment meets the minimum sample size for the testing to be performed.
- 6.3. Each party will test in accordance with Department's approved testing procedures.
- 6.4. Repeat steps 6.1 to 6.3 until the desired number of split samples are obtained to perform the analysis.
- Note:** It is recommended to compare a minimum of 3 split samples for material that will be subject to statistical based acceptance (e.g., HMA, aggregates)

7. COMPARISON OF RESULTS

- 7.1. Compare the split increments for each split sample using the D2S limits (Section 9).
- 7.2. Compare the sets of split increments for all split samples using the paired t-test (Section 8).
Note: The D2S comparison is simple and can be done for each split sample that is obtained. However, this procedure compares only 2 test results (from one split sample), and is not very powerful due to the limited amount of data being evaluated. The paired t-test, compares multiple sets of split samples, and is a better method for comparison since this test uses the differences between multiple pairs of tests and determines whether the average difference is statistically different from zero.
- 7.3. Use the ITD-1237 form to perform and report the comparison.
- 7.4. When differences in results have been identified, the parties will collaborate and investigate to determine the source of the inconsistency and make necessary corrections.
- 7.5. The possible source of the inconsistencies and any corrections made will be documented on the ITD-1237 form.

8. PAIRED T-TEST COMPARISON (RECOMMENDED)

- 8.1. Determine the individual difference between split sample test results (X_{dif}) for each split sample.

$$X_{dif} = X_A - X_B$$

Where:

X_{dif} = Individual difference between split sample test results.

X_A = Party A's individual test value.

X_B = Party B's individual test value.

Note: This difference is not the absolute difference, it is the algebraic difference. The subtraction (i.e., Party A's test value minus Party B's test value) is performed in the same direction for every set of split samples.

- 8.2. Determine the mean of the differences between the split sample test results, calculated as follows:

$$\bar{X}_{dif} = \frac{(X_{dif1} + X_{dif2} + \dots + X_{difn})}{n}$$

Where:

\bar{X}_{dif} = Mean of the differences between the split sample test results.

n = Number of split samples.

- 8.3. Compute the standard deviation of the differences between the split sample test results, calculated as follows:

$$S_{\text{dif}} = \sqrt{\frac{\sum(x_{\text{dif}} - \bar{X}_{\text{dif}})^2}{n - 1.0}}$$

Where:

S_{dif} = Standard deviation of the differences between the split sample test results.

- 8.4. Compute the paired t-statistic (t_{pair}) using the following equation:

$$t_{\text{pair}} = \frac{|\bar{X}_{\text{dif}}|}{\left(\frac{S_{\text{dif}}}{\sqrt{n}}\right)}$$

- 8.5. Compute the degrees of freedom (df). The degrees of freedom are the number of sample pairs (n) minus one, used to compute the t-statistic.

$$\text{df} = n - 1$$

- 8.6. Determine the two-tailed probability distribution (P-value) for the 2 data sets using the degrees of freedom (df) for a two-tailed t-test.

- 8.7. Compare the P-value to α (0.05).

- 8.7.1. If the P-value is greater than α , the paired t-test passes. There is reason to believe that the paired test results are similar and it can be concluded they are from the same population. (i.e., no differences in testing has been identified)

- 8.7.2. If the P-value is less than α , the paired t-test fails. The difference between the paired test results of the split samples is greater than is likely to occur from chance and therefore the results are not similar. (i.e., difference in testing has been identified)

9. D2S COMPARISON

- 9.1. Determine the individual difference between split sample test results (X_{dif}).

$$X_{\text{dif}} = X_A - X_B$$

Where:

X_{dif} = Individual difference between split sample test results.

X_A = Party A's individual test value.

X_B = Party B's individual test value.

- 9.1.1. For aggregates, compare X_{dif} to the QA Manual Table 390.01.1.

- 9.1.2. For concrete, compare X_{dif} to the QA Manual Table 390.01.2.

- 9.1.3. For HMA, compare X_{dif} to Table 1 in this method.

- 9.1.4. For all other materials, compare X_{dif} to the precision statement in the test method performed (if available).
- 9.2. If X_{dif} is greater than the individual split sample acceptable range, they are considered outside of allowable tolerances. (i.e., a difference in testing has been identified)

Table 1 – Allowable HMA Single Individual Split Sample Variations

| Test Method | Quality Characteristic | Acceptable Range of Split Sample Results |
|--------------|----------------------------|------------------------------------------|
| AASHTO T 308 | Asphalt Content (%) | 0.15 |
| AASHTO T 30 | 95 to 100% passing a sieve | 1.6 |
| | 40 to 94% passing a sieve | 3.5 |
| | 25 to 39% passing a sieve | 2.4 |
| | 10 to 24% passing a sieve | 2.3 |
| | 5 to 9% passing a sieve | 1.6 |
| | 2 to 4% passing a sieve | 1.2 |
| | 0 to 1% passing a sieve | 0.9 |
| AASHTO T 209 | G_{mm} | 0.012 |
| AASHTO T 166 | G_{mb} | 0.017 |
| WAQTC TM 13 | G_{sc} | 0.012 |
| | P_a | 0.30 |
| | VMA | 0.30 |
| | DP | 0.15 |

10. EXAMPLES

- 10.1. A Department lab and a Contractor lab performed a split sample comparison on 5 samples. The table below presents the split sample test results for theoretical maximum specific gravity (G_{mm}) to determine whether a difference exists between the Department's and the Contractor's results.

| Example 10.1 – AASHTO T 209 Results | | | |
|-------------------------------------|----------------------|----------------------|--------------------------|
| Split Sample Number | Contractor's Results | Department's Results | Difference (X_{dif}) |
| 1 | 2.396 | 2.405 | -0.009 |
| 2 | 2.368 | 2.374 | -0.006 |
| 3 | 2.377 | 2.381 | -0.004 |
| 4 | 2.395 | 2.390 | 0.005 |
| 5 | 2.381 | 2.379 | 0.002 |
| $\bar{X}_{dif} =$ | | | -0.0024 |
| $S_{dif} =$ | | | 0.00577 |
| P-value = | | | 0.405 |

- 10.1.1. Conclusion: Since the calculated P-value is greater than 0.05 (Section 8) and the X_{dif} of each test is less than the individual split sample acceptable range (Section 9), the split sample comparison indicates that there is not a significant difference in testing between these labs.

Idaho Standard Practice for Nuclear Density Gauge Correlation



IDAHO Designation: IR-154-21

1. SCOPE

- 1.1. This Standard Practice is used to determine the nuclear density gauge correlation for each nuclear gauge used for acceptance testing.
- 1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

- 2.1 *AASHTO Standards*
 - FOP for T 355, Method A, In-Place Density of Asphalt Mixtures by Nuclear Methods
 - FOP for R 67, Sampling Asphalt Mixtures After Compaction (Obtaining Cores)
 - FOP for T 166, Method A, Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens
 - T 331, Bulk Specific Gravity and Density of Compacted Asphalt Mixtures using Automatic Vacuum Sealing Method
- 2.2 *Idaho Standards*
 - Idaho IR 148, Stratified Random Sampling

3. SUMMARY OF THE PRACTICE

- 3.1. The bulk specific gravity (G_{mb}) of the core is a physical measurement of the in-place asphalt mixture and can be compared with the nuclear density gauge readings. Comparing the core value to the corresponding gauge values, a correlation can be established.
- 3.2. The correlation can then be used to adjust the gauge readings to the in-place density of the cores. The core correlation is gauge-specific and must be determined without traffic allowed on the pavement between nuclear density gauge readings and obtaining the core. When using multiple nuclear density gauges, each gauge will be correlated to the core locations before removal of the core.
- 3.3. Correlation of the nuclear density gauge with pavement cores must be made on the first lot of paving (within 24 hours) or anytime a change of the testing conditions occurs (see Section 8).

Note: The Department must correlate all gauges that will be used for acceptance testing for each gauge correlation section.

4. APPARATUS

- 4.1. *Density Gauge*— With accessory equipment as specified in FOP for AASHTO T 355.
- 4.2. *Coring Equipment*— With accessories as specified in FOP for AASHTO R 67 for collecting 6-inch diameter pavement cores.
- 4.3. *Measuring Device*— Approved measuring device capable of measuring gauge correlation section and sub-section lengths.

