SPECIAL PROVISIONS

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INTRODUCTION TO THE SPECIAL PROVISIONS

(January 4, 2024 APWA GSP, Option A)
The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, 2026 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The project-specific Special Provisions are not labeled as such. The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP)
(April 1, 2013 WSDOT GSP)
(May 1, 2013 PC GSP).Agency Special Provision

Project specific special provisions are labeled without a date as such:
(*****)

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT Manual M21-01, current edition
- Pierce County Standard Drawings

Contractor shall obtain copies of these publications, at Contractor's own expense.

DESCRIPTION OF WORK

DESWORK1
(March 13, 1995 WSDOT GSP)
This contract provides for the improvement to the Foothills Trail by the replacement of the Pierce County Parks bridge #PRT27195-E with a 200-foot long, two span, precast concrete girder bridge with drilled shaft foundations. The work also includes the clearing, grubbing, grading, replanting, and construction of a mitigation channel connecting the unnamed stream to a wetland in the area adjacent to the bridge. The work also includes traffic control, erosion control, and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01 DEFINITIONS AND TERMS

1-01.3.OPT1 1-01.3 Definitions
(January 19, 2022 APWA GSP)

Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them with the following:

Dates

Bid Opening Date
The date on which the Contracting Agency publicly opens and reads the Bids.

Award Date
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date
The date the Contracting Agency officially binds the Agency to the Contract.

Notice to Proceed Date
The date stated in the Notice to Proceed on which the Contract time begins.

Substantial Completion Date
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date
The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date
The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Final Acceptance Date
The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms, "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

Additive
A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate
One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Business Day
A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond
The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents
See definition for "Contract".

Contract Time
The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Notice of Award
The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency's acceptance of the Bid Proposal.

Notice to Proceed
The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

Traffic
Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

1-01.3.OPTA Definitions
(June 23, 2026 PC GSP)
Section 1-01.3 is amended by adding or revising the following terms:

Contract Compliance Officer
The representative from Pierce County, who is responsible for administering all regulations and compliance standards regarding equal employment opportunity, affirmative action, and labor standards associated with this project. The Contract Compliance Office is located at Aaron Bible, Pierce County Procurement & Contract Services, 1501 Market St, Suite 420, Tacoma, WA 98402, Email: pcpurchasing@piercecountywa.gov.

Contracting Agency
The existing definition in Section 1-01.3 is deleted and replaced with the following:

Pierce County, a municipal subdivision of the State of Washington, acting by and through its authorized representatives.

County
Pierce County, a political subdivision of the State of Washington, acting through its authorized representatives.

County Bridge Engineer (Pierce County Bridge Engineering)
The Engineer in charge of the Bridge Engineering group whose office is located at the

Tacoma Mall Plaza, 2702 South 42nd Street, Suite 109, Tacoma, WA 98409-7315, phone number (253) 798-7250.

County Traffic Engineer (Pierce County Traffic Engineering)
The Engineer in charge of the Traffic Engineering Section whose office is located at the Sewer and Traffic Operations Facility, 9200 122nd Street East, Puyallup, WA 98373, phone number (253) 798-7250.

1-02 BID PROCEDURES AND CONDITIONS

1-02.1.OPT1 Prequalification of Bidders

Delete this section and replace it with the following:

1-02.1 Qualifications of Bidder
(February 17, 2026 APWA GSP Option A)
Before award of a public works contract, a Bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

1-02.2.OPTA Plans and Specifications
(June 23, 2026 PC GSP)
Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids for the work.

After award of the contract, hard copies of the plans and specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	Maximum No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	10	Furnished Upon Request
Contract Provisions	10	Furnished Upon Request
Large plans (e.g., 22" x 34")	2	Furnished Upon Request

Additional hard copies of the Plans and Contract Provisions may be obtained by the Contractor from the Engineer, at the Contractor's own expense.

1-02.4 Examination of Plans, Specifications, and Site of Work

1-02.4(1) General

1-02.4(1).OPTA General
(June 23, 2026 PC GSP)
Section 1-02.4(1), the ninth paragraph, beginning with "Prospective Bidders desiring…", is revised to read as follows:

Prospective Bidders desiring an explanation or interpretation of the Bid Documents must request the explanation or interpretation in writing via the Pierce County Procurement and Contract Services website (https://www.piercecountywa.gov/CurrentSolicitations).
All requests must be received by Pierce County by 3:30 p.m. on the Thursday preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

The County's response will be posted on the Pierce County Procurement and Contract Services website approximately two days prior to the scheduled bid opening for use by all prospective Bidders who have registered.

Oral explanations, interpretations, or instructions given by anyone before the Award of Contract will not be binding on the Contracting Agency. Any information given a prospective Bidder concerning any of the Bid Documents will be furnished to all prospective Bidders as an Addendum if that information is deemed by the Contracting Agency to be necessary in submitting Bids or if the Contracting Agency concludes that the lack of the information would be prejudicial to other prospective Bidders.

1-02.4(2) Subsurface Information

1-02.4(2).OPTA Subsurface Information
(June 23, 2026 PC GSP)
The third and fourth sentence in the first paragraph are deleted and replaced with the following:

> The Summary of Geotechnical , geotechnical reports, memoranda, boring logs and associated data, if and when included as an appendix to the Special Provisions, shall be considered as part of the Contract.

1-02.5 Proposal Forms
(February 17, 2026 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature. Bids shall be in legible figures (not words) written in ink or typed and expressed in U.S. dollars. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6 Preparation of Proposal

1-02.6.OPTA Preparation of Proposal
(February 17, 2026 APWA GSP Option A)

Revise the fourth paragraph to read:

Subcontractor's List
The Bidder shall submit with the Bid the completed Subcontractor List included in the Contracting Agency Proposal Package. If a Subcontractor List Form is not included in the package, use DOT Form 271-015. The Form shall contain the following:

1. Subcontractors who will perform the Work of structural steel installation, rebar installation, heating, ventilation, air conditioning, and plumbing as described in RCW 18.106 and electrical as described in RCW 19.28,

2. The Work those subcontractors will perform on the Contract and the proof of license when required as described in RCW 39.04.350(1), and

3. No more than one subcontractor for each category of Work identified, except, when subcontractors vary with Bid alternates, in which case the Bidder shall identify which subcontractor will be used for which alternate.

Add the following new section:

1-02.6(1) Recycled Materials Proposal
(January 4, 2016 APWA GSP)
The Bidder shall submit with the Bid, its proposal for incorporating recycled materials into the project, using the form provided in the Contract Provisions.

1-02.7 Bid Deposit

1-02.7.OPT1 1-02.7 Bid Deposit
(February 17, 2026 APWA GSP)

Revise the third sentence of the first paragraph to read:

For projects that are selected by the Contracting Agency to be Bid electronically, the proposal bond may be in either physical format, or an electronic format via https://www.piercecountywa.gov/CurrentSolicitations.

Supplement this section with the following:

Bid bonds shall contain the following:

1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.7.OPTA Bid Deposit
(June 23, 2026 PC GSP)
Section 1-02.7, the third sentence of the first paragraph is deleted and replaced with the following:

All proposal bonds shall be submitted on the form included in the Project Proposal and Contract Forms Section as furnished by the County and shall be signed by the bidder and surety.

Section 1-02.7 is supplemented with the following:

Certified or Cashier's check shall be payable to the Treasurer of the County of Pierce.

1-02.9.OPTD Delivery of Proposal
(November 21, 2025 APWA GSP, Option D)

Delete this section and replace it with the following:

GENERAL

Each Proposal (including all required attachments) shall be submitted to the Contracting Agency by one of the following methods:

1. Electronically upload bid documents via https://piercecountywa.gov/CurrentSolicitations. Instructions for Uploading bid documents are located under "Project Details". This is the preferred method.

2. Deliver hard copy Bid documents in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery. Deliver to: Finance Procurement Office, 1501 Market Street, Suite 420, Tacoma, WA, 98402.

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" that is received after the time specified or received in a location other than that specified in the Call for Bids.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first workday on which the normal work processes of the Contracting Agency resume.

Supplemental bid information submitted after the Proposal submittal but within 48 hours of the time and date the proposal is due, the document(s) shall be submitted as follows:

1. By e-mail to the following e-mail address: pcpubworks@piercecountywa.gov, with "Supplemental Information" and the Project Name and Bid Number as listed in the Call for Bids noted on the subject line of the email.

All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

1-02.10 Withdrawing, Revising, or Supplementing Proposal
(February 17, 2026 APWA GSP)

Delete this section, and replace it with the following:

After submitting a physical or an electronic bid, if allowed under 1-02.9, Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, if a physical Bid Proposal was submitted, or recalled electronically via electronic method described in 1-02.9 if an electronic Bid Proposal was submitted, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder's request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package before the time set for receipt of Bid Proposals, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Requests to withdraw, revise, or supplement a Bid Proposal may be submitted by the following methods:

1. In person
2. Via the electronic method as described in 1-02.9

1-02.12.OPTA Public Opening of Proposals
(June 23, 2026 PC GSP)
The first paragraph of this section shall be deleted and replaced with the following:

Proposals will be opened and publicly read via webcast at the time indicated in the Call for Bids unless the Bid Opening has been delayed or canceled. The link for the webcast will be posted on Pierce County's website at http://www.piercecountywa.gov/CurrentSolicitations prior to the bid opening.

1-02.13 Irregular Proposals
(July 15, 2026 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
   c. A price per unit cannot be determined from the Bid Proposal;
   d. The Proposal form is not properly executed;
   e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
   f. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
   d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
   e. Receipt of Addenda is not acknowledged;
   f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   g. The Bidder fails to submit the Bidder Questionnaire (DOT Form 272-022), if applicable as required by Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions; or
   h. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidder
(May 17, 2018 APWA GSP, Option A)
Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1.INST1
Section 1-03.1 is supplemented with the following:

1-03.1.OPTA (Bidding Preference)
(September 3, 2019 PC GSP)
When a bid is received from a nonresident contractor from a state that provides a percentage bidding preference, a comparable percentage disadvantage will be applied to the bid of that nonresident contractor as required by RCW 39.04.380 (3).

1-03.1(1) Identical Bid Totals
(February 17, 2026 APWA GSP)

Revise this section to read:

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be the Bidder that proposed to use the highest percentage of recycled materials in the Project, per the form submitted with the Bid Proposal, if required. If those percentages are also exactly equal or if the form was not required, then the tie-breaker will be determined by drawing as follows: Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful". The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid, and with a proposed recycled materials percentage that is exactly equal to the highest proposed recycled materials amount, are eligible to draw.

1-03.3.OPTA Execution of Contract
(June 23, 2026 PC GSP)
Section 1-03.3 is revised to read as follows:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 20 calendar days after the award date, the successful Bidder shall return the Contracting Agency-prepared Contract with the contractor license number filled in, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting Agency, the successful Bidder shall provide, if required, any of the following: pre-Award information required by the Contracting Agency as listed under Section 1-02.15, proof of licensure for electrical, HVAC, or plumbing subcontractors. If the Prime Contractor lists themselves as performing electrical, HVAC, or plumbing they are required to submit proof of licensure prior to execution.

Until the Contracting Agency executes a Contract, no Proposal shall bind the Contracting Agency nor shall any Work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any Work begun outside such areas and for any materials ordered before the Contract is executed by the Contracting Agency.

If the Bidder experiences circumstances beyond their control that prevents return of the Contract documents within the calendar days after the Award date stated above, the Contracting Agency may grant up to a maximum of 20 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
    a. Is registered with the Washington State Insurance Commissioner, and
    b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
    a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
    b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by

the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-03.7 Judicial Review
(December 30, 2022 APWA GSP)
Revise this section to read:

All decisions made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda
(December 30, 2022 APWA GSP)
Revise the second paragraph to read:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Standard Specifications,
6. Contracting Agency's Standard Plans or Details (if any), and
7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.4.OPTA Changes
(June 23, 2026 PC GSP)
Revise the last paragraph to read:

Change Orders will be transmitted electronically to the Contractor for signature. Within 21 days of execution of the Contract, the Contractor shall submit a Type 1 Working Drawing consisting of the names, email addresses, and text-message capable phone numbers for the authorized change order signers and shall bear the name, phone number and email of the officer providing this authorization. Delegation of authority to sign Change Orders shall be by the officer authorized to sign the Contract in accordance with Section 1-02.1.

1-05 CONTROL OF WORK

1-05.4 Conformity with and Deviations from Plans and Stakes

1-05.4.INST1
Section 1-05.4 is supplemented with the following:

1-05.4.OPT1 Contractor Surveying - Structure
(September 3, 2024 WSDOT GSP)
The Contracting Agency has provided primary survey control in the Plans.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of bridges, noise walls, retaining walls, buried structures, and marine structures. Except for the survey control data to be furnished by the

Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at the Contractor's expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work by the Contractor shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.

2. Establish, by placing hubs and/or marked stakes, the location with offsets of foundation shafts and piles.

3. Establish offsets to footing centerline of bearing for structure excavation.

4. Establish offsets to footing centerline of bearing for footing forms.

5. Establish wing wall, retaining wall, noise wall, and buried structure horizontal alignment.

6. Establish retaining wall top of wall profile grade.

7. Establish buried structure profile grade.

8. Establish elevation benchmarks for all substructure formwork.

9. Check elevations at top of footing concrete line inside footing formwork immediately prior to concrete placement.

10. Check column location and pier centerline of bearing at top of footing immediately prior to concrete placement.

11. Establish location and plumbness of column forms, and monitor column plumbness during concrete placement.

12. Establish pier cap and crossbeam top and bottom elevations and centerline of bearing.

13. Check pier cap and crossbeam top and bottom elevations and centerline of bearing prior to and during concrete placement.

14. Establish grout pad locations and elevations.

15. Establish structure bearing locations and elevations, including locations of anchor bolt assemblies.

16. Establish box girder bottom slab grades and locations.

17. Establish girder and/or web wall profiles and locations.

18. Establish diaphragm locations and centerline of bearing.

19. Establish roadway slab alignment, grades and provide dimensions from top of girder to top of roadway slab. Set elevations for deck paving machine rails.

20. Establish traffic barrier and curb profile.

21. Profile all girders prior to the placement of any deadload or construction live loads that may affect the girder's profile.

22. Establish locations for marine structures including fixed and floating berthing structures, vehicle and pedestrian foundations and spans, and marine-based buildings.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

The Contractor shall submit the computed elevations at the top of bridge decks as a Type 2 Working Drawing. To compute top of bridge deck elevations, elevations shall be taken at tenth points along the centerline of each girder web from center-to-center of bearing. For girders exceeding 100 feet in length, the elevations shall be taken at equivalent intervals not to exceed 10 feet.

The Contractor shall ensure a surveying accuracy within the following tolerances:

		Vertical	**Horizontal**
1.	Stationing on structures		±0.02 feet
2.	Alignment on structures		±0.02 feet
3.	Superstructure elevations	±0.01 feet variation from plan elevation	
4.	Substructure	±0.02 feet variation from plan grades	

Buried structures shall be within the tolerances described in Section 6-20.3.

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking the following items, the Contractor shall perform independent checks from different secondary control to ensure that the points staked for these items are within the specified survey accuracy tolerances:

Piles
Shafts
Footings
Columns

The Contractor shall calculate coordinates for the points associated with piles, shafts, footings and columns. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the survey work. The Contracting Agency will require up to seven calendar days from the date the data is received to issuing approval.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Payment
Payment will be made for the following bid item when included in the proposal:

"Structure Surveying," lump sum.

The lump sum contract price for "Structure Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

1-05.4.OPT2 Contractor Surveying - Roadway
(January 13, 2021 WSDOT GSP)
The Contracting Agency has provided primary survey control in the Plans.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage, surfacing, paving, channelization and pavement marking, illumination and signals, guardrails and barriers, and signing. Except for the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at the Contractor's expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.