5. TERMINOLOGY

- 5.1. *Gauge Correlation Section*— Pavement placed during production paving that is used to correlate the nuclear density gauge(s) used for acceptance. The gauge correlation section must be constructed to the same placement width and thickness and on the same underlying material as the course it represents.
- 5.2. *Gauge Correlation Sub-Section*— A portion of the gauge correlation section in equal-length to other sub-sections that is represented by a single test location.
- 5.3. *Job Mix Formula (JMF)*— End result of a successful mix design that is the Contractor's selected mixture to be produced and includes the aggregate gradation and asphalt binder percentage.
- 5.4. *Test Location*— The stratified random location within a gauge correlation sub-section where testing will be performed.
- 5.5. *Test Site Density*— The uncorrected density reading taken on the compacted pavement after finish rolling is complete at a test site for correlation to cores. It is obtained by using the test procedure specified in FOP for AASHTO T 355 without applying a gauge correlation factor. Filler material must be applied as required in the procedure before taking test site density readings.
- 5.6. *Stratified Random Sampling* —Method used to ensure the specimens for the sample are obtained from throughout the test section, and are not concentrated in one portion of the test section. All sample locations will be determined by the Engineer using a random sampling system in accordance to Idaho IR 148.

6. PROCEDURE

- 6.1. *Determine the gauge correlation section and testing locations as follows:*
- 6.1.1. Gauge correlation for each correlation section will be within the first 1,000 tons and consist of a minimum of 1,000 feet of production and anytime there is a change of conditions (Section 8).
- 6.1.2. Divide the total length of the gauge correlation section into 10 equal-length sub-sections.
- 6.1.3. Identify a test location for each gauge correlation sub-section in accordance with IR 148.
- 6.2. *Determine the in-place density using the nuclear density gauge for each test location as follows:*
- 6.2.1. Determine in-place density using the nuclear density gauge(s) for each test location in accordance with FOP for AASHTO T 355.
- Note:** *It is recommended that the Contractor's QC personnel also determine in-place density at each test location to develop a correlation factor for QC purposes.*

- 6.2.2. The ITD-820 form will be used by the Department personnel as the original source document to record the test site densities for each gauge at each test location.
- 6.3. *Determine the bulk specific gravity (G_{mb}) for each sub-section as follows:*
- 6.3.1. After the pavement has cooled sufficiently to avoid deformation during coring, the Contractor will obtain 1 core at each test site from each segment in accordance with FOP for AASHTO R 67 in the Engineer's presence. The Engineer will immediately receive the cores. The relative position of the core to the nuclear gauge readings for each test location is illustrated in Figure 1.
Note: The Contractor may core for quality control purposes.
- 6.3.2. Determine the G_{mb} of each core in accordance with FOP for AASHTO T 166 Method A or AASHTO T 331.
Note: *Determine the G_{mb} of all cores for the gauge correlation section using the same procedure.*
- 6.3.2.1. Determine the bulk density of the each core by multiplying G_{mb} by 62.245 lb/ft^3 and report the value to the nearest 0.1 lb/ft^3 .
- 6.3.3. The ITD-820 form from Section 6.2.2 will be used by the Department personnel as the chain of custody documentation and the original source document used to record the G_{mb} of each core.

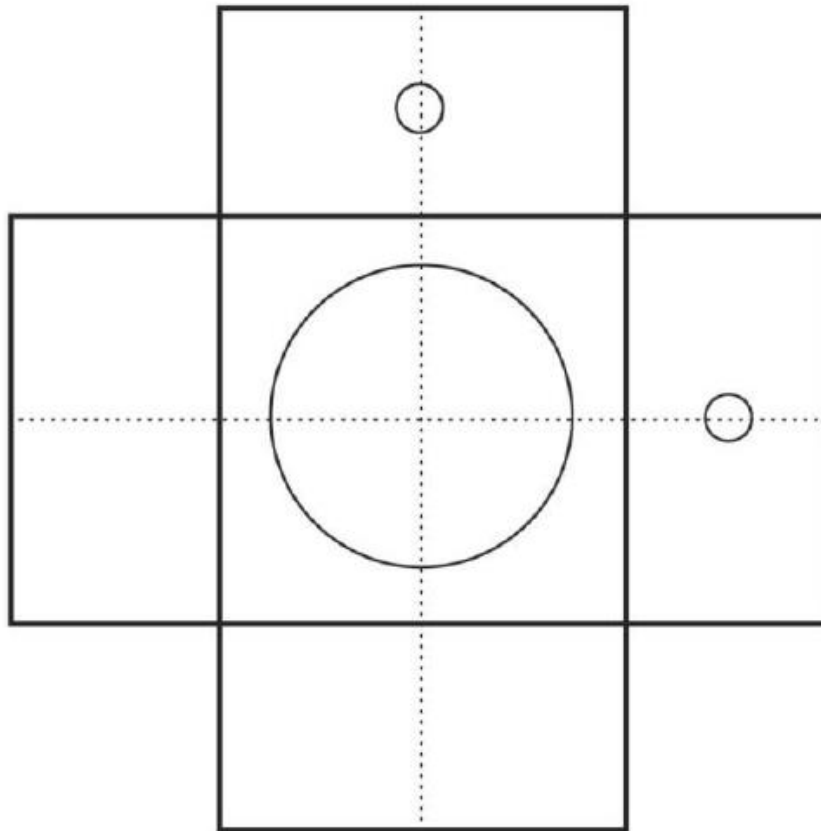


Figure 1. *Footprint of the gauge test site. Core location in the center of the test site.*

7. CALCULATION OF CORRELATION

7.1. *Calculate a correlation factor for the nuclear gauge reading as follows:*

7.1.1. Calculate the difference between the core density and nuclear gauge density at each test site to the nearest 0.1 lb/ft³. Calculate the average difference and standard deviation of the differences for the entire data set to the nearest 0.1 lb/ft³.

7.1.2. If the standard deviation of the differences is equal to or less than ± 2.5 lb/ft³, the correlation factor applied to the nuclear density gauge reading will be the average difference calculated in Section 7.1.1.

7.1.3. If the standard deviation of the differences is greater than ± 2.5 lb/ft³, the test location with the greatest variation from the average difference must be eliminated from the data set, and the data set properties and the correlation factor recalculated following Sections 7.1.1 and 7.1.2.

If the standard deviation of the modified data set still exceeds the maximum specified in Section 7.1.2, additional test sites will be eliminated from the data set, and the data set properties and the correlation factor will be recalculated following Sections 7.1.1 and 7.1.2. If the data set consists of less than 5 test locations, additional test sites must be established.

8. CHANGE OF CONDITIONS

8.1. A correlation factor is valid only for:

8.1.1. A specific project.

8.1.2. A specific JMF.

8.1.3. For the specific nuclear density gauges correlated.

8.1.4. Specific gauge thickness setting.

8.1.5. Specific gauge mode setting.

8.1.6. Specific underlying material.

8.1.7. Specific pavement thickness.

8.1.8. A specific pavement lift.

8.1.9. A specific calendar year.

8.2. Re-correlation of the gauge must occur when any of the above conditions change.

9. REPORT

9.1. The Department will report the results of testing on the ITD-820 form.

9.2. Project information.

9.3. Make, model, and serial number of the nuclear density gauge.

- 9.4. Stratified, random numbers.
- 9.5. Location of test and thickness of layer tested.
- 9.6. Underlying material.
- 9.7. Mixture type.
- 9.8. JMF identification.
- 9.9. Date.
- 9.10. Density standard.
- 9.11. Gauge readings.
- 9.12. Name and signature of individual performing AASHTO T 355.
- 9.13. Name and signature of individual performing AASHTO R 67.
- 9.14. Name and signature of individual performing AASHTO T 166 or T 331.
- 9.15. Nuclear gauge correlation to 0.1 lb/ft³.