2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on

centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.

3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.

4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor

5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.

6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.

7. Establish intermediate elevation benchmarks as needed to check work throughout the project.

8. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.

9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

10. Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Engineer for review and approval 10 days prior to the beginning of work.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested by the Engineer.

The Contractor shall ensure a surveying accuracy within the following tolerances:

	Vertical	**Horizontal**
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)

Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking roadway alignment and stationing, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances.

The Contractor shall calculate coordinates for the alignment. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

Payment
Payment will be made for the following bid item when included in the proposal:

"Roadway Surveying," lump sum.

The lump sum contract price for "Roadway Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordination efforts.

1-05.7 Nonconforming Work
(February 17, 2026 APWA GSP)

Supplement this section with the following:

The rights exercised under the provisions of this Section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required. The Engineer has the right to reject all or part of the Nonconforming Work, and the Engineer's decision is final and not subject to protest.

No additional contract time or compensation will be allowed when the Contracting Agency exercises their rights provided by this Section.

1-05.7(1) Identification of Nonconforming Work
Replace this section with the following:

The Contractor is responsible for quality control and shall identify all Nonconforming Work. The Contracting Agency may also identify Nonconforming Work. However, failure by the Contracting Agency to identify Nonconforming Work shall not relieve the Contractor from their responsibility for the quality of the Work, nor shall it constitute acceptance or approval of the Nonconforming Work.

1-05.7(2) Reporting of Nonconforming Work
Replace this section with the following:

The Contractor shall immediately report all Nonconforming Work to the Engineer and shall include any relevant information known for suggested remediation of Nonconforming Work.

When the Contracting Agency identifies Nonconforming Work, the Engineer will notify the Contractor in writing specifying a time when a remedy must be complete. If the Contractor fails to remedy Nonconforming Work within the time specified in a written notice from the Engineer, or fails to perform any part of the Work required by the Contract Documents, the Engineer may correct and remedy such Work as may be identified in the written notice.

1-05.7(3) Remediation of Nonconforming Work
Supplement this section with the following:

The Contractor shall be responsible and bear all costs for remediating Nonconforming Work.

If the Contracting Agency remedies Nonconforming Work after the specified time when a remedy was to be completed, by any means deemed necessary, direct and indirect costs incurred by the Contracting Agency attributable to correcting and remedying Nonconforming Work not corrected by the time provided in the notice, or Work the Contractor filed or refused to perform, shall be paid by the Contractor.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the Nonconforming Work corrected immediately, have the Work removed and replaced, or have Work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause risk of loss or damage to the public.

When costs are incurred by the Contracting Agency, payment will be deducted by the Engineer from monies due, or to become due, to the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and compensation for removal, repair, replacement and/or correction of the Contractor's Nonconforming Work.

1-05.11 Final Inspection
Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing
(October 1, 2005 APWA GSP)

1-05.11(1) Substantial Completion Date
When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order

to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection, the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefore.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract, but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore, when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing, they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any

items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's guaranties or warranties furnished under the terms of the contract.

1-05.13 Superintendents, Labor and Equipment of Contractor
(August 14, 2013 APWA GSP)
Delete the sixth and seventh paragraphs of this section.

1-05.14 Cooperation with Other Contractors

1-05.15 Method of Serving Notices
(January 4, 2024 APWA GSP)
Revise the second paragraph to read:

All correspondence from the Contractor shall be served and directed to the Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be written in paper format, hand delivered or sent via certified mail delivery service with return receipt requested to the Engineer's office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

1-05.16 Water and Power
(October 1, 2005 APWA GSP)
The Contractor shall make necessary arrangements and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

1-06 CONTROL OF MATERIAL

1-06.6 Recycled Materials
(January 4, 2016 APWA GSP)
Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g., utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form
350-075 Recycled Materials Reporting.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.5 Environmental Regulations

1-07.5.INST1
Section 1-07.5 is supplemented with the following:

1-07.5.OPT2 Payment
(August 3, 2009 WSDOT GSP)
All costs to comply with this special provision for the environmental commitments and requirements are incidental to the contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the contract.

1-07.5(1) General

1-07.5(1).OPTA General
(June 23, 2026 PC GSP)
Section 1-07.5(1) is supplemented with the following:

The Contractor shall comply with all applicable environmental laws and regulations. Project-specific environmental permits are as follows and are included in the contract documents:

U.S. Army Corps Permit Letter
U.S. Army Corps Nationwide Permit
WDFW Hydraulic Project Approval (HPA)
Phase I Municipal Stormwater Permit
Pierce County Shoreline Variance Decision
Pierce County Development Services Permit
Inadvertent Discovery Plan
WSDOT Fish Exclusion – Protocols and Standards

If the Contractor's operations involve work outside the areas covered by the environmental permits, the Contractor shall advise the Engineer and request coverage under the existing permits.

1-07.5(4)B.OPTA Fugitive Dust
(June 23, 2026 PC GSP)
Section 1-07.5(4)B is supplemented with the following:

Fugitive Dust control planning is a partnership between the County, Contractor, subcontractors and any other party whose activities during the project may lead to the generation of fugitive dust. This partnership extends to legal responsibilities as well in that all parties can be held liable for non-compliance and subsequent regulatory actions, including monetary penalties.

The Contractor shall prepare and implement a project-specific Fugitive Dust Control Plan (FDC Plan) for the duration of the project. The Contractor shall submit four (4) copies of the plan to the Engineer no later than the date of the preconstruction conference. No on-site construction activities may commence until the Contracting Agency accepts a FDC Plan for the project.

This plan shall reflect conditions specific to project site conditions, the Contractor's operations, and schedule of work. At a minimum, the Contractor shall develop the FDC Plan utilizing Best Management Practices (BMPs) identified in sources such as the Associated General Contractors of Washington Education Foundation and Fugitive Dust Task Force pamphlet, "Guide to Handling Fugitive Dust from Construction Projects."

The Contractor shall update the FDC Plan throughout construction so that the written plan reflects

actual site conditions and practices. The Contractor shall maintain a copy of the accepted plan, with any updates, at the work site and provide it upon request.

The FDC Plan shall outline the measures to be taken by the Contractor to prevent fugitive dust from being released into the air at the work site. The FDC Plan shall also address at a minimum, the following project-specific information:

Introduction including a description of project conditions, project size, locations, and a summary of anticipated fugitive dust control events.

Management Information, such as identification of Contractor personnel responsible for maintaining and implementing the FDC Plan and contact person in case of a complaint.

Fugitive Dust control methods to be used for each fugitive dust source.

Payment
Payment will be made for the following Bid item when it is included in the proposal:

"FDC Plan," lump sum.

When the written FDC Plan is accepted by the Contracting Agency, the Contractor shall receive 50 percent of the lump sum Contract price for the plan. The remaining amount will be paid when 50 percent of the original Contract amount is earned from other Contract items.

The lump sum payment for the "FDC Plan" shall be full pay for all costs associated with creating and updating the accepted FDC Plan, and all costs associated with the setup of prevention measures and for implementing the current FDC Plan as required by this Specification.

Payment for dust control shall be per Section 3-06, Watering, and included in the unit contract prices of the items involved.

1-07.5(6).OPTA U.S. Fish and Wildlife Service and National Marine Fisheries Service
(June 23, 2026 PC GSP)
The first sentence of Section 1-07.5(6) is revised to read:

The Contractor shall provide fish exclusion and handling services as required in accordance with the Contract.

1-07.7 Load Limits

1-07.7.INST1
Section 1-07.7 is supplemented with the following:

1-07.7.OPT6
(March 13, 1995 WSDOT GSP)
If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.8 High-Visibility Apparel

1-07.8(1) Traffic Control Personnel

1-07.8(1).INST1
Section 1-07.8(1) is revised to read:

1-07.8(1).OPT1
(September 16, 2025 WSDOT GSP)
All personnel performing the Work described in Section 2-04 (including traffic control supervisors, flaggers, and others performing traffic control labor of any kind) shall comply with the following:

1. During daylight hours with clear visibility, workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; and a high visibility hardhat that is white, yellow, yellow-green, orange, or red in color; and

2. During hours of darkness (½ hour before sunset to ½ hour after sunrise) or other low-visibility conditions (snow, fog, etc.), workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; a high-visibility lower garment meeting ANSI/ISEA 107 Class E, and a high visibility hardhat marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility.

1-07.9 Wages

1-07.9(5)A.OPTB Required Documents
(February 17, 2026 APWA GSP Option B)

Revise this section to read follows:

All Statements of Intent to Pay Prevailing Wages and Affidavits of Wages Paid shall be submitted to the Engineer through the State L&I online Prevailing Wage Intent & Affidavit (PWIA) system. When apprenticeship is a requirement of the contract, include all apprentices in PWIA.

1-07.11(1) Regulatory Authorities

1-07.11(1)C Nondiscrimination Authorities

1-07.11(1)C.INST1
Section 1-07.11(1)C is revised to read:

1-07.11(1)C.OPT1
(March 9, 2026 WSDOT GSP)

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest agrees to comply with the following nondiscrimination statues and authorities; including but not limited to:

1. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), and its implementing regulations and case law, prohibit discrimination on the basis of race, color, or national origin. 49 C.F.R. 21.5(b)(2) prohibits a recipient of federal funds from utilizing "criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, or national origin." This includes taking reasonable steps to provide limited English proficiency (LEP) persons meaningful access to all programs, activities and services, where necessary to avoid discrimination on the basis of national origin.

2. 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).

3. Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et. seq.), as amended, (prohibits discrimination on the basis of sex).

4. 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 C.F.R. Part 27.

5. The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age).

6. Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex).

7. 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 of Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition and 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).

8. 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.

9. The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123), (prohibits discrimination on the basis of race, color national origin, and sex).

10. 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.).

1-07.11(2) Contractual Requirements
(November 25, 2024 APWA GSP)

Delete item 11 of the first paragraph of Section 1-07.11(2).

1-07.14.OPTA Responsibility for Damage
(June 23, 2026 PC GSP)
The introductory clause of the ninth paragraph of Section 1-07.14 is deleted and replaced with the following:

> Within 60 calendar days following the date a claim is sent by the Contracting Agency to the Contractor, the Contractor shall notify the Claimant and the Engineer of the following:

1-07.16(2) Vegetation Protection and Restoration

1-07.16(2).INST1
Section 1-07.16(2) is supplemented with the following:

1-07.16(2).OPT1
(August 2, 2010 WSDOT GSP)
Vegetation and soil protection zones for trees shall extend out from the trunk to a distance of 1 foot radius for each inch of trunk diameter at breast height.

Vegetation and soil protection zones for shrubs shall extend out from the stems at ground level to twice the radius of the shrub.

Vegetation and soil protection zones for herbaceous vegetation shall extend to encompass the diameter of the plant as measured from the outer edge of the plant.

1-07.17.OPTA Utilities and Similar Facilities
(June 23, 2026 PC GSP)
Section 1-07.17 is supplemented by the following:

The telephone number for the Washington Utility Notification Center for this project is 1-800-424-5555 (or 811).

Throughout the duration of this project, other contractors and/or utilities may be working adjacent to or within the project limits. It is anticipated that the planned utility relocation work may or may not occur simultaneously. The Contractor shall coordinate his/her work with the contractors and/or utility companies. The Contractor shall coordinate the utility work throughout the project duration including the work that will occur during the Utility Relocation Window (URW) if one is included in the contract. The coordination of work will include direct contact by the Contractor with the other contractors and/or utilities.

It will be the Contractor's responsibility to notify all utilities at least 5 working days prior to beginning work on the project.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

Pierce County Planning and Public Works Department, Rick Butner, Traffic Operations Supervisor, 9200 122nd Street East, Puyallup, WA 98373-3762, (253) 798-8000, e-mail: rick.butner@piercecountywa.gov

Comcast, Tom Hawk, Network Project Manager, 410 Valley Ave NW, Puyallup, WA 98371, (253) 329-7502, e-mail: Thomas_Hawk@Comcast.com

Lumen, Michelle Palmer, Sr Network Implementation Engineer, 411 Kaiser Rd SW, Olympia, WA 98502 (253) 458-6578, e-mail: Michelle.Palmer@Lumen.com

Puget Sound Energy (Power), Luanne Yu, Project Manager III-Electric, 3130 South 38th Street, Tacoma, WA 98409, (253) 204-5669, e-mail: Luanne.Yu@pse.com

It is anticipated that the following work will be performed by others during the course of this project:

Puget Sound Energy
De-energizing of aerial power within project limits when necessary for construction.

Measurement:
No specific unit of measurement will apply to the lump sum item for utility coordination.

Payment:
Payment will be made for the following bid item when it is included in the Proposal:

"Utility Coordination," lump sum

The lump sum price shall be full compensation for all costs incurred by the Contractor in performing the utility coordination work.

Payment shall be 95 percent prorated over the length of the contract with the final payment being made at physical completion.

1-07.18.OPTA Public Liability and Property Damage Insurance
(December 2, 2024 PC GSP)
Section 1-07.18 is deleted and replaced with the following:

1-07.18(1) General Requirements

A. Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A wrap up policy is defined as an insurance agreement or arrangement under which all parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

B. The Contractor shall obtain the insurance described in this section from insurers approved by the State Insurance Commissioner pursuant to RCW Title 48. The insurance must be provided by an insurer with a rating of A-: VII or higher in the A.M. Best's Key Rating Guide, which is licensed to do business in the state of Washington (or issued as a surplus line by a Washington Surplus lines broker). The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer (including financial condition), terms and coverage, the Certificate of Insurance, and/or endorsements.

C. The Contractor shall keep this insurance in force during the term of the contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

D. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Final Completion or earlier termination of this contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims-made form of coverage becomes unavailable or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

E. The insurance policies shall contain a "cross liability" provision.

F. The Contractors' and all subcontractors' insurance coverage shall be primary and noncontributory insurance as respects the Contracting Agency's insurance, self-insurance, or insurance pool coverage.

G. The Contractor shall provide the Contracting Agency and all Additional Insureds with written notice of any policy cancellation within two business days of their receipt of such notice.

H. Upon request, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s).

I. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency.

J. Failure on the part of the Contractor to maintain the insurance as required shall constitute a

material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

K. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Professional Liability and Workers Compensation, shall name the following listed entities as additional insured(s):

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, whether primary, excess, contingent or otherwise, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(3) describes limits lower than those maintained by the Contractor.

1-07.18(3) Subcontractors

Contractor shall ensure that each subcontractor of every tier obtains and maintains at a minimum the insurance coverages listed in 1-07.18(5)A and 1-07.18(5)B. Upon request of the Contracting Agency, the Contractor shall provide evidence of such insurance.

1-07.18(4) Evidence of Insurance

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. The certificate and endorsements must conform to the following requirements:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.

2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as Additional Insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement. A statement of additional insured status on an ACORD Certificate of Insurance shall not satisfy this requirement.

3. Any other amendatory endorsements to show the coverage required herein.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits. All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

A policy of Commercial General Liability Insurance, including:

Per project aggregate

Premises/Operations Liability
Products/Completed Operations--for a period of one year following final acceptance of the work.
Personal/Advertising Injury
Contractual Liability
Independent Contractor's Liability
Stop Gap/Employers' Liability
Explosion, Collapse, or Underground Property Damage (XCU)
Blasting (only required when the Contractor's work under this Contract includes exposures to which this specified coverage responds)

Such policy must provide the following minimum limits:

$ 2,000,000	Each Occurrence
$ 4,000,000	General Aggregate
$ 2,000,000	Products and Completed Operations Aggregate
$ 2,000,000	Personal and Advertising Injury, each offence
$ 10,000	Medical Expense (each occurrence)

Stop Gap/Employers' Liability

$ 2,000,000	Each Accident
$ 2,000,000	Disease - Policy Limit
$ 2,000,000	Disease - Each Employee

1-07.18(5)B Automobile Liability
Automobile Liability for owned, non-owned, hired, and leased vehicles, with an MCS 90 endorsement and a CA 9948 endorsement attached if "pollutants" are to be transported. Such policy(ies) must provide the following minimum limit:

$ 2,000,000	combined single limit

1-07.18(5)C Workers' Compensation
The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the state of Washington.