Idaho Standard Practice for**Procedures for Checking Asphalt Mix
Plant Calibrations****IDAHO Designation: IR-155-21**

1. SCOPE

- 1.1. These procedures are used in conjunction with the Department's Standard Specifications for Highway Construction for checking asphalt drum mix plants to assess plant conformance. This procedure is used for original plant approval, annual plant approval, after plant relocation (if necessary), or trouble shooting. If, at any time the Engineer has reason to believe plant calibration should be checked and provides documentation supporting the reason(s), only the meter(s) or scale(s) in question will be considered verified if the indicated metered or scaled amount, at a production rate within the range stated in the Plant Quality Control Plan, is confirmed when within $\pm 1.0\%$ of the actual scaled or measured amount. Some variations from this procedure may be necessary depending upon the configuration of the plant, including volumetric plants.
- 1.1.1. Volumetric plants are defined as those plants that meter some or all constituent materials using volumetric metering, such as a volumetric asphalt meter rather than a mass flow meter, or aggregate feeder gate and conveyor speed settings rather than individual belt scales.
- 1.2. All calibration procedures stated below are required to be completed in the Department's presence for plant verification, unless the Department waives, in writing, witness of calibration. Documentation will be provided to the Department that the tests have been completed and meet specification tolerances. If the Engineer requests how to read and interpret the plant information provided, the Contractor will inform the Engineer.
- 1.3. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use. All individuals must comply with the Contractor's safety program requirements at the plant.*

2. MEASURING DEVICES

- 2.1. Any weighing device used for payment must meet Section 109.01.A.6.b.
- 2.2. All measuring devices must meet the current edition of the National Institute of Standards and Technology Handbook 44, except as modified by Table 2.1. The Contractor must provide all personnel and equipment for calibrating measuring devices.
- 2.3. Balance and zero conditions of scales must be checked daily, and at any other time requested by the Department. The Engineer may, at any time, direct that any measuring device be tested by the producer or an outside agency if there is any doubt about the accuracy of the measuring device. Certificates of inspection must be posted in a prominent place in the plant, and a copy must be promptly submitted to the Engineer.
- 2.4. Production plant tolerances must meet the following table:

Table 2.1

| Material | Measurement Tolerance ^(a) | Unit of Measure |
|-----------|--------------------------------------|------------------|
| Aggregate | 0.2% | Weight |
| RAP | 0.2% | Weight |
| Asphalt | 0.2% | Weight or Volume |
| Additives | 0.5% | Weight or Volume |

^(a) Measurement tolerance equals the smallest scale or meter graduation divided the quantity or volume measured (e.g., 20-pound graduations / 10,000 pounds measured = 0.2%)

3. BELT SCALES ON COLD FEEDERS

- 3.1. Use a certified scale(s) to check each individual belt scale, including RAP, at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within $\pm 1.0\%$. A minimum of 2 tests will be run at each range to check for repeatability and eliminate any outliers.
- 3.2. *Plant Test Procedure:*
- 3.2.1. Each bin and its belt scale are tested individually.
- 3.2.2. Some plants may have to use a zero percent moisture input to ensure accuracy.
- 3.2.3. Check the belt scale accuracy at both high range and low range by running material over the belt scale and checking the indicated computer weight (accumulator) against the actual net weight of the material in the truck.
- 3.2.4. The allowable error must not exceed $\pm 1.0\%$ from the certified truck scale weight.
- 3.2.5. The final belt scale (totalizer) will be checked at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within $\pm 1.0\%$

4. BELT SCALE ON VOLUMETRIC PLANTS

- 4.1. *Plant Test Procedure:*
- 4.1.1. The final belt scale will be tested using two high-production rate runs and two low-production rate runs as stated in the Plant Quality Control Plan. The allowable error must not exceed $\pm 1.0\%$.

5. FEEDER BINS ON VOLUMETRIC PLANTS

- 5.1. Use a certified scale(s) to check each individual volumetric feeder, including RAP, gate setting and underbelt speed, at its high production rate and low production rate, as stated in the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within $\pm 1.0\%$. A minimum of 2 tests will be run at each range to check for repeatability and eliminate any outliers.

- 5.2. Test Procedure:
- 5.2.1. Each bin and its gate setting(s) and underbelt speed(s) are tested individually.
- 5.2.2. Record the gate setting and underbelt speed at both high range and low range by running material over the belt scale and recording the indicated computer weight or the actual net weight of the material in the truck divided by the run time and record the tons per hour for those settings.

6. ASPHALT METER ACCURACY

- 6.1. The asphalt meter is checked at its estimated high production rate and low production rate, as stated in the Plant Quality Control Plan. Run 2 checks at each rate.
- 6.2. *Test Procedure:*
- 6.2.1. Enter the correct specific gravity or lb/gal and temperature for the liquid asphalt being used for the test into the computer system. The Contractor will determine the amount of material needed to ensure plant calibration is accurate within $\pm 0.5\%$. Follow the manufacturer's recommendation for calibration of the asphalt meter or the asphalt metering system. The calibration tank must be certified or verified with test weights before calibrating the asphalt meter.
- 6.2.2. Check the asphalt meter accuracy at the high range and low range by running material through the meter and checking the indicated computer weight (accumulator) against the actual net weight of the material in the truck or calibration tank. For volumetric meters, convert the actual net weight to volume using the specific gravity and correcting for temperature.
- A minimum of 2 test runs at the high production rate and low production rate will provide repeatability and eliminate any outliers.

7. BAGHOUSE FINES RETURN SYSTEM

- 7.1. If baghouse fines are returned, the returns will be in accordance with the quality control plan.

8. MINERAL FILLER SYSTEM

- 8.1. If mineral filler (e.g., lime, other mineral additive) is added separately and does not come into contact with the other aggregates until it is in the drum mixer, it is handled in the same manner as the asphalt meter check.
- Note: This is not the baghouse fines return system. The fines in the baghouse fines return system has contact with the other aggregates before reaching the drum mixer.*
- 8.2. *Materials and Equipment:*
- 8.2.1. Calibration vessel, container, or truck with sufficient capacity for calibrating mineral filler.
- 8.3. *Test Procedure:*
- 8.3.1. The mineral filler is pumped through its meter into a tared calibration vessel where it is weighed on an approved scale and compared against the quantity as recorded by the plant automation. The Contractor will determine the amount of material needed to ensure mineral filler calibration is accurate within $\pm 5.0\%$.

9. ANTI-STRIP ADDITIVE CALIBRATION

- 9.1. Anti-stripping additive calibration check must be performed in a manner satisfactory to the Engineer; at both the high and low production rates and all percentages of additive addition in accordance with the Plant Quality Control Plan. The Contractor will determine the amount of material needed to ensure anti-strip additive calibration is accurate within $\pm 0.5\%$.

10. NO-FLOW SYSTEM

- 10.1. Aggregate, RAP, mineral filler system, and asphalt interlocks must issue an audible alarm if a no-flow situation occurs.
- 10.2. *Test Procedure:*
- 10.2.1. The no-flow test will be run on each cold feed bin including RAP.
- 10.2.2. Material will be placed in the bin, and the bin will be allowed to run empty. An audible alarm must immediately occur.
- 10.2.3. The asphalt and mineral filler systems will be placed in a “No-Flow” condition or otherwise halted and an audible warning must immediately occur.

11. REPORTS

- 11.1.1. After the plant calibration and/or verification is complete, the Contractor will supply the Engineer with a printout of all calibration numbers which verify the calibration of the system and show that it meets all Department specifications. The Engineer will sign and date a copy for the Contractor to retain.
- 11.1.2. The Contractor will supply upon request either a display or printout of all calibration numbers that verify the calibration of the system has not changed since the annual calibration and still meets Department specifications.

Idaho Standard Practice for

Determining Rolling G_{mm}



IDAHO Designation: IR-156-21

1. SCOPE

- 1.1. This Standard Practice is used to determine the maximum theoretical specific gravity (G_{mm}) used for calculating percent compaction of in-place density during production paving.
- 1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

- 2.1 *AASHTO Standards*
- FOP for T 209, Bowl Method, Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
 - FOP for T 355, In-Place Density of Asphalt Mixtures by Nuclear Method
 - FOP for R 97, Sampling Asphalt Mixtures
 - FOP for R 47, Reducing Samples of Hot Mix Asphalt to Testing Size
- 2.2 *Idaho Standards*
- Idaho IR 148, Stratified Random Sampling
 - Idaho IR 125, Acceptance Test Strip for Hot Mix Asphalt (HMA)

3. SUMMARY OF THE PRACTICE

- 3.1. The maximum theoretical specific gravity (G_{mm}) for determining the percent compaction will be determined using a rolling, consecutive 2-lot average (i.e., the most recent 2 completed lots) of the Department's acceptance test results. For the first 2 lots of production paving, the average G_{mm} from the test strip is used for determining percent compaction.