1-07.18(5)I Builder's Risk
(December 30, 2022 APWA GSP)

Contractor shall purchase and maintain Builder's Risk insurance covering interests of the Contracting Agency, the Contractor, and subcontractors of every tier, as Named Insureds, in the Work. An Installation Floater instead of Builders Risk is acceptable for renovation projects. Builder's Risk insurance shall be on a special form policy, and shall insure against the perils of fire and extended coverage and physical loss or damage, theft, vandalism, malicious mischief and collapse; and flood and earthquake when shown below. The Builder's Risk insurance shall include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site. Such insurance shall cover resulting "soft costs" including but not limited to design costs, licensing fees, architect's and engineer's fees, and costs due to delay in completion.

Builder's Risk insurance shall be written in the amount of the completed value of the project, with no coinsurance provisions. Such policy must provide coverage and deductibles that comply with the following:

Coverage:
Total Cost of Project to be Insured: $1,500,000
Soft Costs: N/A
Flood: N/A

Earthquake: N/A

Deductibles not to exceed:
Flood: 2% of the Value at Time of Loss, subject to a $250,000 Minimum
Earthquake: 5% of the Value at Time of Loss, subject to a $250,000 Minimum
Earth Movement: 5% of the Value at Time of Loss, subject to a $250,000 Minimum
All Other Perils: $50,000
Soft Costs: $50,000, with no more than 7-day waiting period

The Builders Risk insurance covering the work shall have maximum deductibles as listed above for each occurrence. The deductible(s) shall be the responsibility of the Contractor.

The Contractor shall provide the Contracting Agency with a full and certified copy of the insurance policy when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

The Builders Risk insurance shall be maintained until final acceptance of the Work by the Contracting Agency.

The Contractor and the Contracting Agency waive all rights against each other and any of their subcontractors of every tier, agents, and employees, officers, and officials, for damages caused by fire or other perils to the extent covered by Builder's Risk insurance or other property insurance applicable to the work. The policies shall provide such waivers by endorsement.

1-07.18(5)J Pollution Liability
(January 4, 2016 APWA GSP)
The Contractor shall provide a Contractors Pollution Liability policy, providing coverage for claims involving bodily injury, property damage (including loss of use of tangible property that has not been physically injured), cleanup costs, remediation, disposal, or other handling of pollutants, including costs and expenses incurred in the investigation, defense, or settlement of claims, arising out of any one or more of the following:

1. Contractor's operations related to this project.

2. Remediation, abatement, repair, maintenance or other work with lead-based paint or materials containing asbestos.

3. Transportation of hazardous materials away from any site related to this project.

All entities listed under 1-07.18(2) of these Special Provisions shall be named by endorsement as additional insureds on the Contractors Pollution Liability insurance policy.

Such Pollution Liability policy shall provide the following minimum limits:

$1,000,000 / $2,000,000 each loss and annual aggregate

1-07.24 Rights of Way
(April 22, 2025 APWA GSP)
Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits unless arrangements for use of private property are made as described below.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours' notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

(October 21, 2025 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To review Training or Apprenticeship Plans, when applicable.;

5. To discuss FSBE Goals when applicable.
6. To establish normal working hours for the work;
7. To review safety standards and traffic control; and
8. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work
(February 17, 2026 APWA GSP)
Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 AM and 6:00 PM Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 48 hours prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the Work. Representatives who may be deemed necessary by the Engineer include but are not limited to survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such Work necessitates their presence.)

2. Considering the Work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.

3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.

4. If a 4-10 work schedule is requested and approved the non-working day for the week will be charged as a working day.

If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll.

1-08.1(7) Payments to Subcontractors and Lower-Tier Subcontractors

1-08.1(7)A Payment Reporting

1-08.1(7)A Payment Reporting
(November 25, 2024 APWA GSP)
Delete this section and replace it with the following:

1-08.1(7)A Vacant

1-08.1(8) Required Subcontract Clauses

1-08.1(8)B Clauses Required in Subcontracts of All Tiers
(November 25, 2024 APWA GSP)

Delete item 8 of the second paragraph of Section 1-08.1(8)B.

1-08.1(8)B Clauses Required in Subcontracts of All Tiers

1-08.1(9) Submittal of Executed Subcontracts

1-08.1(9).OPTB
(April 22, 2025 APWA GSP Option B)

Section 1-08.1(9) content and title are deleted and replaced with the following:

Vacant

1-08.3.OPTA Progress Schedule
(June 23, 2026 PC GSP)
Section 1-08.3 is supplemented with the following:

Weekly Meeting
The Contractor shall attend Weekly Meetings with the Contracting Agency's Engineer, at a mutually agreed upon time and location, to discuss changes in the proposed order of work, construction delays, or conditions that may affect the progress of work.

The attendees shall include but not be limited to Project Manager(s), Superintendent(s), key personnel, and when necessary, subcontractor personnel.

1-08.3(5).OPTA Payment
(June 23, 2026 PC GSP)
Section 1-08.3(5) is supplemented with the following:

All costs for preparing for and attending Weekly Meetings are considered incidental to other items of Work in the Contract.

1-08.4 Prosecution of Work

Delete this section and replace it with the following:

1-08.4.OPT1 Notice to Proceed and Prosecution of Work
(February 17, 2026 APWA GSP)

Notice to Proceed will be given after the Contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor

shall not commence with the Work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the Work to the Physical Completion Date within the time specified in the Contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the Work within the time(s) specified in the Contract.

When shown in the Plans, the first order of Work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 2-04.3. Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other Work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

1-08.5 Time for Completion
(February 17, 2026 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the Contract as it occurs, until the Contract Work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the Contract the week before; (2) specified for the physical completion of the Contract; and (3) remaining for the physical completion of the Contract. The statement will also show the nonworking days and all partial or whole days the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day, then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the Completion Date of the Contract after all the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical Work on the project must be complete; and

2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the Contract. The following documents must be received by the Engineer prior to establishing a completion date:

    a. Certified Payrolls (per Section 1-07.9(5)).

    b. Material Acceptance Certification Documents.

    c. Monthly Reports in DMCS of the amounts paid including the final payment confirmation to all firms required by Section 1-08.1(7)A if applicable.

d. Final Contract Voucher Certification.

e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all subcontractors.

f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).

g. Property owner releases per Section 1-07.24.

1-08.5.INST2
Section 1-08.5 is supplemented with the following:

1-08.5.OPT7 (Time for Physical Completion)
(March 13, 1995 WSDOT GSP)
This project shall be physically completed within 90 working days.

1-08.9 Liquidated Damages

1-08.9.OPTA 1-08.9 Liquidated Damages
(February 17, 2026 APWA GSP, Option A)
Replace Section 1-08.9 with the following:

Time is of the essence of the Contract. Delays inconvenience the traveling public, obstruct traffic, interfere with and delay commerce, and increase risk to Highway users. Delays also cost tax payers undue sums of money, adding time needed for administration, engineering, inspection, and supervision.

Accordingly, the Contractor agrees:

1. To pay liquidated damages in the amount of $1,150 for each working day beyond the number of working days established for Physical Completion, and

2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine the Contract Work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, liquidated damages identified above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

Liquidated damages will not be assessed for any days for which an extension of time is granted. No deduction or payment of liquidated damages will, in any degree, release the Contractor from further obligations and liabilities to complete the entire Contract.

1-09 MEASUREMENT AND PAYMENT

1-09.2 Weighing Equipment

1-09.2(1) General Requirements for Weighing Equipment
(November 25, 2024 APWA GSP, Option B)
Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027LP, Scaleman's Daily Report, unless the printed ticket contains the same information that is on the Scaleman's Daily Report Form. The scale operator must provide AM and/or PM tare weights for each truck on the printed ticket.

1-09.2(5) Measurement
(December 30, 2022 APWA GSP)

Revise the first paragraph to read:

Scale Verification Checks – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.6 Force Account
(December 30, 2022 APWA GSP)
Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

1-09.9 Payments

1-09.9.INST1
Section 1-09.9 is supplemented with the following:

1-09.9.OPT1

Section 1-09.9 is supplemented with the following:

The quantity of the following items to be paid for on this project shall be the quantity shown in the Proposal, unless changes are made in accordance with Section 1-04.4 which affect this quantity. The quantity shown in the Proposal will be adjusted by the amount of the change and will be paid for as specified in Section 1-04.4.

Steel Reinf. Bar for Substructure
Conc. Class 4000 for Substructure

The quantities in the Proposal are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for approved changes will be made in the quantity even though the actual quantities required may deviate from those listed.

The unit contract price for these items shall be full pay to construct and complete this portion of the work.

1-09.9.OPT2 1-09.9 Payments
(February 17, 2026 APWA GSP Option B)
Delete the fourth paragraph and replace it with the following:

Progress payments for completed Work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the Work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the Work are tentative, and made only for the purpose of determining progress payment. The progress estimates are subject to change at any time prior to the calculation of the Final Payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of Work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra Work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of Progress Payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for Work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any Work has been satisfactorily completed. The determination of payments under the Contract will be final in accordance with Section 1-05.1.

The sixth paragraph of Section 1-09.9 is deleted.

1-09.9.OPTA Payments
(June 23, 2026 PC GSP)
Revise the first sentence in the sixth paragraph to read:

The Contractor shall sign and return the Final Contract Voucher Certification (FCVC) as indicated in this section.

Replace all occurrences of "Secretary" with "Engineer" in the seventh and eight paragraphs.

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction
(December 30, 2022 APWA GSP)
Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that all claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that all such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to all such claims or causes of action. It is further mutually agreed by the parties that when claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

1-09.13(3)A Arbitration General
(January 19, 2022 APWA GSP)
Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(4).OPTA Venue for Litigation
(June 23, 2026 PC GSP)
Revise the first sentence to read:

The venue for litigation shall be as provided by RCW 36.01.050.

2-01 MOBILIZATION

2-01 Mobilization
(February 17, 2026 APWA GSP)

Delete Section 2-01 and replace it with the following:

2-01.1 Description

This Work consists of operations and preparatory Work necessary to become ready to perform the Work or an item of Work.

2-01.3 Construction Requirements

Mobilization consists of preconstruction expenses and the costs of preparatory Work and operations performed by the Contractor typically occurring before 10 percent of the total original amount of an individual Bid Schedule is earned from other Contract items on that Bid Schedule. Items which are not to be included in the item of Mobilization include but are not limited to:

1. Portions of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Costs incurred for mobilizing equipment for force account Work.

2-01.5 Payment

Payment will be by lump sum as "Mobilization".

Based on the lump sum Contract price for "Mobilization", partial payments will be made as follows:

1. When 5 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 50 percent of the Bid Item for mobilization on that original Bid Schedule, 5 percent of the total of that original Bid Schedule, or 5 percent of the total original Contract amount, whichever is the least, will be paid.
2. When 10 percent of the total original Bid Schedule amount is earned from other Contract items on that original Bid Schedule, excluding amounts paid for materials on hand, 100 percent of the Bid Item for mobilization on that original Bid Schedule, 10 percent of the total of that original Bid Schedule, or 10 percent of the total original Contract amount, whichever is the least, will be paid.
3. When the Substantial Completion Date has been established for the project, payment of any remaining amount Bid for mobilization will be paid.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

2-03 PUBLIC CONVENIENCE AND SAFETY

2-03.3 Construction Requirements

2-03.3(1) Construction Under Traffic

2-03.3(1).INST1
Section 2-03.3(1) is supplemented with the following:

2-03.3(1).OPT5 (Lane Closure Restrictions)
(November 4, 2024 WSDOT GSP)
Lane, ramp, shoulder, and roadway closures are only permitted as follows:

There are no time-of-day restrictions for alternating one-way traffic.

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours. Exceptions to these restrictions are listed below and when applicable take precedence over closures listed above. The Engineer may also consider on a case-by-case basis additional exceptions following a written request by the Contractor.

Lane, ramp, shoulder, and roadway closures are not allowed on any of the following:

1. A holiday
2. A holiday weekend: holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After noon on the day prior to a holiday or holiday weekend, and
4. Before 8:00 AM on the day after the holiday or holiday weekend.

5. The two-hour period prior to and the two-hour period after the following special events: Contractor shall coordinate with Pierce County Parks and Recreation for special events during construction.

   It shall be the Contractor's responsibility to obtain the dates and times of all events.

Traffic Delays
When Automated Flagger Assistance Devices (AFADs) or flaggers are used to control traffic, traffic shall not be stopped for more than 15 minutes at any time. All traffic congestion shall be allowed to clear before traffic is delayed again.

If the delay becomes greater than 15 minutes, the Contractor shall immediately begin to take action to cease the operations that are causing the delays. If the 15 minute delay limit has been exceeded, as determined by the Engineer, the Contractor shall provide to the Engineer, a written proposal to revise his work operations to meet the 15 minute limit. This proposal shall be accepted by the Engineer prior to resuming any work requiring traffic control.

There shall be no delay to medical, fire, or other emergency vehicles. The Contractor shall alert all flaggers and personnel of this requirement.

General Restrictions
Construction vehicles using a closed traffic lane shall travel only in the normal direction of traffic flow unless expressly allowed in an accepted traffic control plan. Construction vehicles shall be equipped with flashing or rotating amber lights.

No two consecutive on-ramps, off-ramps, or intersections shall be closed at the same time and only one ramp at an interchange shall be closed, unless specifically shown in the Plans.

Roads or ramps that are designated as part of a detour shall not be closed or restricted during the implementation of that detour, unless specifically shown in the Plans.

Controlled Access
No special access or egress shall be allowed by the Contractor other than normal legal movements or as shown in the Plans.

Contractor's vehicles of 10,000 GVW or greater shall not exit or enter a lane open to public traffic except as follows:

Egress and ingress shall only occur during the hours of allowable lane closures, and:

1. For exiting an open lane of traffic, by decelerating in a lane that is closed during the allowable hours for lane closures.

2. For entering an open lane of traffic, by accelerating in a closed lane during the allowable hours for lane closures.

Traffic control vehicles are excluded from the gross vehicle weight requirement. If placing construction signs will restrict traveled lanes, then the work will be permitted during the hours of allowable lane closures.

Advance Notification
The Contractor shall notify the Engineer in writing of any traffic impacts related to lane closure, shoulder closure, sidewalk closure, or any combination for the week by 12:00 p.m. (noon) Wednesday the week prior to the stated impacts.

The Contractor shall notify the Engineer in writing ten working days in advance of any traffic impacts related to full roadway closure, ramp closure, or both.

The Contractor shall notify the Engineer in writing of any changes to the stated traffic impacts a minimum of 48 hours prior to the traffic impacts.

2-03.3(1).OPT7
(October 3, 2022 WSDOT GSP)

Public Notification
The Contractor shall furnish and install information signs that provide advance notification of a ramp closure, roadway closure, or both, a minimum of 15 working days prior to the closure. Sign locations, messages, letter sizes, and sign sizes are shown in the Plans.

The Contractor shall notify Pierce County Parks and Recreation, in writing, a minimum of 15 working days prior to each closure. The Contractor shall furnish copies of these notifications to the Engineer.