4. PROCEDURE

- 4.1. *Determine the rolling G_{mm} for each lot as follows:*
- 4.1.1. For the first 2 lots of production paving, use the average of all Department acceptance G_{mm} results from the test strip.
- Note:** The Department must provide the G_{mm} preliminary results before production the next day to the Contractor.
- 4.1.2. For all other lots of production paving, use the average of all Department acceptance G_{mm} results from the previous 2 lots.

Note: For previously used mix designs, use the average of Lot 1 results of the current project for the first 2 lots of production paving.

- 4.2. The rolling G_{mm} established in this procedure is used for performing the calculations in the FOP for AASHTO T 355 for the current lot.

5. PROCEDURE FOR TEST RESULT CHALLENGE

- 5.1. When test result challenge resolution is performed in accordance with Subsection 106.07 of the Standard Specifications, the original Department acceptance test results are replaced with the challenge resolution test results and the rolling G_{mm} for the subsequent lots will be re-determined.
- 5.2. The rolling G_{mm} established in 5.1 will be used for performing the calculations in place of the G_{mm} determined in Section 4.

6. EXAMPLE

- 6.1. The table below presents the G_{mm} results from the samples for the first 4 completed lots of production paving. Lot 1 was the test strip. The rolling G_{mm} for the first 5 lots are calculated as follows:
- 6.1.1. Lot 1 rolling $G_{mm} = 2.402$ (average of lot 1 combined G_{mm})
- 6.1.2. Lot 2 rolling $G_{mm} = 2.402$ (average of lot 1 combined G_{mm})
- 6.1.3. Lot 3 rolling $G_{mm} = 2.399$ (average of lot 1 and lot 2 combined G_{mm})
- 6.1.4. Lot 4 rolling $G_{mm} = 2.398$ (average of lot 2 and lot 3 combined G_{mm})
- 6.1.5. Lot 5 rolling $G_{mm} = 2.392$ (average of lot 3 and lot 4 combined G_{mm})

| Lot Number | Sample Number | Combined G_{mm} |
|------------|---------------|-------------------|
| 1 | 1 | 2.396 |
| 1 | 2 | 2.410 |
| 1 | 3 | 2.401 |
| 2 | 4 | 2.395 |
| 2 | 5 | 2.419 |
| 2 | 6 | 2.389 |
| 2 | 7 | 2.391 |
| 2 | 8 | 2.392 |
| 3 | 9 | 2.381 |
| 3 | 10 | 2.422 |
| 3 | 11 | 2.398 |
| 4 | 12 | 2.379 |
| 4 | 13 | 2.388 |
| 4 | 14 | 2.391 |
| 4 | 15 | 2.385 |

Idaho Standard Practice for**Determining Ignition Furnace Correction Factor****IDAHO Designation: IR-157-21**

1. SCOPE

- 1.1. This Standard Practice is used to determine the ignition furnace correction factor for ignition furnaces used on production paving projects to determine asphalt content.
- 1.2. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the user's responsibility of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.*

2. REFERENCE DOCUMENTS

- 2.1 *AASHTO Standards*
 - FOP for T 308, Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
 - FOP for T 30, Mechanical Analysis of Extracted Aggregate
 - T 30, Mechanical Analysis of Extracted Aggregate
 - FOP for R 97, Sampling Asphalt Mixtures
 - FOP for R 47, Reducing Samples of Hot Mix Asphalt to Testing Size
- 2.2 *ASTM Standards*
- 2.3 D 8159, Standard Test Method for Automated Extraction of Asphalt Binder From Asphalt Mixtures (Asphalt Analyzer™)
- 2.4 *Idaho Standards*
 - Idaho IR 148, Stratified Random Sampling
 - Idaho IR 125, Acceptance Test Strip for Hot Mix Asphalt (HMA)

3. SUMMARY

- 3.1. Asphalt binder content results may be affected by the type of aggregate in the mixture and by the ignition furnace. Asphalt binder and aggregate correction factors must, therefore, be established by testing a set of correction specimens for each job mix formula (JMF). Each ignition furnace will have its own unique correction factor determined in the location where testing will be performed.
- 3.2. This procedure must be performed before any acceptance testing is completed, and repeated each time there is a change in the mix ingredients or design. Any changes greater than 5.0 percent for a stock pile of the same product will require a new correction factor. The existing correction factor will continue to be utilized until the new correction factor is available and will be used at the

beginning of the next lot. All correction samples used for acceptance will be prepared by the Department's Central Materials Laboratory.

- 3.3. Mix design laboratories and quality control laboratories can use this procedure, or FOP for AASHTO T 308 Annex – Correction Factors, or another Department-approved method as described the approved quality control plan for determining correction factors for QC labs.
- 3.4. **Asphalt binder correction factor:** A correction factor must be established by testing a set of correction specimens for each job mix formula (JMF). Certain aggregate types may result in unusually high correction factors (i.e., > 1.00 percent). Such mixes must be corrected and tested at a lower temperature as described below.
- 3.5. **Aggregate correction factor:** Due to potential aggregate breakdown during the ignition process, a correction factor will need to be determined.
- 3.6. This correction factor will be used to adjust the acceptance gradation test results obtained according to the FOP for AASHTO T 30.

4. PRODUCING CORRECTION FACTOR SAMPLES

- 4.1. Obtain sample of HMA in accordance with the FOP for AASHTO R 97 and Idaho IR 125.
- 4.2. Reduce the sample of HMA in accordance with the FOP for AASHTO R 47 for the following:
 - 4.2.1. Provide 3 correction factor samples for each ignition furnace to be used for acceptance.
 - 4.2.1.1. Correction factor sample size is determined by AASHTO T 308 Sampling Step 4.
 - 4.2.2. Provide 3 correction factor samples for the Central Materials Laboratory's Asphalt Analyzer™. Sample sizes will be in accordance to the manufacturer's recommendation.
 - 4.2.3. Six (6) additional correction factor samples for use as needed.

5. DETERMINING THE ACTUAL ASPHALT CONTENT AND GRADATION

- 5.1. Test 3 correction factor samples in accordance with ASTM D8159 and AASHTO T 30 and average the results. Each sample must be dried to constant mass according to the FOP for AASHTO 329 prior to performing ASTM D8159.
- 5.2. The average of the results are considered to be the actual asphalt content and actual gradation.
 - 5.2.1. The asphalt content will be calculated and reported to 0.01 percent.
 - 5.2.2. The gradation results will be calculated and reported to 0.1 percent.

6. PROCEDURE

- 6.1. For each ignition furnace that will be used to determine acceptance, perform Steps 7.1 through 7.4 and Steps 8.1 through 8.4.
- 6.2. The correction factors are unique to each furnace and each JMF.

7. DETERMINING THE IGNITION FURNACE CORRECTION FACTOR

- 7.1. Test 3 correction factor samples in accordance with FOP for AASHTO T 308. Each sample must be dried to constant mass according to the FOP for AASHTO T 329 prior to performing FOP for AASHTO T 308.
- 7.2. Once all 3 of the correction specimens have been burned, determine the measured asphalt binder content for each specimen from the printed oven tickets.
- 7.3. Determine the average measured binder content of the 3 correction specimens.
- 7.4. The asphalt binder correction factor, C_f , is the difference between the average actual and average measured asphalt binder contents for each specimen to 0.01 percent.
- 7.5. If the asphalt binder correction factor exceeds 1.00 percent, the test temperature must be lowered to $482 \pm 5^\circ\text{C}$ ($900 \pm 9^\circ\text{F}$) and new samples must be burned. The temperature for determining the asphalt binder content of HMA samples by this procedure must be the same temperature determined for the correction samples.
- 7.5.1. If history shows that the aggregate source produces a correction factor that exceeds 1.00 percent, the test temperature may be lowered to $482 \pm 5^\circ\text{C}$ ($900 \pm 9^\circ\text{F}$) initially.

8. DETERMINING THE AGGREGATE CORRECTION FACTOR

- 8.1. For each of the 3 correction specimens from Section 7, perform a gradation analysis on the residual aggregate in accordance with FOP for AASHTO T 30.
- 8.2. Determine the average measured gradation for each of the 3 correction specimens. The results will be utilized in developing an aggregate correction factor and will be calculated and reported to 0.1 percent.
- 8.3. Determine the difference between the average actual and average measured gradation results.
- 8.4. If the difference for any single sieve exceeds the allowable difference of that sieve as listed in Table 8.1, then aggregate gradation correction factors (equal to the resultant average differences) for all sieves must be applied to all acceptance gradation test results determined by the FOP for AASHTO T 30. If the 75 μm (No. 200) is the only sieve outside the limits in Table 2, apply the aggregate correction factor to only the 75 μm (No. 200) sieve.

Table 8.1 – Permitted Sieving Difference

| Sieve | Allowable Difference |
|-------------------------------------------------------------------------------|----------------------|
| Sizes larger than or equal to 2.36 mm (No. 8) | $\pm 5.0\%$ |
| Sizes larger than 75 μm (No. 200) and smaller than 2.36 mm (No. 8) | $\pm 3.0\%$ |
| Sizes 75 μm (No. 200) and smaller | $\pm 0.5\%$ |

Idaho Standard Practice for**QUALITY CONTROL PLAN (QCP) DEVELOPMENT AND IMPLEMENTATION****IDAHO Designation: IR-158-21**

1. SCOPE

- 1.1. The purpose of this guide is to establish minimum requirements for the Contractor's quality control system and quality control plan (QCP). It is intended that these requirements be used as a procedural guide in detailing the inspection, sampling, and testing deemed necessary to maintain compliance with the Department's specifications.

2. GENERAL REQUIREMENTS

- 2.1. As stated in the Standard Specifications for Highway Construction, a QCP must be developed by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method. For this reason, the QCP will clearly describe the methods by which the quality control program will be conducted. For example, the items to be controlled, tests to be performed, testing frequencies, sampling locations, and techniques will be included with each item listed separately. Also include a table stating what actions will occur when test results indicate specification limits are approached or exceeded. See Table 1 at end of this guide for an example. Also, a detailed plan of action regarding disposition of non-specification material will be included. Such a plan will provide for immediate notification of all parties involved in the Quality Assurance process in the event nonconforming situations are detected. Example 1. Quality Control Plan may be used as an example.
- 2.2. Inspection and testing records must be maintained, kept current, and made available for periodic review by Department personnel throughout the life of the contract. All other documentation (e.g., date of inspections, tests performed, temperature measurements, and accuracy, calibration or re-calibration checks performed on production of testing equipment) will be recorded.
- 2.3. The Contractor will maintain standard equipment and qualified personnel in accordance with the contract and specification requirements for the item(s) being produced.

3. QUALITY CONTROL PLAN

- 3.1. Operation quality control plans will be submitted for each contract/project to the Engineer for approval. Distribution of the approved quality control plans will be made by the Engineer.
- 3.2. Follow Example 1. Quality Control Plan as a general guideline but at a minimum include the following:
- 3.2.1. Contract bid item covered by the quality control plan.
- 3.2.2. Sampling location and techniques.

- 3.2.3. Sampling plan.
- 3.2.4. Tests and test methods.
- 3.2.5. Testing frequencies.
- 3.2.6. Testing forms to be used.
- 3.2.7. Inspection frequencies and areas of inspection.
- 3.2.8. Detailed description of production and placement equipment and methods.
- 3.2.9. Detailed calibration processes and procedures (if applicable)
- 3.2.10. Documentation procedures, including:
 - 3.2.10.1. Inspection and test record requirements and document management.
 - 3.2.10.2. Temperature measurements.
 - 3.2.10.3. Accuracy, calibration, or recalibration checks performed on production or testing equipment.
- 3.2.11. QC personnel, including the company official ultimately responsible for the quality of work.

4. ADDENDA TO THE QUALITY CONTROL PLAN

- 4.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with Department Specifications and subsequently signed and dated when approved by the Engineer.

EXAMPLE 1

3/4" Aggregate Type B Base Quality Control Plan

Date:

To: (RESIDENT ENGINEER)

From: (CONTRACTOR(S) NAME)

Subject: 3/4" Aggregate Type B for Base Quality Control Plan

1. Project Information

1.1. We are submitting our Quality Control Plan, developed in accordance with Idaho IR 158 for:

Project Number: _____

Lead Key Number: _____

Bid Item Number: _____

Date Submitted: _____

1.2. (NAME) will be responsible for insuring that all items of work will comply with the contract and Department specifications.

2. Material Source

2.1. General Information:

Source Number: _____

Address of Source: _____

2.2. The aggregate source operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

2.3. (DETAILED DESCRIPTION OF THE PRODUCTION PROCESS)

3. Delivery and Placement

3.1. The field operation is under the direction of (NAME) who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).

3.2. (LIST OF EQUIPMENT TYPE, YEAR, MAKE, MODEL)

3.3. (DETAILED DESCRIPTION OF THE PLACEMENT PROCESS)

4. Quality Control Sampling and Testing,

4.1. The laboratory performing quality control testing is (LAB QUALIFICATION NUMBER), located at (LOCATION).

- 4.2. The quality control program is under the direction of (NAME OF PERSON), who can be contacted at (ADDRESS, EMAIL, AND TELEPHONE).
- 4.3. During the production operations of the aggregate we will perform at a minimum quality control tests per attached schedule. Sampling and testing will be the responsibility of (NAME(s), WAQTC number (NUMBER(s))).
- 4.4. During the placement operations of the aggregate (NAMES) will perform, at a minimum, quality control tests in accordance with the attached schedule. Also attached are the proposed method to select locations and/or times for sampling.
- 4.5. All testing will be completed by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of sampling and all original documentation of results will be completed on the attached original documentation forms.
- 4.6. Testing reports and original source documents will be reviewed and checked by (NAME(s)), (WAQTC NUMBER(s)), within (HOURS) hours of testing being completed. All reporting will be completed on the attached forms.

5. Records.

- 5.1. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) during the life of the contract/project.
- 5.2. Testing reports and all backup documentation will be located at (LOCATION) for review by the Department between the hours of (TIME) and (TIME) for (YEARS) after the completion of the project.

6. Notifications.

- 6.1. Any material found to be noncomplying will be addressed by (NAME) who will notify the Engineer immediately.
- 6.2. (NAME) will notify all appropriate Department personnel at least 48 hours before any work is to begin.

7. Nonconforming Material.

- 7.1. (STATE THE PROCESS FOR DISPOSITION OF NONCONFORMING MATERIAL)

Table 1: Example of QC Actions to Implement When Approaching or Exceeding Specification Limits

| Test Description | Test Method | QC Action Limits | | Situation | | Action |
|---------------------|------------------------------------|------------------|-----------------------------------|--------------------------------------|-----------------------------------|------------------------------------------------------------------|
| | | Single Test | 4-Point Moving Avg. or Daily Avg. | Single Test | 4-Point Moving Avg. or Daily Avg. | |
| Aggregate Gradation | FOP for AASHTO T 27 and AAHTO T 11 | NA | Approaching Limit | 5 percent on +#4 3 percent on -#4 | Approaching Limit | Increase frequency of tests and prepare for process modification |
| Sand Equivalent | FOP for AAHTO T 76 | NA | Approaching Limit | NA | Approaching Limit | Increase frequency of tests and prepare for process modification |

Note: When 2 consecutive test results fail or if any of the 4-point moving average values fail, production will be suspended and corrective action will be taken. The process will be corrected before production resumes.

Idaho Standard Practice for**QUALITY CONTROL PLAN (QCP) REVIEW PROCESS****IDAHO Designation: IR-159-19**

1. SCOPE

- 1.1. The purpose of this process is to establish a standard for reviewing the Contractor's quality control plan (QCP).