2-04 TEMPORARY TRAFFIC CONTROL

2-04.2(9-35.2) Construction Signs
Section 9-35.2 is revised to read:

2-04.2(9-35.2).OPT1
(January 5, 2026 WSDOT GSP)
Construction signs shall conform to the requirements of the MUTCD and shall meet the requirements of NCHRP Report 350 for Category 2 devices or MASH. Except as noted below, any sign/sign stand combination that satisfies these requirements will be acceptable. Post mounted Class A construction signs shall conform to the requirements of this section and additionally shall conform to the requirements stated in Section 9-28.

Aluminum sheeting shall be used to fabricate all construction signs. The signs shall have a minimum thickness of 0.080 inches and a maximum thickness of 0.125 inches.

All construction signs shall be fabricated with reflective sheeting in accordance with Section 9-28.12. All post mounted signs shall use a nylon washer between the twist fasteners (screw heads, bolts or nuts) and the reflective sheeting.

The use of plywood, fiberglass reinforced plastic, fabric rollup signs, and any other previously approved sign materials except aluminum or aluminum composite is prohibited.

All Class A and Class B signs shall utilize materials and be fabricated in accordance with Section 9-28 and the Washington State Sign Fabrication Manual M 55-05. A fabrication decal as stated in Section 9-28.1 is not required for construction signs.

2-04.2(9-35.6) Barricades
Section 9-35.6 is revised to read:

2-04.2(9-35.6).OPT1
(January 5, 2026 WSDOT GSP)
Barricades shall conform to the requirements of the MUTCD. The alternating orange and white reflective bands shall be fabricated with reflective sheeting in accordance with Section 9-28.12.

2-04.2(9-35.7) Traffic Safety Drums
The third and fourth paragraphs of Section 9-35.7 are revised to read:

2-04.2(9-35.7).OPT1
(January 5, 2026 WSDOT GSP)
Until December 31, 2026, traffic safety drums may have 4-inch or 6-inch reflective bands fabricated from Type III or Type IV or higher sheeting type as described in Section 9-28.12.

Beginning January 1, 2027, traffic safety drums shall have 6-inch reflective bands. A minimum of 4 reflective horizontal bands, alternating fluorescent orange and white starting with the top stripe being fluorescent orange, shall be used. Reflective bands shall be fabricated from Type IV or higher (reflective sheeting as described in Section 9-28.12). Drums of different reflective band types shall not be intermixed within the same closure. When recommended by the manufacturer, drums shall be treated to ensure proper adhesion of the reflective sheeting.

2-04.2(9-35.9) Traffic Cones
The last paragraph of Section 9-35.9 is revised to read:

2-04.2(9-35.9).OPT1
(January 5, 2026 WSDOT GSP)
White reflective bands shall be fabricated with reflective sheeting in accordance with Section 9-28.12.

2-04.2(9-35.10) Tubular Markers
The last paragraph of Section 9-35.10 is revised to read:

2-04.2(9-35.10).OPT1
(January 5, 2026 WSDOT GSP)
White reflective bands shall be fabricated with reflective sheeting in accordance with Section 9-28.12. When recommended by the manufacturer, tubular markers shall be treated to ensure proper adhesion of the reflective sheeting.

2-04.2(9-35.12) Transportable Attenuator
The last paragraph of Section 9-35.12 is revised to read:

2-04.2(9-35.12).OPT1
(January 5, 2026 WSDOT GSP)
The transportable attenuator shall have a chevron pattern on the rear of the unit. The pattern shall consist of 4-inch to 8-inch alternating nonreflective black and reflective yellow or alternating reflective red and white sheeting, slanted at 45 degrees in an inverted "V" with the "V" at the center of the unit. Reflective sheeting shall be in accordance with Section 9-28.12.

2-04.2(9-35.13) 42-Inch Tall Channelization Devices
The third and fourth paragraphs of Section 9-35.13 are revised to read:

2-04.2(9-35.13).OPT1
(January 5, 2026 WSDOT GSP)
Until December 31, 2026, 42-inch tall channelization devices may have 4-inch or 6-inch reflective bands fabricated from Type III or Type IV or higher sheeting type as described in Section 9-28.12.

Beginning January 1, 2027, 42-inch tall channelization devices shall have 6-inch reflective bands. A minimum of 4 reflective horizontal bands, alternating fluorescent orange and white starting with the top stripe being fluorescent orange, shall be used. Reflective bands shall be fabricated from Type IV or higher (reflective sheeting as described in Section 9-28.12). 42-inch tall channelization devices of different reflective band types shall not be intermixed within the same closure. When recommended by the manufacturer, 42-inch tall channelization devices shall be treated to ensure proper adhesion of the reflective sheeting.

2-04.2(9-35.16) Pedestrian Channelizing Devices
Section 9-35.16 is revised to read:

2-04.2(9-35.16).OPT1
(January 5, 2026 WSDOT GSP)
When exposed to vehicular traffic, pedestrian channelizing devices shall meet the crashworthiness requirements of NCHRP 350 or MASH as described in Section 2-04.3(3). The bottom and top surfaces of the pedestrian channelizing device shall have 6-inch reflective bands matching the body color of the device fabricated from reflective sheeting as described in Section 9-28.12.

2-04.3 Construction Requirements

2-04.3(1) Traffic Control Management

2-04.3(1).INST1
Section 2-04.3(1) is supplemented with the following:

2-04.3(1).OPT1
(September 2, 2025 WSDOT GSP)
Work Zone Safety Contingency
Enhancements to improve the effectiveness of the accepted traffic control plans to increase the safety of the work zones shall be discussed on a weekly basis between the Contractor and the Contracting Agency. Enhancements shall be mutually agreed upon by the Contractor and Engineer prior to performing any Work to implement the enhancement.

Enhancements do not include the use of Uniformed Police Officers or WSP, address changes to the allowed work hour restrictions, or changes to the staging plans in the Contract (if applicable). If allowed by the Engineer, these items will be addressed in accordance with Section 1-04.4.

The Contractor shall be solely responsible for submitting any traffic control plan revision to implement the enhancement in accordance with Section 2-04.3(2).

2-04.3(1).OPT2 (Acceptable TCS Training)
(March 9, 2026 WSDOT GSP)
The Traffic Control Supervisor shall be certified by one of the following:

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701
https://atssa.com/training

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778
https://www.esc.org

Integrity Safety
13912 NE 20th Ave.
Vancouver WA 98686
(360) 574-6071
https://www.integritysafety.com

K&D Services Inc.
2719 Rockefeller Ave.
Everett, WA 98201
(800) 343-4049
https://www.kndservices.net

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035
https://www.nwlett.edu

Trafficorp
5077 N Bldg Center Drive
Coeur d'Alene, ID 83815
(208) 665-4683
https://trafficorp.com/contact-us/

US Safety Alliance
(904) 705-5660
https://www.ussafetyalliance.com

2-04.3(1)B Traffic Control Supervisor (TCS)

2-04.3(1)B.OPTA Traffic Control Supervisor

(June 23, 2026 PC GSP)
Revise item 3 of the third paragraph to read:

1. Preparing a daily traffic control diary on each day that traffic control is performed using WSDOT Form 421-040A and 421-040B and submitting them in Portable Document Format (PDF) to the Engineer no later than the end of the next working day. The Contractor may use alternate forms if approved by the Engineer. Diary entries shall include, but not be limited to:

    a. Time of day when signs and traffic control devices are installed and removed,

    b. Location and condition of signs and traffic control devices,

    c. Revisions to the traffic control plan,

    d. Lighting utilized at night, and

    e. Observations of traffic conditions.

Revise item 9 of the third paragraph to read:

9. The Traffic Control Supervisor may perform the Work described in Section 2-04.3(4)A Flaggers or in Section 2-04.3(4)B Other Traffic Control Labor and will not be compensated under those Bid items.

2-04.5 Payment

2-04.5(2).OPT7

(November 2, 2022 WSDOT GSP)
"Work Zone Safety Contingency," by force account.

All costs as authorized by the Engineer will be paid for by force account as specified in Section 1-09.6.

For purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Work Zone Safety Contingency" in the Proposal to become a part of the Contractor's total bid.

The Engineer may choose to use existing bid items for the implementation of the agreed upon enhancement.

3-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

3-01.1 Description

3-01.1.INST1
Section 3-01.1 is supplemented with the following:

3-01.1.OPT1 (Clearing and Grubbing)
(March 13, 1995 WSDOT GSP)
Clearing and grubbing on this project shall be performed within the following limits:

Per Project Plans

3-01.2 Disposal of Usable Material and Debris

3-01.2(1) Disposal Method No. 1--Open Burning

3-01.2(1).INST1
Section 3-01.2(1) is revised to read:

3-01.2(1).OPTA Disposal Method No. 1--Open Burning
(September 2, 2025 PC GSP)
Disposal Method No. 1, Open Burning, as specified in Section 3-01.2(1) will not be allowed on or off this project.

3-01.5 Payment

3-01.5.INST1
The first and second paragraphs of Section 3-01.5 are revised to read:

3-01.5.OPT1 (Clearing and Grubbing)
(August 7, 2017 WSDOT GSP)
Payment will be made for the following bid items when they are included in the proposal.

All costs for clearing and grubbing on this project shall be included in the lump sum Contract price for "Clearing and Grubbing."

3-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

3-02.3(2) Removal of Bridges, Box Culverts, and Other Drainage Structures

3-02.3(2).INST1
Section 3-02.3(2) is supplemented with the following:

3-02.3(2).OPT1 (Removing Existing Bridge)
(June 26, 2000 WSDOT GSP)
The Contractor shall remove existing Bridge No. PRT27195-E after routing traffic onto South Prairie Carbon River Rd E, to be coordinated by Pierce County Parks and Recreation.

3-02.3(2).OPT11 Requirements for Closing Bridge to Traffic Prior to Beginning Removal
(January 2, 2018 WSDOT GSP)
The Contractor shall not close the existing bridge to traffic, and shall not begin bridge removal operations, until the following conditions are met:

1. The Contractor's bridge demolition plan Working Drawing submittal has been processed and all comments from the Engineer have been addressed.

2. The Contractor has received the Engineer's acceptance of all shop drawings and materials submittals for materials required for the work to be executed during the closure.

3. The Contractor has submitted a Type 1 Working Drawing consisting of a report on the status of material delivery. The report shall specify the materials already available at the site, the materials yet to arrive at the site, and the scheduled delivery dates of the materials yet to arrive at the site, with written verification from the supplier or copies of confirmed purchase orders indicating the delivery dates of the materials yet to arrive at the site.

4. The Contractor shall provide an updated progress schedule in accordance with Section 1-08.3 confirming that the scheduled delivery of materials will meet the schedule to complete the work within the allowed time. The Contractor shall supplement the progress schedule with a written narrative describing the assumed production rates and planned resource allocations that support the bridge construction activity durations provided in the progress schedule.

5. The Contractor has received the Engineer's concurrence to proceed.

3-02.3(3) Removal of Pavement, Sidewalks, Curbs, and Gutters

3-02.3(3).INST1
Section 3-02.3(3) is supplemented with the following:

3-02.3(3).OPT1
(September 8, 1997 WSDOT GSP)
The approximate thickness of the asphalt conc. pavement is 4 inches.

3-02.5 Payment

3-02.5.INST1
Section 3-02.5 is revised by the following:

3-02.5.OPT1 (Removal of Structures and Obstructions Included in Other Work)
(August 7, 2017 WSDOT GSP)
Payment will be made for the following bid item when it is included in the proposal.

All costs for the removal of structures and obstructions shall be included in Removing Existing Bridge No. PRT27195-E.

3-03 ROADWAY EXCAVATION AND EMBANKMENT

3-03.5 Payment

3-03.5.INST1
Section 3-03.5 is supplemented with the following:

3-03.5.OPTB (Sawcutting)
(October 6, 2022 PC GSP)
All costs incurred for sawcutting or vertical neatline cutting, where shown in the Plans or as directed by the Engineer, shall be included in the unit contract price per cubic yard for "Roadway Excavation Incl. Haul."

3-06 WATERING

3-06.1 Description

3-06.1.INST1
Section 3-06.1 is supplemented with the following:

3-06.1.OPTA Description
(February 21, 2019 PC GSP)
Watering for dust control will include the application of water on both working and nonworking days.

5-04 HOT MIX ASPHALT

5-04.2 Materials

5-04.2(2) Mix Design – Obtaining Project Approval

5-04.2(2).INST1
Section 5-04.2(2) is supplemented with the following:

5-04.2(2).OPT1
(January 3, 2011 WSDOT GSP)
ESALs
The number of ESALs for the design and acceptance of the HMA shall be 1 million.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

5-04.3(1).INST1
The first sentence of Section 5-04.3(1) is revised to read:

5-04.3(1).OPT1
(August 3, 2009 WSDOT GSP)
HMA for wearing course shall not be placed on any travelled way from October 1st and through March 31st of the following year without written approval from the Engineer.

5-04.3(3) Equipment

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle

5-04.3(3)D.OPT1
(April 4, 2016 WSDOT GSP)
Section 5-04.3(3)D is deleted in its entirety.

5-04.3(9) HMA Mixture Acceptance

5-04.3(9).INST1
Section 5-04.3(9) is revised to read:

5-04.3(9).OPTA HMA Mixture Acceptance
(October 10, 2024 PC GSP)

5-04.3(9) HMA Mixture Acceptance

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

5-04.3(9)A Vacant

5-04.3(9)A1 Vacant

5-04.3(9)A2 Vacant

5-04.3(9)B Vacant

5-04.3(9)B1 Vacant

5-04.3(9)B2 Vacant

5-04.3(9)B3 Vacant

5-04.3(9)B4 Vacant

5-04.3(9)B5 Vacant

5-04.3(9)B6 Vacant

5-04.3(9)B7 Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation
HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots
A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 1000 tons, whichever is less except that the final sublot will be a minimum of 500 tons and may be increased to 1500 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per sublot.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling
Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASHTO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall be tested.

Sampling and testing HMA in a Structural application where quantities are less than 500 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 1000 tons but more than 500 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.

- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a Composite Pay Factor (CPF) shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing
Testing of HMA for compliance of Va will be at the option of the Contracting Agency. If tested, compliance of Va will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors
For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a Composite Pay Factor (CPF) using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	**Factor "f"**
All aggregate passing: 1-1/2", 1", 3/4", 1/2", 3/8″ and No.4 sieves	2
All aggregate passing No. 8 sieve	15

All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (Va) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments
For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests
The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, Va. The results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of $500 per sample.

5-04.3(9)D Mixture Acceptance – Commercial Evaluation
If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the Composite Pay Factor (CPF).

5-04.3(9)D1 Vacant

5-04.3(9)E Mixture Acceptance – Notification of Acceptance Test Results
The Contracting Agency will endeavor to provide written notification (via email to the Contractor's designee) of acceptance test results through its web-based materials testing system Statistical Analysis of Materials (SAM) within 24 hours of the sample being made available to the Contracting Agency. However, the Contractor agrees:

1. Quality control, defined as the system used by the Contractor to monitor, assess, and adjust its production processes to ensure that the final HMA mixture will meet the specified level of quality, is the sole responsibility of the Contractor.

2. The Contractor has no right to rely on testing performed by the Contracting Agency, nor does the Contractor have a right to rely on timely notification by the Contracting Agency of the Contracting Agency's test results (or statistical analysis thereof), for any part of quality control and/or for making changes or corrections to the HMA mixture.

3. The Contractor shall make no claim for untimely notification by the Contracting Agency of the Contracting Agency's test results or statistical analysis.

5-04.3(12) Joints

5-04.3(12).INST1
Section 5-04.3(12) is supplemented with the following:

5-04.3(12).OPT1
(January 5, 2004 WSDOT GSP)
The HMA overlay shall be feathered to produce a smooth riding connection to the existing pavement.

HMA utilized in the construction of the feathered connections shall be modified by eliminating the coarse aggregate from the mix at the Contractor's plant or the commercial source or by raking the joint on the roadway, to the satisfaction of the Engineer.

5-04.3(12).OPTA (Sealing HMA Joints)
(October 6, 2022 PC GSP)
The contractor shall seal all HMA surface joints with an application of PG58H-22 Liquid Asphalt. Joints to be sealed shall include, but are not limited to, joints at manhole frames and covers, planed butt joints, neat vertical cuts, and around water valve boxes, gas valve boxes, other utilities or as directed by the Engineer.

6-02 CONCRETE STRUCTURES

6-02.2 Materials

6-02.2.INST1
Section 6-02.2 is supplemented with the following:

6-02.2.OPT2 Epoxy Bonding Agent for Surfaces and for Steel Reinforcing Bar Dowels
(September 8, 2020 WSDOT GSP)
Epoxy bonding agent shall be Type II, as specified in Section 9-26.1. Epoxy bonding agent for steel reinforcing bar dowels shall be either Type 1 or IV, as specified in Section 9-26.1. The grade and class of epoxy bonding agent shall be as recommended by the resin manufacturer

6-02.3(24) Reinforcement

6-02.3(24)C Placing and Fastening

6-02.3(24)C.INST1
Section 6-02.3(24)C is supplemented with the following:

6-02.3(24)C.OPT1 Drilling Holes for, and Setting, Steel Reinforcing Bar Dowels
(September 8, 2020 WSDOT GSP)
Where called for in the Plans, holes shall be drilled into existing concrete to the size and dimension shown in the Plans. The Contractor may use any method for drilling the holes provided the method selected does not damage the concrete and the steel reinforcing bar that is to remain. Core drilling will be required when specifically noted in the Plans.

The Contractor shall exercise care in locating and drilling the holes to avoid damage to existing steel reinforcing bars and concrete. Location of the holes may be shifted slightly with the acceptance of the Engineer in order to avoid damaging the existing steel reinforcing bars. All damage caused by the Contractor's operations shall be repaired by the Contractor in accordance with Section 1-07.13.

Steel reinforcing bars shall be set into the holes noted in the Plans with epoxy resin. The holes shall be cleaned before placing the resin.

The Contractor shall demonstrate, to the satisfaction of the Engineer, that the method used for setting the steel reinforcing bars completely fills the void between the steel reinforcing bar and the concrete with epoxy resin. Dams shall be placed at the front of the holes to confine the epoxy and shall not be removed until the epoxy has cured in the hole.

6-02.4 Measurement

6-02.4.INST1
Section 6-02.4 is supplemented with the following:

6-02.4.OPT1 Summary of Quantities for Superstructure and Bridge Deck
(September 8, 2020 WSDOT GSP)
Superstructure No. PRT27195-E contains the following approximate quantities of materials and work:

Prestressed Concrete WF39DG Girders – 400 LF
Girder Embed Plate – 8 EA
Elastomeric Bearings – 8 EA
Steel Reinforcing Bar – 10,200 LBS
Seismic Fabrications and Restraints – 2 EA

The quantities are listed only for the convenience of the Contractor in determining the volume of work involved and are not guaranteed to be accurate. The prospective bidders shall verify these quantities before submitting a bid. No adjustments other than for accepted changes will be made in the lump sum Contract price for Superstructure No. PRT27195-E even though the actual quantities required may deviate from those listed.

6-02.5 Payment

6-02.5.INST4
Section 6-02.5 is supplemented with the following:

6-02.4.OPT26 Modifying Bridge Drain

(June 26, 2000 WSDOT GSP)
Modify bridge drain will be measured per each for each bridge drain modified.

6-02.5.OPT91 Bridge and Structures Minor Items
(June 1, 2026 WSDOT GSP)
For the purpose of payment, bridge and structures items including, but not limited to grout, pre-molded joint filler, etc.., for which there is no pay item included in the proposal, are considered as bridge and structures minor items. All costs in connection with furnishing and installing these bridge and structures minor items as shown and noted in the Plans and as outlined in these specifications and in the Standard Specifications shall be included in the Superstructure No. PRT27195-E.

6-06 BRIDGE RAILINGS
(*****)
Section 6-06 Bridge Railings is supplemented with the following:

Section 6-06.1 Description
Section 6-06.1 is supplemented with the following:

The Contractor shall furnish and install a bridge railing of the design, type, and location shown in the Plans.

Section 6-06.1 Description
Section 6-06.1 is supplemented with the following:
The Contractor shall furnish and install a bridge railing of the design, type, and location shown in the Plans.

6-06.2 Materials
Section 6-06.2 is supplemented with the following:

All wood materials shall be treated wood, or wood of natural resistance to decay. Materials shall be free from loose knots, cracks, and other imperfections and meet the material requirements described in Section 9-09, Timber and Lumber.

The HSS tubes shall be ASTM A500 Gr. B with Fy = 46ksi. The steel plates shall be ASTM A36 steel with drilled holes, flame cut holes are not acceptable. Welding shall be per Section 6-03.3(25). Finished steel fabrications, after welding, shall be hot dip galvanized per Section 6-07.3(14).

All timber fasteners shall be stainless steel unless otherwise noted on the Plans or as directed by the engineer.

Concrete for timber posts shall meet the requirements in Section 6-02.3(2)B for Commercial Concrete. The concrete may be mixed on site.

6-06.3 Construction Requirements
Section 6-06.3 is supplemented with the following:

Rail posts and horizontal timber railing spacing and layout shall be as illustrated in the Plans. Joints of timber railing and timber top rail sections shall be centered at the posts, except at the centerline of intermediate piers as illustrated in the Plans.
Posts set in concrete shall have concrete footings that are 12-inch diameter by 30 inches deep and crowned at the top.

Before fabrication of rail components, the Contractor shall submit Type 2 Working Drawings of the shop plans. The Contractor may substitute other rail connection details for those shown in the Plans if details of these changes show in the shop plans and if the Engineer accepts them in the Working

Drawing response comments. In reviewing the shop plans, the Engineer indicates only that they are adequate and complete enough. The review does not indicate a check on dimensions.

Section 6-06.4 Measurement
Section 6-06.4 is supplemented with the following:

Bridge Railing will be measured by the linear foot along the line and slope at the base of the completed railing.

6-06.5 Payment
Section 6-06.5 is supplemented with the following:

The per linear foot contract price for "Bridge Railing" shall be full pay for furnishing all materials, labor, tools, and equipment necessary to construct the railing as shown in the Plans. No further payment will be made.

6-08 BITUMINOUS SURFACING ON STRUCTURE DECKS
For WSDOT GSPs Relating to Bituminous Surfacing on Structure Decks see 6-08.GR6 at
https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/general-special-provisions-gsps

6-08.3 Construction Requirements

6-08.3.INST1
Section 6-08.3 is supplemented with the following:

6-08.3.OPTA Surfacing Removal and Paving Equipment Load and Spacing Restrictions
(October 6, 2022 PC GSP)
The following bridge(s) is (are) subject to the requirements and restrictions of this Special Provision:

Bridge No. PRT27195-E

The gross vehicle weight (GVW) of the surfacing removal and paving train vehicles (planers, scrapers, haul trucks, asphalt pavers, MTD/V, and rollers) allowed on the bridge shall not exceed the maximum GVW specified in the Plans and the spacing of the vehicles shall not be less than that specified in the Plans unless otherwise accepted as described in the **Submittal of Alternative Surfacing Removal and HMA Paving Trains** subsection of this Special Provision.

The Contractor shall submit a Type 2 Working Drawing consisting of the proposed methods and equipment to be used to remove surfacing and apply HMA overlay to the bridge deck. The Working Drawing shall include catalogue cuts, make, model, axle spacing, and gross weights of all surfacing removal equipment, pavers, rollers, and haul trucks used to conduct surfacing removal and paving operations on the bridge. The Working Drawing shall show the surfacing removal train units and paving train units and associated support equipment that is simultaneously on the bridge, in longitudinal section. The longitudinal section shall show the units in operational order. The details shall show or specify means of confirming in the field that the equipment units conform to and do not exceed the load limits specified in the Plans.

6-19 SHAFTS

6-19.2 Materials

6-19.2(9-36.2) Shaft Slurry

6-19.2(9-36.2(2)).INST1 Synthetic Slurry
Section 9-36.2(2) is supplemented with the following:

6-19.2(9-36.2(2)).OPT1
(January 2, 2012 WSDOT GSP)
Salt water shall not be used with synthetic slurry for shafts. Fresh water only shall be used.

6-19.2(9-36.4) Access Tubes and Caps

6-19.2(9-36.4).INST1
The first paragraph of Section 9-36.4 is revised to read:

6-19.2(9-36.4).OPT1
(October 3, 2022 WSDOT GSP)
Access tubes for CSL or TIP testing shall be steel pipe of 0.145 inches minimum wall thickness and at least 1-1/2 inch inside diameter or shall be Sonitec V2 CSL Tubes manufactured in America by Dextra. Dextra CSL tubes shall use Dextra caps and connectors.

6-19.3 Construction Requirements

6-19.3(3) Shaft Excavation

6-19.3(3).INST1
Section 6-19.3(3) is supplemented with the following:

6-19.3(3).OPT1
(January 2, 2012 WSDOT GSP)
Variations in the bearing layer elevation from that shown in the Plans are anticipated. The Contractor shall have equipment on-site capable of excavating an additional 20 percent of depth below that shown in the Plans.

6-19.3(3)B Temporary and Permanent Shaft Casing

6-19.3(3)B.INST1
Section 6-19.3(3)B is supplemented with the following:

6-19.3(3)B.OPT2
(January 2, 2012 WSDOT GSP)
Shaft casing shall be equipped with cutting teeth or a cutting shoe, and installed by either rotating or oscillating the casting. Installing the casing by vibratory means will not be allowed.

6-19.3(3)B4 Temporary Telescoping Shaft Casing

6-19.3(3)B4.INST1
The second paragraph of Section 6-19.3(3)B4 is revised to read as follows:

6-19.3(3)B4.OPT1
(January 2, 2012 WSDOT GSP)
Temporary telescoping casing will not be allowed for bridge end pier shafts.

6-19.3(5) Assembly and Placement of Reinforcing Steel

6-19.3(5).INST1
Section 6-19.3(5) is supplemented with the following:

6-19.3(5).OPT1
(August 1, 2016 WSDOT GSP)
For those shafts with a specified minimum penetration into the bearing layer and no specified tip elevation, the Contractor shall furnish each shaft steel reinforcing bar cage, including access tubes

for non-destructive QA testing in accordance with Section 6-19.3(6), 20 percent longer than specified in the Plans. The Contractor shall add the increased length to the bottom of the cage. The Contractor shall trim the shaft steel reinforcing bar cage to the proper length prior to placing it into the excavation. If trimming the cage is required and access tubes are attached to the cage, the Contractor shall either shift the access tubes up the cage, or cut the access tubes provided that the cut tube ends are adapted to receive the watertight cap as specified.

6-19.3(6) Contractor Furnished Accessories for Nondestructive QA Testing

6-19.3(6)E Thermal Wire and Thermal Access Points (TAPs)

6-19.3(6)E.INST1
Section 6-19.3(6)E is supplemented with the following:

6-19.3(6)E.OPT1
(January 2, 2018 WSDOT GSP)
The thermal wire and associated couplers shall be obtained from the following source:

Pile Dynamics, Inc.
30724 Aurora Road
Cleveland, OH 44139
(216) 831-6131
FAX: (216) 831-0916
www.pile.com

6-19.3(7) Placing Concrete

6-19.3(7)D Requirements for Placing Concrete Underwater

6-19.3(7)D.INST1
Section 6-19.3(7)D is supplemented with the following:

6-19.3(7)D.OPT1
(January 2, 2012 WSDOT GSP)
The Contractor may use a tremie instead of a concrete pump, subject to the following conditions:

1. The tremie shall have a hopper at the top that empties into a watertight tube at least eight inches in diameter.

2. The discharge end of the tube on the tremie shall include a device to seal out water while the tube is first filled with concrete.

6-19.4 Measurement

6-19.4.INST2
Section 6-19.4 is supplemented with the following:

6-19.4.OPT3
(September 2, 2025 WSDOT GSP)
Fresh water for shaft slurry will be measured in accordance with Section 3-06.4.

8-01 EROSION CONTROL AND WATER POLLUTION CONTROL

8-01.INST1 (Stormwater Pollution Prevention Plan)

(January 2, 2018 PC GSP)
In Section 8-01, all references to "temporary erosion and sediment control" and "TESC" are revised to read "stormwater pollution prevention" and "SWPP." All references to "Washington State Department of Transportation's Temporary Erosion Sediment Control Manual" or "Washington State Department of Ecology's Stormwater Management Manual" is revised to read "Pierce County Stormwater Management and Site Development Manual."

8-01.1 Description

8-01.1.INST1
Section 8-01.1 is supplemented with the following:

8-01.1.OPTA Straw Mulch
(June 27, 2024 PC GSP)
The Contractor shall place straw mulch on disturbed or bare areas, such as embankment slopes, cut and fill sections, where shown in the Plans or where designated by the engineer.

8-01_CSWPPP Requirement

Stormwater Pollution Prevention Plan
(*****)
Section 8-01 Erosion Control and Water Pollution Control is supplemented with the following:

Description
This work consists of Contractor development, submission, implementation, and management of a Construction Stormwater Pollution Prevention Plan.

Construction Requirements
The Contractor shall prepare a Construction Stormwater Pollution Prevention Plan (CSWPPP) that meets the requirements of the Pierce County Stormwater Management and Site Development Manual. The contractor shall submit the CSWPPP to the County for approval before starting work. Any revisions to the CSWPPP will require review and approval by the County. The Contractor shall provide a schedule for CSWPPP implementation and incorporate it into the Contractor's progress schedule. The Contractor shall obtain the approval of the CSWPPP and implementation schedule from the Engineer and, if required, Pierce County Development Services, before any Work begins.

The CSWPPP is considered a "living" document, in that it should be constantly revised to account for additional erosion control/pollution prevention BMPs as they become necessary and are implemented in the field during project construction. At the Contractor's preference, revisions to the CSWPPP may be forwarded to the Engineer, rather than submitting a complete document. All revisions to the CSWPPP shall meet all requirements of the Pierce County Stormwater Management and Site Development Manual. Revisions to the CSWPPP may require review by Pierce County Development Services.

The CSWPPP shall cover all areas in and around the project limits. The Contractor shall allow at least 5 working days for the Engineer to review any original or revised CSWPPP. Failure to approve all or part of any such Plan shall not make the County or Engineer liable to the Contractor for Work delays.
A copy of the most current CSWPPP shall remain on-site at all times, and an additional copy shall be forwarded to the Engineer. Likewise, revisions to the CSWPPP must be kept on site in a file along with the original CSWPPP document.

Measurement
There is no specific unit of measure, and no measurement will be made for the CSWPPP.

Payment
All costs associated with the Construction Stormwater Pollution Prevention Plan shall be incidental and included in the other items of Work that apply. No further payment will be made.

8-01.2 Materials

8-01.2.INST1
Section 8-01.2 is supplemented with the following:

8-01.2.OPTA Straw Mulch
(June 27, 2024 PC GSP)

Straw Mulch	9-14.5(1)

8-01.3 Construction Requirements

8-01.3.INST1
Section 8-01.3 is supplemented with the following:

8-01.3.OPTA Straw Mulch
(June 27, 2024 PC GSP)
Straw Mulch shall be placed by spreading over an erosion control area where shown in the Plans or where designated by the Engineer. See Standard Drawing PC.M2.3 in the Standard Drawing Section of the Contract. The mulch shall be spread in loose thickness to a minimum depth of 2 inches (corresponds to approximately 2 tons per acre). Coverage shall be uniform and even. The Engineer may field adjust the thickness of coverage to suit field and weather conditions.