2. REFERENCE DOCUMENTS

- 2.1. Idaho Standards:
- IR 152, Asphalt Mixtures Quality Control Plan (QCP) Development and Implementation
 - IR 155, Procedures for Checking Asphalt Drum Mix Plant Calibrations
 - IR 158, Quality Control Plan Development and Implementation
- 2.2. Standard Specifications for Highway Construction
- 2.3. Quality Assurance Manual
- 2.4. Laboratory Operations Manual

3. GENERAL REQUIREMENTS

- 3.1. As stated in the Department's Standard Specifications for Highway Construction, a QCP must be developed in accordance with Idaho IR 158 and in concurrence with the Standard Specifications applicable to the bid item by the Contractor/producer and submitted in writing to the Engineer at the preconstruction conference. Acceptance of the QCP by the Engineer will be contingent upon its concurrence with the Standard Specifications and this standard method.

4. MINIMUM REQUIREMENTS OF A QUALITY CONTROL PLAN

- 4.1. Requirements shown in Idaho IR 158.
- 4.2. Subsection 106.03.A.2 of the Standard Specifications
- 4.3. Requirements of the contract bid item covered by the quality control plan (e.g., subsection 405.03.C of the Standard Specifications).
- 4.4. Sampling location and techniques.
- 4.5. Sampling plan.
- 4.6. Tests and test methods.
- 4.7. Testing frequencies.

- 4.8. Testing forms to be used, including examples.
- 4.9. Inspection frequencies and areas of inspection.
- 4.10. Detailed description of production and placement equipment and methods.
- 4.11. Detailed calibration processes and procedures (if applicable).
- 4.12. Documentation procedures, including:
 - 4.12.1. Inspection and test record requirements and document management.
 - 4.12.2. Temperature measurements.
 - 4.12.3. Accuracy, calibration, or recalibration checks performed on production or testing equipment.
- 4.13. QC personnel, including the company point of contact responsible for the quality of work.
- 4.14. Processes for addressing non-conforming material.

5. REVIEW OF THE QUALITY CONTROL PLAN

- 5.1. Review the quality control plan to ensure it meets the minimum requirements in Section 4 and that adequate quality control measures are in place for the specific project.

6. REVIEW OF ADDENDA TO THE QUALITY CONTROL PLAN

- 6.1. Addenda are defined as an addition or deletion to the QCP. Each page of the QCP that is revised is required to include the project key lead number, bid item number, date of revision, and means of identifying the revision. The addenda are required to be signed and dated by the Contractor's representative who is responsible for insuring that all items of work will comply with the Department's specifications.
- 6.2. Review addenda to the quality control plan to ensure the revised QCP meets the minimum requirements and that adequate quality control measures are in place for the specific project.

7. APPROVAL OF THE QUALITY CONTROL PLAN

- 7.1. The QCP and each addenda will be approved only once the minimum requirements have been met.
- 7.2. The QCP, and addenda if applicable, as approved by the Department, is binding upon the Contractor as a contract requirement.

DEVELOPMENT, EVALUATION, AND APPROVAL OF HMA PLANT QUALITY CONTROL PLANS



IDAHO Designation: IR-160-21

1. SCOPE

- 1.1. This procedure covers requirements for plants producing hot mix asphalt (HMA) or warm mix asphalt (WMA) paving mixtures. The requirements in this procedure are the minimum requirements for a plant to meet 405.03.E of the Department's Standard Specifications for Highway Construction ("Standard Specifications").
- 1.2. *This procedure may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. It is the user's responsibility to establish the appropriate safety and health practices and determine the applicability of regulatory limitations before use. All individuals must comply with the Contractor's safety program requirements at the plant.*

2. REFERENCE DOCUMENTS

- 2.1. AASHTO Standards:
- M 156, Standard Specifications for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures
 - R 66, Sampling Asphalt Materials
 - T 19M/T 19, Bulk Density ("Unit Weight") and Voids in Aggregate
 - T 27, Sieve Analysis of Fine and Coarse Aggregates
 - T 30, Mechanical Analysis of Extracted Aggregate
 - T 84, Specific Gravity and Absorption of Fine Aggregate
 - T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens
 - R 97, Sampling Asphalt Mixtures
 - T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)
 - T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage
 - T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method
 - T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor

3. TERMINOLOGY

- 3.1. Check—A specific type of inspection or measurement performed on equipment or materials to indicate compliance with the stated criteria (e.g., lime check, calibration check of the cold feed system).
- 3.2. Continuous Mix Plant—A manufacturing facility for producing asphalt paving mixtures that continuously proportions the aggregate, asphalt binder, RAP, and other chosen additives into the mix by a continuous volumetric or mass proportioning system without definite batch intervals.
- 3.3. Drum Mix Plant—A manufacturing facility for producing asphalt paving mixtures that continuously proportions the aggregate, heats and dries it in a rotating drum, adds any chosen additives, and simultaneously mixes the material with a controlled amount of asphalt binder.
- 3.4. Batch Plant - A manufacturing facility for producing asphalt paving mixtures that proportions and mixes the aggregate, asphalt binder, RAP, and other chosen additives into the mix by in discrete batches.
- 3.5. Hot Mix Plant (or Plant)—Any manufacturing facility used to produce asphalt paving mixtures.
- 3.6. Interlock—A system whereby plant production will be interrupted when any one of the interlocked raw material constituents fails to meet the targeted requirements established within the specifications or plant requirements.
- 3.7. Baghouse fines (dust) - That portion of the aggregate removed during drying and heating by the hot gas stream that accumulates in the particulate emission control baghouse. For purposes of this definition, aggregate removed from the hot gas stream by intermediate collectors such as knockout boxes is not considered baghouse fines.
- 3.8. Mineral Filler—A finely divided mineral product with a maximum of 3 percent retained on the 0.800 mm (No. 30) sieve and at least 70 percent of which will pass a 0.075 mm (No. 200) sieve. The most common mineral fillers include pulverized limestone, other stone dust, hydrated lime, portland cement, fly ash, and certain natural deposits of finely divided mineral matter. Baghouse fines are not considered mineral filler.

4. PLANT REQUIREMENTS

- 4.1. Prerequisite for Plant Approval:
- 4.1.1. Inspection of Equipment—The plant owner or manager will schedule an inspection of the plant facilities to determine compliance with this standard. The equipment will be maintained in a satisfactory operating condition and be capable of its intended function at all times during production.
- 4.1.2. Quality Control Program—Each plant will have a quality control program and have a designated person to administer the program. This program will include the testing and control of the individual component materials and the final product produced at the plant. Plant operations will be conducted in a manner to ensure a uniform product is produced which will meet specified requirements.
- 4.1.3. Truck Scales—Scales must meet the requirements of 109.01.A.6.b of the Standard Specifications.
- 4.1.4. Uniformity—The plant must be capable of producing homogenous asphalt mixtures even though the individual components include such diverse materials as various sizes of aggregate from

stockpiles, reclaimed asphalt pavement (RAP), asphalt binder, and other admixtures, as required by the mix design.

5. WEIGHT MEASURING SYSTEMS

- 5.1. Furnish (at the Contractor's expense) certified scales to weigh bulk asphalt plant mixtures, regardless of the type of weight measuring system used for payment.
- 5.2. Ensure that the documentation for certified scales complies with state and/or federal requirements. Platform scales must be certified at a minimum annually. Certified scales must be certified/re-certified if they are moved, re-calibrated, or relocated.
- 5.3. Each platform scale system must be capable of taring truck weights with each load.
- 5.4. When not using platform scales, provide calibrated weighing devices that record the mixture's net weight delivered to the truck. Weighing devices will be calibrated at a minimum before the start of the paving season and each time a plant is moved to a new location. A net weigh system will include, but is not limited to, the following:
 - 5.4.1. Hopper weigh system that delivers asphalt mixture directly to the truck.
- 5.5. The weighing system used to determine the net weight will have a printing system used in conjunction with automatic mixing systems. All printing systems must be approved by the engineer.
- 5.6. Verify adequate installation of the net weight scale mechanism or device by the manufacturer to ensure acceptable performance and operation.
- 5.7. Provide information on the project tickets per Section 109.01 of the Standard Specifications.
- 5.8. Certify the accuracy of the weighing system by an approved registered scale service person at least once annually or whenever the plant is moved or relocated.