8-01.3(1) General

8-01.3(1)B Erosion and Sediment Control (ESC) Lead

8-01.3(1)B.INST1
Section 8-01.3(1)B is revised to read:

8-01.3(1)B.OPTA Erosion and Sediment Control (ESC) Lead
(September 2, 2025 PC GSP)
This section is revised to read:

The Contractor shall identify the ESC Lead at the preconstruction discussions and in the TESC Plan. The ESC Lead shall have, for the life of the Contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by the Washington State Department of Ecology. The ESC Lead must be onsite or on call at all times throughout construction. The ESC Lead shall be listed on the Emergency Contact List required under Section 1-05.13(1).

The ESC Lead shall implement the TESC Plan. Implementation shall include, but is not limited to:

1. Installing, adaptively managing, and maintaining all temporary erosion and sediment control BMPs to assure continued performance of their intended function. Damaged or inadequate BMPs shall be corrected immediately. Impacts beyond the project perimeter shall be immediately corrected.

2. Updating the TESC Plan to reflect current field conditions.

3. Develop and maintain the Site Log Book that contains a record of the implementation of the SWPP Plan and other permit requirements, including the installation and maintenance of BMP's, site inspections, and stormwater

monitoring. When the Site Log Book or portion thereof is electronically developed, the electronic documentation must be accessible onsite.

4. Develop and maintain a BMP tracking table to show that identified TESC compliance issues are fully resolved within 10 calendar days. The table shall include the date an issue was identified, the date corrective actions commenced, a description of how it was resolved, and the date the issue was fully resolved. The BMP tracking table shall be included as part of the Site Log Book.

The ESC Lead shall also inspect all areas disturbed by construction activities, all on-site erosion and sediment control BMPs, and all stormwater discharge points at least once every calendar week and in advance of wet weather. The ESC Lead shall additionally inspect for signs of erosion, sedimentation, and discharges from the project limits within 24 hours following discrete storm events that may have caused onsite erosion or a need to maintain onsite BMPs.

Inspections of temporarily stabilized inactive sites may be reduced to once every calendar month following confirmation from the Contracting Agency that temporary BMPs installation is consistent with the Standard Plans and are performing in accordance with Contract requirements.

The Pierce County Construction Stormwater Site Inspection Form, included in the Contract Documents, shall be completed for each inspection and a copy shall be submitted to the Engineer in Portable Document Format (PDF) no later than the end of the next working day following the inspection.

8-01.3(7) Stabilized Construction Entrance
(*****)
Section 8-01.3(7) Stabilized Construction Entrance is replaced with the following:

Description
Temporary stabilized construction entrance shall be constructed in accordance with these Special Provisions, Summary of Geotechnical Conditions, and the Plans, prior to construction vehicles entering the roadway from locations that generate sediment track onto the roadway.

Materials
Material used for stabilized construction entrance shall be free of pH modifying and extraneous materials that may cause or contribute to track out or turbid water discharges.

Permeable Ballast	9-03.9(2)
Construction Geotextile	9-33

Construction Requirements
Preparation of the access areas should be performed as follows:

- Cut existing brush down to approximately 6 inches above ground surface. Bushes with stems larger than about 1 inch in diameter should be cut flush with the ground surface. Do not remove vegetative mat or root balls.

- Place a Geotextile for Soil Stabilization conforming to the requirements of Section 9-33 of the WSDOT Standard Specifications (refer to Table 3) over the area being prepared.

- Overlap all geotextile seams by at least 2 feet and roll out with as little wrinkling as practical.

- Cover the geotextile with at least 18 inches of Permeable Ballast conforming to the requirements of Section 9-03.9(2) of the WSDOT Standard Specifications.

- Spread the material with a dozer or other light-ground pressure equipment maintaining a minimum thickness of 12 inches of ballast between the equipment and the geotextile.

- If localized low-lying areas are present, place additional ballast to create a smooth, level pad.

- Compact the ballast by several passes of rubber-tired equipment or a static drum roller; use of heavy equipment or vibratory methods should only be used if evaluated by the Engineer and determined that they will not cause disturbance of underlying soils.

- Smooth the top of the ballast to provide even load distribution from the dunnage (timber mats, blocking and/or steel plates); heavy equipment such as cranes should only be allowed to operate on the ballast when dunnage is in place and the maximum ground bearing pressure below the dunnage is 700 psf.

Depending on the conditions encountered during construction and the crane loads, thicker sections of permeable ballast and/or use of reinforcing geogrids may be necessary. Requirements for the crane pads to be used during pick operations can be developed based on site conditions at the pick locations evaluated during construction and after actual loads are known.

It should also be noted that loading of the underlying soils, particularly where peat soils are present, will likely cause settlement. The settlement may be non-uniform and may require releveling one or more times during construction. Pad levelness and the corresponding crane levelness should be monitored closely and continuously throughout construction.

When the stabilized entrance no longer prevents track out of sediment or debris or turbid water discharges, the Contractor shall rehabilitate the existing entrance to original condition.

When the Contract requires a tire wash in conjunction with the stabilized entrance, the Contractor shall include details for the tire wash and the method for containing and treating the turbid runoff as part of the TESC Plan. All vehicles leaving the site shall stop and wash sediment from their tires. Tire wash or wheel wash water must be managed in accordance with Section 8-01.3(1)C2 and shall not discharge or infiltrate.

After removal of the Stabilized Construction Entrance and associated fill, the contractor shall perform additional grubbing as necessary for planting or as directed by the Engineer.

Submittals
The Contractor shall submit a Type 2 Working Drawing for the access plan/Stabilized Construction Entrance detailing the equipment and corresponding total weight / loads, as well as their plan for providing dunnage / wood blocking / steel plates to limit ground contact bearing pressures. The recommendations presented herein do not apply to scenarios where girders or other heavy objects are picked since the total loads that will require support, how these loads will be distributed below the cranes, and the exact locations of the cranes for the picks are unknown.

8-01.4 Measurement

8-01.4.INST1
Section 8-01.4 is supplemented with the following:

8-01.4.OPTA Straw Mulch
(June 27, 2024 PC GSP)

Straw Mulch shall be measured by the square yard.

8-01.4(2) Item Bids

8-01.4(2).INST1
The seventh paragraph of Section 8-01.4(2) is supplemented with the following:

8-01.4(2).OPTA
(January 29, 2024 PC GSP)
When the Contract does not include a Bid item for street cleaning, all cost for street cleaning shall be incidental to construction, and included in other Contract pay items.

8-01.5 Payment

8-01.5.INST1
Section 8-01.5 is supplemented with the following:

8-01.5.OPTA Straw Mulch
(June 27, 2024 PC GSP)
The unit contract price per square yard for "Straw Mulch" shall be full pay for furnishing all material, labor, tools, and equipment necessary to place and maintain the straw mulch. No further payment will be made.

8-02 ROADSIDE RESTORATION

8-02.2(9-14.2) Topsoil

8-02.2(9-14.2(1)) Topsoil Type A
Section 9-14.2(1) is supplemented with the following:

8-02.2(9-14.2(1)).OPT1
(February 25, 2021 WSDOT GSP)
Topsoil Type A shall meet the following requirements:

1. Cation exchange capacity (CEC) of Topsoil Type A shall be a minimum of 5 milliequivalents CEC/100 g dry soil (U.S. EPA Method 9081).

2. Organic content greater than 8-percent but less than 15-percent as measured on a dry weight basis using AASHTO T 267 Determination of Organic Content in Soils by Loss on Ignition.

Topsoil Type A shall be 60-percent to 70-percent Sandy Loam and 40-percent to 30-percent Fine Compost by volume. Sandy Loam shall be as defined by the US Department of Agriculture Soil Classification System.

The Contractor shall submit a Particle Size Analysis as a Type 1 Working Drawing from an independent accredited soils testing laboratory indicating the Material source and compliance with all Topsoil Type A specifications. The laboratory analysis shall be with a sample size of no less than 2 pounds.

The Fine Compost shall conform to the requirements of Section 9-14.5(8).

8-02.3(9) Seeding, Fertilizing, and Mulching

8-02.3(9)B Seeding and Fertilizing

8-02.3(9)B.INST1
Section 8-02.3(9)B is supplemented with the following:

8-02.3(9)B.OPT2 Seeding by Hand
(September 3, 2019 WSDOT GSP)
Grass seed shall be a commercially prepared mix, made up of low growing species which will grow without irrigation at the project location, and accepted by the Engineer. The application rate shall be two pounds per 1,000 square feet.

8-02.3(12) Inspection and Completion of Initial Planting
The fifth bullet of Section 8-02.3(12) is revised to read:

5. All planting areas are in a weed-free condition.

8-07 Precast Conc. Curb
(*****)
Section 8-07 Precast Traffic Curb is supplemented with the following:

Section 8-07.1 Description
Section 8-07.1 is supplemented with the following:

The Contractor shall furnish and install precast concrete curb of the design, type, and location shown in the Plans and in accordance with the Specifications.

Section 8-07.2 Materials
Section 8-07.2 is supplemented with the following:

Materials for precast conc. curb shall meet the requirements of section 8-07.2.

The thru-bolts to attach the curb to the girders shall be hot dip galvanized A307 bolts with a Simpson BP1 bearing plate (or approved equal) on the underside and a hot dip galvanized ASTM A563 nut.

The anchor bolts fastening the railing to the curb shall meet the requirements in Section 9-06.5(4).

Section 8-07.3 Construction Requirements
Section 8-07.3 is supplemented with the following:

Before fabrication or casting of the precast conc. curb, the Contractor shall submit Type 2 Working Drawings of the shop plans.

Joints between precast sections shall be open as shown in the plans.
After thru-bolt installation and tightening the Contractor shall stake the threads of the bolt.

Section 8-07.4 Measurement
Section 8-07.4 is supplemented with the following:

Precast Conc. Curb will be measured by the linear foot along the front face of the completed curb.

Section 8-07.5 Payment
Section 8-07.5 is supplemented with the following:

The per linear foot contract price for "Precast Conc. Curb" shall be full pay for furnishing all materials, labor, tools, and equipment necessary to construct the curb as shown in the Plans. No further payment will be made.

8-24 ROCK AND GRAVITY BLOCK WALL, AND GABION CRIBBING (*****)

Section 8-24 is supplemented with the following:

8-24.2 Materials

8-24.2.INST1

Section 8-24.2 is supplemented with the following:

8-24.2.OPT1 Gravity Block Wall

(November 2, 2022 WSDOT GSP)

Gravity block wall blocks shall be rectangular prisms with dimensions 2'-5 1/2" by 2'-5 1/2" by 4'-11", except for special blocks which shall be as dimensioned in the Plans. All dimensions shall be ± 1/2".

Except as otherwise specified, gravity block wall blocks will be accepted by the Engineer based on visual inspection only, with no minimum compressive strength and no air content requirements for the concrete used in the block.

Gravity block wall blocks for permanent walls of heights greater than six feet and less than 15 feet shall be cast with Class 3000 concrete, conforming to the air content requirements of Section 6-02.3(2)A. Commercial concrete shall not be used. Gravity block wall blocks for permanent walls of these heights will be accepted based on visual inspection, and conformance to Section 6-02.3(9) and the specified concrete strength and air content requirements.

8-24.3 Construction Requirements

8-24.3(2) Gravity Block Wall

8-24.3(2).INST1

Section 8-24.3(2) is supplemented with the following:

8-24.3(2).OPT1 Gravity Block Wall

(September 2, 2025 WSDOT GSP)

Definitions

Temporary Gravity Block Wall: A gravity block wall that is constructed and removed under the same contract. Temporary gravity block walls shall not exceed ten feet in height, measured from the bottom of the bottom row of blocks to the top of the highest block.

Permanent Gravity Block Wall: A gravity block wall that remains in place after the conclusion of the contract under which the gravity block wall was constructed. Permanent gravity block walls shall not exceed 15 feet in height, measured from the bottom of the bottom row of blocks to the top of the highest block.

Submittals

The Contractor shall submit working drawings of the gravity block wall to the Engineer for approval in accordance with Section 6-01.9. The working drawings shall include, but not be limited to, the following:

1. Plan, elevation, and section views of the wall, showing the layout, batter, and orientation of the blocks.

2. Dimensions and details of the blocks, including details and locations of block erection lifting loops and inserts, and the features designed to interlock blocks together if the blocks have such features.

3. Method and equipment used to erect the blocks.

4. Erection sequence.

The Contractor shall not begin fabricating gravity block wall blocks until receiving the Engineer's approval of the working drawing submittal.

Gravity Block Wall Erection
After excavating for the wall base, the Contractor shall grade the excavation for a width equal to or exceeding the width of the bottom row of blocks. The base shall be graded to the base elevation shown in the Plans and working drawings as approved by the Engineer and shall accommodate the batter of the bottom row of blocks.

The Contractor shall erect the gravity block wall and place the backfill in accordance with the erection sequence as approved by the Engineer. The top of the gravity block wall shall be within two inches of the line and grade shown in the Plans. The backfill shall be compacted in accordance with Section 3-03.3(14)C, Method C.

The Contractor shall repair all large blemishes, honeycombed areas, and chipped surfaces, (25 square inches and larger) on the exposed face of the erected wall using methods and materials as approved by the Engineer.

8-24.4 MEASUREMENT
Section 8-24.4 is supplemented with the following:

No specific unit of measurement will apply to the lump sum item for Gravity Block Wall.

8-24.5 PAYMENT
Section 8-24.5 is replaced with the following:

The lump sum contract price for "Gravity Block Wall" shall be full pay for all labor, tools, materials, excavation, foundation base material, backfill material, and equipment necessary to complete the Work as specified. No further payment will be made.

8-31 FISH EXCLUSION
(*****)
Section 8-31 is supplemented with the following:

Description
This work shall consist of blocking fish and removing fish from the project area and removing fish from the dewatered areas and initial dewatering of the work area and final re-watering of the work area in accordance with the "WSDOT Fish Exclusion Protocols and Standards." A Copy of the "WSDOT Fish Exclusion Protocols and Standards" is in the appendix of the Contract. All references in WSDOT Fish Exclusion Protocols and Standards to a WSDOT biologist shall be revised to read as the Contractor's biologist.

The Contractor shall have a qualified Fisheries Biologist oversee all creek bypass and fish exclusion activities.

MEASUREMENT
"Fish Exclusion" shall be for the exclusion of fish per these documents and the "WSDOT Fish Exclusion Protocols and Standards" and for the initial de-watering and final re-watering of the project site.

PAYMENT
Payment will be made in accordance with Section 1-04.1, for the lump sum bid item "Fish Exclusion." The lump sum price shall be full pay for all costs associated with Fish Exclusion.

9-03 AGGREGATES

9-03.8 Aggregates for Hot Mix Asphalt

9-03.8(7) HMA Tolerances, Specification Limits and Adjustments

9-03.8(7).INST1
Section 9-03.8(7) is deleted and replaced with the following:

9-03.8(7).OPTA HMA Tolerances, Specification Limits and Adjustments
(October 6, 2022 PC GSP)

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

   For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

   For Aggregates in the mixture:

   a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", 3/4", 1/2", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

   b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. **Job Mix Formula Adjustments** – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

   a. **Aggregates** –2 percent for the aggregate passing the 1-1/2", 1", 3/4", 1/2", 3/8", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).

   b. **Asphalt Binder Content** – The Engineer may order or approve changes to

asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

9-03.9 Aggregates for Ballast and Crushed Surfacing

9-03.9(3) Crushed Surfacing

9-03.9(3).INST1
Section 9-03.9(3) is supplemented with the following:

9-03.9(3).OPTA Crushed Surfacing
(October 6, 2022 PC GSP)
Recycled material shall not be used on shoulders.

STANDARD PLANS
(January 5, 2026 WSDOT GSP)
The Washington State Department of Transportation Standard Plans M21-01, published September 2024, is made a part of this Contract with the following revisions:

A-10.30
RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table): The RISER RING detail is deleted from the plan.

INSTALLATION detail, SECTION A: The "1/4"" callout is revised to read: "+/- 1/4" (SEE CONTRACT ~ Note: The + 1/4" installation is shown in the Section A view)"

A-40.20
Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

1. Use the ½-inch joint details for bridges with expansion length less than 100 feet and for bridges with L type abutments. Use the 1-inch joint details for other applications.
2. Use detail 5, 6, 7 on steel trusses and timber bridges with concrete bridge deck panels.
3. For details 1, 2, 3 and 4, the item "HMA Joint Seal at Bridge End" shall be used for payment. For details 5 and 6, the item "HMA Joint Seal at Bridge Deck Panel Joint" shall be used for payment. For detail 7, the item "Clean and Seal Bridge Deck Panel Joint" shall be used for payment.

Sheet 2, Detail 8 reference to "6-09.3(6)" is revised to read: "6-21.3(7)".

A-50.40
Sheet 1, Plan View: The callout "BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21 OR TYPE 24 (SEE STANDARD PLAN C-25.20 OR C-25.30)" is revised to read: "BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21, 24, OR 25 (SEE STANDARD PLAN C-25.20, C-25.30, OR C-25.32)"

A-60.40
Note 2 reference to "6-09.3(6)" is revised to read: "6-21.3(7)".

B-90.40
Valve Detail – DELETED

C-20.41
Note 4, First Sentence, "Box Culvert guardrail steel posts are not needed for fill depths greater than 40 inches." is revised to read; "Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater of separation between the bottom of the guardrail post and top of the culvert"
BOX CULVERT POST ASSEMBLY, ELEVATION VIEW, post assembly length dimension "41" MIN. 72" MAX." is revised to read; "41" MIN. 78" MAX."

SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”

C-20.43
Note 4, First Sentence: “Box culvert guardrail steel posts are not needed for fill depths greater than 40 inches.” is revised to read: “Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater separation between the bottom of guardrail post and top of culvert.”
Add a new KEY NOTE 4 – “IT IS PERMISSIBLE TO USE A 1” DIAM. ANCHOR ROD WITH TWO NUTS AND TWO – 1” DIAM. WASHERS PER STD. SPEC. SECTION 9-06.5(4) IN LIEU OF A HEX HEAD BOLT.”
BOX CULVERT POST & BASE PLATE ASSEMBLY, ELEVATION VIEW, post assembly length dimension – “41” MIN. 72” MAX.” is revised to read: “41” MIN. 78” MAX.”
SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”
Section A, callout – “1” (IN) DIAM. HEX HEAD BOLT (ASTM A 307, GR. A) W/NUT & 2 – 1” DIAM. WASHERS PER STD. SPEC. SECTION 9-06.5(1) ~ SEE NOTE 1” is revised to read” “1” (IN) DIAM. HEX HEAD BOLT (ASTM A 307, GR. A) W/NUT & TWO – 1” DIAM. WASHERS PER STD. SPEC. SECTION 9-06.5(1) ~ SEE KEY NOTES 1 AND 4”
Elevation View, Weld symbol – callout, See (key Note Symbol) “4” is revised to read: See (key Note Symbol) “3”

C-23.70
Sheet 2, ANCHOR BRACKET ASSEMBLY DETAIL, dimension, “R. 5/16” is revised to read: “R.15/16”
ANCHOR PLATE DETAIL, weld callout (fillet), 1/4" is revised to read: 3/16"

C-60.20
Sheet 1, Plan view callout – “1/2" (IN) DIAMETER X 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)” is revised to read: “5/8" (IN) DIAMETER X 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)”

C-70.15
BARRIER CONNECTION DETAIL, callout – “CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH TYPE 3 GROUT (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-20.3(20)” is revised to read “CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH GROUT TYPE 3 (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-02.3(20)”

C81.10
Sheet 1, TYPICAL SECTION – TRAFFIC BARRIER the R4 #6 bar on the traffic face may be placed 4” down from the top of the barrier to allow additional room to install BP railing or other attachments. The R4 bar shall be kept tight to the front R2 bar.
Sheet 4, the existing table “IMPACT SHEAR AND IMPACT MOMENT TABLE” is renamed to “IMPACT SHEAR AND MOMENT TABLE DECK OVERHANG AND CONNECTIONS” keynote 25 is still applicable.
Sheet 4, NOTES, the following Note is added: “3. Deck overhangs for this use constitute plain reinforced concrete typically around 8" in thickness, non-prestressed moment slabs or approach slabs, or plain reinforced and longitudinally prestressed box girders which employ a topping slab. Other Supporting Structure Systems inclusive of post-tensioned decks, walls, and or Structure segments tied together without a topping slab, with the ties in the barrier resistance load path, shall use the impact shear and moments for other supporting structures.”
Sheet 4, the following table is added with a keynote 25.

IMPACT SHEAR AND MOMENT TABLE OTHER SUPPORTING STRUCTURES										
	Interior Segment					End Segment				
Roadway and Fill Height at Curb Line (in)	0	6	12	18	24	0	6	12	18	24
End Segment Length (ft)	-	-	-	-	-	10.00	10.50	11.25	11.75	12.50
Impact Moment (kip*ft/ft)	19.86	24.12	28.55	33.16	37.97	20.80	25.17	29.65	34.27	39.04
Impact Shear (kip/ft)	7.89	8.04	8.23	8.44	8.68	8.27	8.39	8.54	8.72	8.92

C-81.15
Sheet 1, General Notes, Add Note 7, to read: "7. The concrete class for the moment slab shall be class 4000 typically and class 4000A when the top of the slab is used as the roadway, or sidewalk, surface. The concrete class for the barrier is defined in Standard Specification Section 6-10.3."

C-85.11
On Section B, the callout "3" EXPANDED POLYSTYRENE AROUND COLUMN (TYP.)" is revised to read: "3" EXPANDED POLYSTYRENE OR POLYETHYLENE FOAM AROUND COLUMN (TYP.)"

D-3.09
Sheet 1, GEOSYNTHETIC WALL WITH 2 FT TRAFFIC SURCHARGE detail, callout – "BARRIER ON WALL ~ SEE Standard Plan D-3.15 or D-3.16" is revised to read: "BARRIER ON WALL ~ SEE CONTRACT PLANS"

D-3.10
Sheet 1, Typical Section, callout – "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.15" is revised to read: "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER, SEE CONTRACT PLANS"
Sheet 1, Typical Section, callout – "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.16" is revised to read: "FOR WALLS WITH F-SHAPE TRAFFIC BARRIER, SEE CONTRACT PLANS"

D-3.11
Sheet 1, Typical Section, callout – "B" BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16" is revised to read: "B" BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)"
Sheet 1, Typical Section, callout – "TYPICAL BARRIER ON BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16" is revised to read: "TYPICAL BARRIER ON BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)"

D-10.10
Note 7, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30" is revised to read "Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 1 and 1SW".

D-10.15
Note 7, "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30" is revised to read "Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 2 and 2SW".

D-10.30
Wall Type 5 may be used in all cases.

D-10.35
Wall Type 6 may be used in all cases.

D-10.40
Note 5: "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30" is revised to read "Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 7".

D-10.45
Note 5: "If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30" is revised to read "Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 8".

F-10.18
Note 1: "Construct curb joints at cement concrete pavement transverse joint locations. If all adjacent pavement is HMA, see Standard Plan F-30.10 for Curb Expansion and Contraction Joint Spacing." is revised to read: "See Standard Plan F-30.10 and Standard Specification
Section 8-04.3 for Curb Expansion and Contraction Joint details and spacing."
CURB 3 Detail, the diamond note 1 callout on the 6" dimension at the bottom left side of the detail, is revised to be a diamond note 2 callout.

F-30.10
All five instances of the "2.0% MAX." are replaced with "2.1% MAX."

F-40.12
The one instance of "2.0% MAX." is replaced with "2.1% MAX."
Note 7 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15 ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.

Section B is amended as follows:
Delete: "15' – 0" MAX. (TYP.)"
Section C is amended as follows:
Delete: "15' – 0" MAX. (TYP.)"

F-40.14
The one instance of "2.0% MAX." is replaced with "2.1% MAX."
Note 7 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15 ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.

Section A is amended as follows:
Delete: "15' – 0" MAX. (TYP.)"
Section C is amended as follows:

Delete: “15' – 0" MAX. (TYP.)”

F-40.15
The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 7 is replaced with the following:
7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15 ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.
Section A is amended as follows:
Delete: “15' – 0" MAX. (TYP.)”

F-40.16
The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 8 is replaced with the following:
7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15 ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.
Section A is amended as follows:
Delete: “15' – 0" MAX. (TYP.)”
Section B is amended as follows:
Delete: “15' – 0" MAX. (TYP.)”

F-80.10
The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”
Note 6 is replaced with the following:
The running slope of the Pedestrian Ramp shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15 ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk.
Section A is amended as follows:
Delete: “15" Max.”

J-10.10
Sheet 4 of 6, “Foundation Size Reference Table”, PAD WIDTH column, Type 33xD=6' – 3" is revised to read: 7' – 3". Type 342LX / NEMA P44=5' – 10" is revised to read: 6' – 10"
Sheet 5 of 6, Plan View, “FOR EXAMPLE PAD SHOWN HERE: “first bullet” item, “-SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6" (IN)” IS REVISED TO READ: “SPACE BETWEEN TYPE B MOD. CABINET (BACK OF ALL CHANNEL STEEL) AND 33x CABINET IS 6" (IN) (CHANNEL STEEL ADDS ABOUT 5" (IN)”

J-10.16
Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.17
Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.18
Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-20.01
STANDARD DIMENSIONS AND REFERENCES table, TYPE FB, Standard Height column – “15’-0”” is revised to read, “14’ – 0””

J-20.10
DELETED

J-20.11
DELETED

J-20.26
Add Note 1: "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."
Add General Note 2, to read: "Signs shown are for locations with pedestrian signal displays (Accessible Pedestrian Signals/APS). Accessible information device (AID) pushbuttons signs not shown."
Revise View Titles (Both Sheets) to read: "ACCESSIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY"

J-20.16
View A, callout, was – LOCK NIPPLE, is revised to read: CHASE NIPPLE

J-21.10
Sheet 1, Anchor Bolt Template, callout; "9" (IN) BOLT CIRCLE" is revised to read: "9" (IN) DIA. BOLT CIRCLE"
Base Plate Detail, callout: "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/6" (IN)" IS REVISED TO READ: "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/16" (IN)"
Flat Foundation Detail – Elevation, callout; "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" is revised to read: "ANCHOR BOLTS ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"
Flat Foundation Detail – Elevation, dimension; 4'-0" is revised to read: "4'-0" ROUND OR 3'-0" SQUARE"

J-21.15
Partial View, callout, was – LOCK NIPPLE ~ 1 1/2" DIAM., is revised to read: CHASE NIPPLE ~ 1 1/2" (IN) DIAM.

J-21.16
On both elevation views, the overall standard height dimension "15'-0"" is revised to read, "14' – 0""

J-28.30
General Note 13 – "See Standard Plans C-8b and C-85.14 for steel light standards on traffic barrier" is revised to read: "See Standard Plan C-85.15 for steel light standards on traffic barrier."

J-40.10
Sheet 2 of 2, Detail F, callout, "12 – 13 x 1 1/2" S.S. PENTA HEAD BOLT AND 12" S.S. FLAT WASHER" is revised to read: "12 – 13 x 1 1/2" S.S. PENTA HEAD BOLT AND 1/2" (IN) S.S. FLAT WASHER"

J-40.36
Note 1, second sentence; "Finish shall be # 2B for backbox and # 4 for the cover." Is revised to read: "Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover."

J-40.37
Note 1, second sentence; "Finish shall be # 2B for backbox and # 4 for the cover." Is revised to read: "Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover."

J-50.15
Sheet 1, SECTION A, the call out "LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 3 PAIRS" is revised to read "LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 6 PAIRS"

J-75.20

Key Notes, note 16, second bullet point, was: "1/2" (IN) x 0.45" (IN) Stainless Steel Bands," add the following to the end of the note: "Alternate: Stainless steel cable with stainless steel ends, nuts, bolts, and washers may be used in place of stainless steel bands and associated hardware."

J-75.55
Notes, Note A1, Revise reference, was – G-90.29, should be – G-90.20.

K-80.32
Sheet 1, END VIEW, the callout located at the base of barrier – "SEE NOTE 2" is revised to read "SEE NOTE 3"
Sheet 2, WIRE ROPE LOOP DETAIL, dimension (overall length) – "SEE NOTE 1" is revised to read: "SEE NOTE 2"
Sheet 2, Side View (Right), callout – "WIRE ROPE LOOPS – SEE NOTE 1" is revised to read: "WIRE ROPE LOOPS – SEE NOTE 2"

L-5.10
Add new general Note 9 on sheet 1 – "9. The top of wall in Section A on Sheet 1 shall be located as follows: 1) flush with the finished grade when placed within the deflection distance of the long span guardrail system (Std. Plan C-20.40), 2) Two inches maximum above finished grade when placed behind a box culvert guardrail steel post system (Std. Plan C-20.41 or C-20.43), 3) Six inches minimum for all other applications. The bottom rail shall be located at mid height between the top rail and the top of structure."

M-20.30
Wide Dotted Lane Line Detail, reference below title, (SEE NOTE 6) is revised to read:
(SEE NOTE 5)

M-40.10
Guide Post Type ~ Reflective Sheeting Applications Table, remove reference – "(SEE NOTE 5)"

The following are the Standard Plan numbers applicable at the time this project was advertised. The date shown with each plan number is the publication approval date shown in the lower right-hand corner of that plan. Standard Plans showing different dates shall not be used in this contract.