6. EQUIPMENT FOR PREPARATION OF ASPHALT BINDER

- 6.1. Tanks for storage of asphalt binder must provide adequate capacity and means to ensure proper continuous circulation between the individual storage tank and proportioning units during the entire operating period.
- 6.2. The delivery and metering system for the asphalt binder must have adequate capacity to provide proper continuous flow between the storage tank, proportioning unit, and mixing equipment during the entire operating period.
- 6.3. Storage tank capacity and operation must allow for continuous operation of the plant and uniform temperature of the asphalt binder when it is introduced into the aggregate. Metering devices must be calibrated in accordance with Idaho IR 155. Any additives based on liquid volume or mass flow must be interlocked with an audible alarm system.
- 6.4. A sampling valve must be provided in the asphalt binder injection lines connecting the storage tanks to the asphalt binder control unit. The valve will be located in such a manner as to allow for adequate safety for the person obtaining the sample and to allow the Department to safely witness sampling.

- 6.5. Any tank used for storing polymer-modified asphalt binders must be equipped with an agitation system or circulation system to ensure the liquid asphalt is maintained in a homogenous state without separation.
- 6.6. The mechanisms used to introduce WMA additives to asphalt mixtures at the hot mix plant must be capable of uniformly feeding and metering the additive. WMA additives typically consist of additives added at the binder production facility, dry material added through cold feeds, or water injection. Depending on the type of WMA process, the plant must be equipped with automatic controls to monitor the feed system and interrupt plant production if there is an interruption in the feed process. Equipment used to produce WMA must be approved by the Engineer before mixture production.

7. COLD AGGREGATE FEEDERS

- 7.1. A mechanism that must be capable of uniformly feeding the aggregates into the dryer to ensure uniform production and temperature. The mechanism must be capable of accurately combining aggregates from different storage bins.
- 7.2. Cold bins for storing aggregates before proportioning will be monitored to ensure that bins do not become empty or restricted. The bins will be interlocked so that a production interruption will occur or an audible warning will sound if an interruption in supply of material from any cold feed bin occurs.
- 7.3. Adequate and convenient facilities must be provided for obtaining samples of the full flow of aggregate from the total of the bins.
- 7.4. Control will be based on frequent samples from each component aggregate as well as samples taken from the combined cold aggregate feeders.
- 7.5. All plants are to be equipped with a means of diverting aggregate on the conveyor belt away from the dryer and into an empty haul truck for cold bin calibration purposes.

8. RECLAIMED ASPHALT PAVEMENT (RAP)

- 8.1. The recycled mixture will be a homogenous mixture of RAP, virgin aggregate, hydrated lime (if required), asphalt binder, and any additives. If recycling capability is required, the plant will be equipped with mechanical means for feeding the desired weight of RAP into the mix.
- 8.2. RAP bins for storing material before proportioning will be monitored to ensure that the bins do not become empty or restricted. The bins will be interlocked so that a production interruption will occur or an audible warning will sound if any interruption in supply of material from any cold feed bin occurs.
- 8.3. Adequate and convenient facilities will be provided for obtaining samples of the full flow of RAP material from the total of the bins.
- 8.4. Use a hot mix plant for the recycling process with necessary modifications to process the recycled material. The ratio of the RAP to virgin aggregate will be controlled by weight.
- 8.5. For drum and continuous mix plants, use electronic belt weighing devices to monitor the flow of RAP and the flow of virgin aggregate.
- 8.6. Equip plants with an interlocking system of feeders and conveyors that synchronize the RAP flow with the virgin aggregate flow. Ensure that the electronic controls monitor the flow rates indicated by the belt weighing devices and automatically maintain the desired ratio at varying production

rates. Design the RAP feeder bins, conveyor system, and auxiliary bins (if used) to prevent the material from segregating and sticking. RAP will be screened before crossing the weigh bridge with a 2-inch to 3-inch screen.

9. EMISSIONS CONTROLS FOR DUST COLLECTOR FINES

- 9.1. A dust collection system must be provided. The system will be made to waste the material collected, or to return all or any part of the collected material uniformly to the mixture.
- 9.2. Other emissions, with the exception of water vapor, , will be controlled to be in compliance with applicable environmental limits.
- 9.3. *Control the dust collection as follows:*
 - 9.3.1. When collecting airborne aggregate particles and returning them to the mixture, ensure the return system delivers the desired portion of the collected dust uniformly into the aggregate mixture and wastes the excess.

10. SURGE AND STORAGE SYSTEMS

- 10.1. *Provide surge and storage bins as follows:*
 - 10.1.1. Ensure that bins for asphalt mixture storage are insulated and have a working seal, top, and bottom to prevent outside air infiltration and to maintain an inert atmosphere during storage to ensure the asphalt mixture maintains temperature at the working temperature. Bins not intended for storage may be used as surge bins to hold asphalt mixtures for part of the working day; however, empty these surge bins completely at the end of each working day.
 - 10.1.2. Ensure that surge and storage bins can retain a predetermined minimum level of mixture in the bin when trucks are loaded. The determination of the minimum mixture level will be based on minimizing mixture segregation and any other pertinent operational constraints.
 - 10.1.3. Ensure that surge and storage systems do not contribute to mix segregation, loss of homogeneity, lumpiness, temperature loss, draindown, or stiffness.
- 10.2. A plant may be permitted to store asphalt mixtures in a silo after prior evaluation and approval by the Engineer. Use will conform with all limitations on retention time, type of mixture, heater operation, silo atmosphere, mix level, mix draindown time, or other characteristics set forth in the applicable specifications.
- 10.3. Approval of silos may be removed or restrictions may be applied if it is determined the silo contributes to segregation, does not maintain temperature, or fails in any other way to provide a homogeneous mix.

11. MINERAL FILLER

- 11.1. *When mineral filler is required as a mixture ingredient:*
- 11.2. Use a separate feed system to proportion the required quantity into the mixture with uniform distribution.
- 11.3. *Control the feeder system with a proportioning device that meets the following:*
 - 11.3.1. Is accurate to within ± 5 percent of the filler required by weight.

- 11.3.2. Has a convenient and accurate means of calibration.
- 11.3.3. Interlocks or audible/visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production.
- 11.4. Provide flow indicators or sensing devices for the mineral filler system and interlock them with the plant controls to interrupt mixture production if the mineral filler introduction fails to meet the required target value after no longer than 60 seconds.
- 11.5. *Add mineral filler to the mixture as follows, according to the plant type:*
 - 11.5.1. Continuous Plants Using Dryer Drum Mixtures—Add the mineral filler so that the dry mixing is accomplished no less than 18 inches before the addition of the asphalt binder and ensure that the filler does not become entrained into the air stream of the dryer.

12. HYDRATED LIME TREATMENT SYSTEM

- 12.1. *When hydrated lime is required as a mixture ingredient:*
- 12.2. Use a separate bin and feed system to store and proportion the required quantity into the mixture.
- 12.3. Ensure that the aggregate is uniformly coated with hydrated lime at least 18 inches before the addition of the asphalt binder to the mixture. Ensure the hydrated lime does not become entrained in the exhaust system of the dryer or plant.
- 12.4. *Control the feeder system with a proportioning device that meets the following:*
 - 12.4.1. Is accurate to within ± 10 percent of the hydrated lime required by weight.
 - 12.4.2. Has a convenient and accurate means of calibration.
 - 12.4.3. Interlocks or audible/visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production to ensure mixture produced is properly treated with lime.
- 12.5. Provide flow indicators or sensing devices for the hydrated lime system and interlock or audible/visual alarms them with the plant controls to interrupt mixture production if hydrated lime introduction fails to meet the required target value after 60 seconds.

13. FIBER SUPPLY SYSTEM

- 13.1. *When stabilizing fiber is required as a mixture ingredient:*
- 13.2. Use a separate bin and/or feed system to store and uniformly proportion by weight the required quantity of fiber into the mixture.
- 13.3. Control the feeder system with a proportioning device that meets the following:
 - 13.3.1. Is accurate to within ± 10 percent of the fiber required by weight. Automatically adjust the feed rate to maintain the material within this tolerance at all times.
 - 13.3.2. Has a convenient and accurate means of calibration.

- 13.3.3. Provides in-process monitoring, consisting of a digital display of output of feed rate, in pounds (kilograms) per min, to verify feed rate.
- 13.3.4. Interlocks or audible visual alarms with the aggregate feed or weigh system to maintain the correct proportions for all rates of production.
- 13.4. Provides flow indicators or sensing devices for the fiber system and interlocks them with the plant controls to interrupt mixture production if the fiber introduction fails to meet the required target value.
- 13.5. *Introduce the fiber as follows, according to the plant type:*
 - 13.5.1. When a continuous or dryer-drum-type plant is used, add the fiber uniformly to the aggregate and disperse it before the injection of the asphalt binder. Ensure the fibers will not become entrained in the exhaust system of the dryer.

14. CALIBRATION OF PLANT EQUIPMENT

- 14.1. Calibration of the plant must meet Idaho IR 155.
- 14.2. *Calibration will occur, at a minimum:*
 - 14.2.1. If the material changes, or if a plant component supply system effecting the ingredient proportions has been repaired, replaced, or adjusted, recalibrate the proportions.
- 14.3. *Calibrate the mixing plant as follows:*
 - 14.3.1. Before producing mixture for the project, calibrate by scale weight the electronic sensors or settings for proportioning the mixture ingredients.
 - 14.3.2. Calibrate the ingredient proportioning for the anticipated range of production rates as shown in the Plant QCP. Do not operate outside the calibration range without first calibrating the proportioning systems for the new range of production rates.

15. THERMOMETRIC EQUIPMENT

- 15.1. Provide appropriate recording thermometers, of suitable temperature ranges, to accurately assess the temperature of the asphalt mixture at or near the discharge point. Harden the thermometer mechanism as necessary to ensure durability of the device and continuous operation. Thermometers must be calibrated by the manufacturer for the full range of mixture production temperatures. The thermometers must be verified periodically during production to ensure their accuracy.
- 15.2. Measure the temperature at the discharge chute of the dryer and record the temperature data automatically.

16. DEVELOPING AND MAINTAINING A PLANT QUALITY CONTROL PLAN

- 16.1. Develop and maintain a Plant Quality Control Plan (Plant QCP). The plant must have an approved Plant QCP prior to the plant being used on Department projects. This plan must address each section of this procedure and describe how these requirements will or will not be met.

16.1.1. If any of the minimum requirements cannot be met; describe in detail why, and how, the plant will mitigate any adverse effects from deviation of this procedure's minimum requirements.

16.2. See Section 19 (Plant QCP template) for a template of the plant quality control plan.

17. PLANT QCP REVIEW

17.1. The Department will review the Plant QCP at a minimum of once per calendar year.

17.2. Review the Plant QCP to ensure all requirements in the previous sections are met or that adequate processes and procedures are in place to mitigate any adverse effects (See Section 16.1.1)

18. PLANT QCP APPROVAL

18.1. If the Plant QCP review finds that the plant's quality control plan is sufficient to ensure a quality product will be produced, the Plant QCP will be approved.

18.2. If the Plant QCP is approved, return a signed copy of the Plant QCP to the plant. The approval is valid for one calendar year.

Company Name:

Year:

Plant Quality Control Plan

Quality Control Plan Administrator

Name

Contact Information

Reviewed By:

Reviewed Date:

Approved By:

Approval Date:

Quality Control Plans for Plants

Template

1. Plant Description
 - a. Plant Type (Drum/Batch)
 - b. Plant Address
 - c. Detailed narrative meeting the requirements of Subsection 17.1 and 17.1.1
2. Plant Laboratory Personnel
 - a. Qualified Personnel/Contact Information/WAQTC#/ Exp. Date (Scanned Copy)
3. Laboratory Qualification
 - a. Idaho Lab Qualification Number
 - i. Date last completed
 - ii. Certification Posted in Laboratory
 - b. AMRL accreditation (if applicable)
 - i. Date last completed
4. Plant Inspection
 - a. Performed Yearly
 - i. Certification is posted at plant
 - b. Plant complies with Idaho IR 160
5. Truck Scales
 - a. Calibration Frequency
 - b. Testing agency – copies on file
6. Plant Weighing/Measuring Devices
 - a. Calibration frequency
 - b. Testing agency – copies on file
7. Aggregate Stockpiles
 - a. Construction Method
 - i. Separation/Labeling
 - ii. Segregation Control
 - iii. Moisture Control (if applicable)
 - b. Testing (method/frequency)
8. RAP stockpile
 - a. Construction methods of stockpiles
 - i. Separation/Labeling
 - ii. Segregation Control
 - iii. Moisture Control (if applicable)

- b. Testing (method/frequency)
- 9. Plant Mix Temperatures
 - a. Plant Monitor/Control
 - b. Temperature checks
- 10. Binder
 - a. Storage
 - b. Hauling
 - c. Sampling (include location)
 - d. Source Change – Notification/Start-up testing
 - e. List how corrective action will be taken
- 11. Asphalt Mix Design
 - a. Responsibility
- 12. Asphalt Mix Sampling
 - a. Location for QC
 - b. Plant check processes and procedures
 - c. Sampling frequency
 - i. Low tonnage (< 200 tons)
 - ii. > 200 tons
- 13. Mix Gradation
 - a. Test method
- 14. Asphalt Content
 - a. Test method
- 15. Volumetric Properties
 - a. Test methods
- 16. Mix Diagnostic and Corrective Action Plan
 - a. Items to address: #13-15, and on-site density
- 17. Project Records – Idaho Standard Specs. 106.03.A.2.
 - a. Maintain and make available to the Engineer upon request complete records (including hand written worksheets) of sampling, testing, actions taken to correct problems, and quality control inspection results. Provide copies of the Reports when requested.
 - b. Control Charts
- 18. Truck Loading
 - a. Loading method
 - b. Segregation control
- 19. Warm Mix Capabilities (if applicable)
 - a. Plant used for WMA?

- b. Type: Foamed, Additive, etc.
- c. Operation (e.g. rate(s), temperatures, etc.)

20. Anti-Strip

- a. Type/Brand
- b. Method of dosing

It is hereby certified that the information contained in this Plant Quality Control Plan meets the requirements of Idaho IR 160.

Company Name:

Signature:

First & Last Name:

Quality Control Plan Administrator

Title VI Special Provisions

In compliance with the United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination Assurances (DOT Order No. 1050.2A):

"The Idaho Transportation Department, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

During the performance of work covered by this Contract, the Contractor for themselves, their assignees and successors in interest agree as follows to adhere to Appendix A and E of the USDOT Standard Title VI/Non-Discrimination Assurances:

APPENDIX A

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 (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

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 procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration (FHWA), to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration (FHWA), as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration (FHWA) may determine to be appropriate, including, but not limited to:

- a. withholding payments to the contractor under the contract until the contractor complies; and/or
- b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the

Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration (FHWA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 4 71, Section 4 7123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U .S.C. 1681 et seq).

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall 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 shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

FHWA-1273 SUPPLEMENT

Comply with the Cargo Preference Act and its implementing of regulations in 46 CFR 381. Refer to 46 CFR 381.7 (a) – (b).

TRAINING SPECIAL PROVISION

This Training Special Provision supplements FHWA-1273 Section II – nondiscrimination.

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractors shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of training hours to be trained under this special provision will be as shown in the Bid Schedule.

In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the training units are to be trained by the subcontractor, provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also ensure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications underutilized in minorities and women based on the contractor's needs and the availability of journeyman in the various underutilized classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the state highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each approved trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used to discriminate against any applicant for training, whether a member of minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Idaho Transportation Department and the

Federal Highway Administration. The Idaho Transportation Department and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the US Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligation of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the Idaho Transportation Department prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc. where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Federal Highway Administration Division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hours of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project: contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the off-site training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of training units specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Department of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the

training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports, including the ITD 2776 form – Trainee Monthly Progress Record, documenting his performance under this Training Special Provision.

Reporting

In addition to providing the information as to number of individuals to be trained in each classification, and submitting training programs to be used, the contractor shall: Prior to payment for training notify the Engineer of the name, address, social security number of trainee, previous training completed and certify that the trainee has never attained journeyman status in the craft specified (the Engineer will review the information submitted and approve or disapprove the trainee). No credit will be allowed for training hours prior to approval of the Engineer. The trainee will be identified on contractor payrolls.