A-10.10-00 ..... 8/7/07	A-30.35-00..... 10/12/07	A-50.10-02 .....7/18/24
A-10.20-00 ..... 10/5/07	A-40.00-01..... 7/6/22	A-50.40-01 .....8/17/21
A-10.30-00 ..... 10/5/07	A-40.10-04..... 7/31/19	A-60.10-03 .....12/23/14
A-20.10-00 ..... 8/31/07	A-40.15-00..... 8/11/09	A-60.20-03 .....12/23/14
A-30.10-00 ..... 11/8/07	A-40.20-04..... 1/18/17	A-60.30-01 .....6/28/18
A-30.30-01 ..... 6/16/11	A-40.50-03..... 9/12/23	A-60.40-00 .....8/31/07
B-5.20-03..... 9/9/20	B-30.40-03 .....2/27/18	B-70.60-01 .....1/26/17
B-5.40-02..... 1/26/17	B-30.50-03 .....2/27/18	B-75.20-03 .....8/17/21
B-5.60-02..... 1/26/17	B-30.60-00 .....9/9/20	B-75.50-02 .....3/15/22
B-10.20-03..... 8/23/23	B-30.70-04 .....2/27/18	B-75.60-00 .....6/8/06
B-10.40-02..... 8/17/21	B-30.80-01 .....2/27/18	B-80.20-00 .....6/8/06
B-10.70-03..... 8/23/23	B-30.90-02 .....1/26/17	B-80.40-00 .....6/1/06
B-15.20-01..... 2/7/12	B-35.20-00 .....6/8/06	B-85.10-01 .....6/10/08
B-15.40-01..... 2/7/12	B-35.40-01 .....8/23/23	B-85.20-00 .....6/1/06
B-15.60-02..... 1/26/17	B-40.20-00 .....6/1/06	B-85.30-00 .....6/1/06
B-20.20-02..... 3/16/12	B-40.40-02 .....1/26/17	B-85.40-00 .....6/8/06
B-20.40-04..... 2/27/18	B-45.20-01 .....7/11/17	B-85.50-01 .....6/10/08
B-20.60-03..... 3/15/12	B-45.40-01 .....7/21/17	B-90.10-00 .....6/8/06
B-25.20-02..... 2/27/18	B-50.20-00 .....6/1/06	B-90.20-00 .....6/8/06
B-25.60-03..... 8/23/23	B-55.20-03 .....8/17/21	B-90.30-00 .....6/8/06
B-30.05-00..... 9/9/20	B-60.20-02 .....9/9/20	B-90.40-01 .....1/26/17

B-30.10-03 ..... 2/27/18
B-30.15-00 ..... 2/27/18
B-30.20-04 ..... 2/27/18
B-30.30-03 ..... 2/27/18
B-60.40-01 ..... 2/27/18
B-65.20-01 ..... 4/26/12
B-65.40-00 ..... 6/1/06
B-70.20-01 ..... 3/15/22
B-90.50-00 ..... 6/8/06
B-95.20-02 ..... 8/17/21
B-95.40-01 ..... 6/28/18

C-1 ..... 9/8/22
C-1b 10/12/23
C-1d 10/31/03
C-6a 9/8/22
C-7 ..... 9/8/22
C-7a 9/8/22
C-20.10-09 ..... 10/12/23
C-20.14-05 ..... 9/8/22
C-20.15-03 ..... 10/12/23
C-20.18-04 ..... 9/8/22
C-20.40-10 ..... 10/12/23
C-20.41-05 ..... 7/18/24
C-20.43-01 ..... 7/18/24
C-20.44-00 ..... 8/13/24
C-20.45-03 ..... 9/8/22
C-20.55-00 ..... 7/30/24
C-22.16-08 ..... 10/17/23
C-22.40-11 ..... 7/21/24
C-22.45-07 ..... 7/21/24
C-23.70-01 ..... 10/16/23
C.24.10-05 ..... 7/21/24
C-24.15-00 ..... 3/15/22
C-25.20-07 ..... 8/20/21
C-25.22-06 ..... 8/20/21
C-25.26-05 ..... 8/20/21
C-25.30-01 ..... 8/20/21
C-25.32-00 ..... 7/29/24
C-25.80-05 ..... 8/12/19
C-60.10-04 ..... 7/21/24
C-60.15-01 ..... 7/21/24
C-60.20-01 ..... 9/8/22
C-60.30-02 ..... 7/21/24
C-60.40-01 ..... 7/21/24
C-60.45-01 ..... 7/21/24
C-60.50-01 ..... 7/21/24
C-60.60-01 ..... 7/21/24
C-60.70-01 ..... 9/8/22
C-60.80-02 ..... 7/21/24
C-70.10-04 ..... 10/16/23
C-70.15-01 ..... 7/21/24
C-75.10-02 ..... 9/16/20
C-75.20-03 ..... 8/20/21
C-75.30-03 ..... 8/20/21
C-80.10-03 ..... 10/16/23
C-80.20-01 ..... 6/11/14
C-80.30-02 ..... 8/20/21
C-80.40-01 ..... 6/11/14
C-81.10-00 ..... 9/12/23
C-81.15-00 ..... 9/12/23
C-85.10-00 ..... 4/8/12
C-85.11-01 ..... 9/16/20
C-85.15-03 ..... 10/17/23
C-85-18-03 ..... 9/8/22

D-2.36-03 ..... 6/11/14
D-2.46-02 ..... 8/13/21
D-2.84-00 ..... 11/10/05
D-2.92-01 ..... 4/26/22
D-3.09-00 ..... 5/17/12
D-3.10-01 ..... 5/29/13
D-3.11-03 ..... 6/11/14
D-4 ..... 12/11/98
D-6 ..... 6/19/98
D-10.10-01 ..... 12/2/08
D-10.15-01 ..... 12/2/08
D-10.20-01 ..... 8/7/19
D-10.25-01 ..... 8/7/19
D-10.30-00 ..... 7/8/08
D-10.35-00 ..... 7/8/08
D-10.40-01 ..... 12/2/08
D-10.45-01 ..... 12/2/08
D-20.10-00 ..... 10/9/23

E-1 ..... 2/21/07
E-2 ..... 5/29/98
E-4 ..... 8/27/03
E-4a 8/27/03
E-20.10-00 ..... 9/12/23
E-20.20-00 ..... 10/4/23

F-10.12-04 ..... 9/24/20
F-10.16-00 ..... 12/20/06
F-10.18-04 ..... 6/28/24
F-10.40-04 ..... 9/24/20
F-10.42-00 ..... 1/23/07
F-10.62-02 ..... 4/22/14
F-10.64-03 ..... 4/22/14
F-30.10-04 ..... 9/25/20
F-40.12-03 ..... 6/29/16
F-40.14-03 ..... 6/29/16
F-40.15-04 ..... 9/25/20
F-40.16-03 ..... 6/29/16
F-45.10-05 ..... 6/4/24
F-80.10-04 ..... 7/15/16

G-10.10-00 ..... 9/20/07
G-20.10-03 ..... 8/20/21
G-22.10-04 ..... 6/28/18
G-24.10-00 ..... 11/8/07
G-24.20-01 ..... 2/7/12
G-24.30-02 ..... 6/28/18
G-24.40-07 ..... 6/28/18
G-24.50-05 ..... 8/7/19
G-24.60-05 ..... 6/28/18
G-25.10-05 ..... 9/16/20
G-26.10-00 ..... 7/31/19
G-30.10-04 ..... 6/23/15
G-50.10-03 ..... 6/28/18
G-90.10-03 ..... 7/11/17
G-90.20-05 ..... 7/11/17
G-90.30-04 ..... 7/11/17
G-95.10-02 ..... 6/28/18
G-95.20-03 ..... 6/28/18
G-95.30-03 ..... 6/28/18

H-10.10-01 ..... 6/2/24
H-10.11-00 ..... 6/2/24
H-10.15-01 ..... 6/2/24
H-10.16-00 ..... 6/2/24
H-30.10-00 ..... 10/12/07
H-32.10-00 ..... 9/20/07
H-60.10-01 ..... 7/3/08
H-60.20-01 ..... 7/3/08
H-70.10-02 ..... 8/17/21
H-70.20-02 ..... 8/17/21

I-10.10-01 ..... 8/11/09
I-30.10-02 ..... 3/22/13
I-30.15-02 ..... 3/22/13
I-30.20-00 ..... 9/20/07
I-30.30-02 ..... 6/12/19
I-30.40-02 ..... 6/12/19
I-40.20-00 ..... 9/20/07
I-50.20-02 ..... 7/6/22
I-60.10-01 ..... 6/10/13

I-30.16-01 ..... 7/11/19
I-30.17-01 ..... 6/12/19
I-30.60-02 ..... 6/12/19
I-40.10-00 ..... 9/20/07
I-60.20-01 ..... 6/10/13
I-80.10-02 ..... 7/15/16

J-05.50-00 ..... 8/30/22
J-10 ..... 7/18/97
J-10.10-04 ..... 9/16/20
J-10.12-00 ..... 9/16/20
J-10.14-00 ..... 9/16/20
J-10.15-01 ..... 6/11/14
J-10.16-02 ..... 8/18/21
J-10.17-02 ..... 8/18/21
J-10.18-02 ..... 8/18/21
J-10.20-04 ..... 8/18/21
J-10.21-02 ..... 8/18/21
J-10.22-03 ..... 10/4/23
J-10.25-01 ..... 6/21/24
J-10.26-00 ..... 8/30/22
J-12.15-00 ..... 6/28/18
J-12.16-00 ..... 6/28/18
J-15.10-01 ..... 6/11/14
J-15.15-02 ..... 7/10/15
J-20.01-01 ..... 6/21/24
J-20.05-00 ..... 6/21/24
J-20.10-05 ..... 10/4/23
J-20.11-03 ..... 7/31/19
J-20.15-04 ..... 6/21/24
J-20.16-02 ..... 6/30/14
J-20.20-02 ..... 5/20/13
J-20.26-01 ..... 7/12/12
J-21.10-05 ..... 6/21/24
J-21.15-01 ..... 6/10/13
J-21.16-02 ..... 6/21/24
J-21.17-01 ..... 6/10/13
J-21.20-01 ..... 6/10/13
J-22.15-03 ..... 6/21/24
J-22.16-03 ..... 7/10/15
J-22.17-00 ..... 6/21/24
J-26.10-03 ..... 7/21/16
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J-27.10-01 ..... 7/21/16
J-27.15-00 ..... 3/15/12
J-28.01-00 ..... 8/30/22
J-28.10-02 ..... 8/7/19
J-28.22-00 ..... 8/7/07
J-28.24-02 ..... 9/16/20
J-28.26-01 ..... 12/2/08
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J-28.40-02 ..... 6/11/14
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J-28.43-01 ..... 6/28/18
J-28.45-03 ..... 7/21/16
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J-28.60-03 ..... 8/27/21
J-28.70-04 ..... 8/30/22
J-29.10-02 ..... 8/26/22
J-29.15-01 ..... 7/21/16
J-29.16-02 ..... 7/21/16
J-30.10-01 ..... 8/26/22
J-40.01-00 ..... 8/30/22
J-40.05-00 ..... 7/21/16
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J-40.20-03 ..... 4/28/16
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J-40.35-01 ..... 5/29/13
J-40.36-02 ..... 7/21/17
J-40.37-02 ..... 7/21/17
J-40.38-01 ..... 5/20/13
J-40.39-00 ..... 5/20/13
J-40.40-02 ..... 7/31/19
J-45.36-00 ..... 7/21/17
J-50.05-00 ..... 7/21/17
J-50.10-01 ..... 7/31/19
J-50.11-02 ..... 7/31/19
J-50.12-02 ..... 8/7/19
J-50.13-01 ..... 8/30/22
J-50.15-01 ..... 7/21/17
J-50.16-01 ..... 3/22/13
J-50.18-00 ..... 8/7/19
J-50.19-00 ..... 8/7/19
J-50.20-00 ..... 6/3/11
J-50.25-00 ..... 6/3/11
J-50.30-00 ..... 6/3/11
J-60.05-01 ..... 7/21/16
J-60.11-00 ..... 5/20/13
J-60.12-00 ..... 5/20/13
J-60.13-00 ..... 6/16/10
J-60.14-01 ..... 7/31/19
J-75.10-02 ..... 7/10/15
J-75.20-01 ..... 7/10/15
J-75.30-02 ..... 7/10/15
J-75.50-00 ..... 8/30/22
J-75.55-00 ..... 8/30/22
J-80.05-00 ..... 8/30/22
J-80.10-01 ..... 8/18/21
J-80.12-00 ..... 8/18/21
J-80.15-00 ..... 6/28/18
J-81.10-02 ..... 8/18/21
J-81.12-00 ..... 9/3/21
J-84.05-00 ..... 8/30/22
J-86.10-00 ..... 6/28/18
J-90.10-03 ..... 6/28/18
J-90.20-03 ..... 6/28/18
J-90.21-02 ..... 6/28/18
J-90.50-00 ..... 6/28/18

K-70.20-01 ..... 6/1/16
K-80.10-02 ..... 9/25/20
K-80.32-00..... 8/17/21
K-80.34-00..... 8/17/21
K-80.35-01 ..... 9/16/20
K-80.37-01 ..... 9/16/20

L-5.10-02 ..... 6/5/24
L-5.15-00 ..... 9/19/22
L-10.10-02 ..... 6/21/12
L-20.10-03 ..... 7/14/15
L-30.10-02 ..... 6/11/14
L-40.15-01 ..... 6/16/11
L-40.20-02 ..... 6/21/12
L-70.10-01 ..... 5/21/08
L-70.20-01 ..... 5/21/08

M-1.20-04 ..... 9/25/20
M-1.40-03 ..... 9/25/20
M-1.60-03 ..... 9/25/20
M-1.80-03 ..... 6/3/11
M-2.20-03 ..... 7/10/15
M-2.21-00 ..... 7/10/15
M-3.10-04 ..... 9/25/20
M-3.20-04 ..... 8/2/22
M-3.30-04 ..... 9/25/20
M-3.40-04 ..... 9/25/20
M-3.50-03 ..... 9/25/20
M-9.60-00 ..... 2/10/09
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M-12.10-04 ..... 6/28/24
M-15.10-02 ..... 7/17/23
M-17.10-02 ..... 7/3/08
M-20.10-04 ..... 8/2/22
M-20.20-02 ..... 4/20/15
M-20.30-05 ..... 6/28/24
M-20.40-03 ..... 6/24/14
M-20.50-02 ..... 6/3/11
M-24.20-02 ..... 4/20/15
M-24.66-00 ..... 7/11/17
M-40.10-04 ..... 10/17/23
M-40.20-00 ..... 10/12/07
M-40.30-01 ..... 7/11/17
M-40.40-00 ..... 9/20/07
M-40.50-00 ..... 9/20/07
M-40.60-00 ..... 9/20/07
M-60.10-01 ..... 6/3/11
M-60.20-03 ..... 8/17/21
M-65.10-03 ..... 8/17/21
M-80.10-01 ..... 6/3/11

M-5.10-03 ..... 9/25/20
M-7.50-01 ..... 1/30/07
M-9.50-02 ..... 6/24/14
M-24.40-02 ..... 4/20/15
M-24.60-04 ..... 6/24/14
M-24.65-00 ..... 7/11/17
M-80.20-00 ..... 6/10/08
M-80.30-00 ..... 6/10/08

OTHER AGENCY PERMITS

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH, BLDG 1202
SEATTLE, WA 98134-2388

November 25, 2025

Regulatory Division

Mr. Garett Tapia
Pierce County Parks
9850 64th Street west
University Place, Washington 98467

Reference: NWS-2025-316-WRD
Pierce County Parks
(Ski Park Bridge
Replacement)

Dear Mr. Tapia:

We have reviewed your application to place 551 cubic yards of temporary fill into Wetland B for the access road and staging area and replace existing 195 linear feet by 10 feet wide foothills trail system pedestrian bridge supported by creosote piers with a new 204 linear feet by 12.2 feet wide bridge superstructure supported by three concrete piers with steel casting and bridge caps (330 cubic yards of concrete poured in placed) within the existing footprint in Wetland B and an unnamed tributary to South Prairie Creek near Orting, Pierce County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 3, *Maintenance* (Federal Register December 27, 2021, Vol. 86, No. 245), authorizes your proposal as depicted on the enclosed drawings dated March 4, 2025.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 3, Terms and Conditions* and the following special conditions:

a. You must implement and abide by the *No Effect Be Evaluation for Ski Park Bridge Replacement* dated 24 April 2025, in its entirety. The U.S. Army Corps of Engineers (Corps) made a determination of No Effect for USFW species and critical habitat based on this document. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and your Corps permit.

b. This U.S. Army Corps of Engineers (Corps) permit does not authorize you to take a threatened or endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or ESA Section 7 consultation Biological Opinion (BO) with non-

discretionary “incidental take” provisions with which you must comply). The Regional Road Maintenance Program Limit 10 BO prepared by the National Marine Fisheries Service (NMFS) contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the specified “incidental take” in the BO (NMFS Reference Numbers 2003-00313, 2004-00647, 2009-03290, and WCR-2014-304). Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take of the BO. These terms and conditions are incorporated by reference in this permit. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and your Corps permit. The NMFS is the appropriate authority to determine compliance with the ESA.

c. In order to meet the requirements of the Endangered Species Act you may conduct the authorized in-water activities (e.g., pile driving) during the period from July 1 through September 30 in any year this permit is valid. You shall not conduct any in-water work authorized by this permit during the period from October 1 through June 30 in any year this permit is valid.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the National Historic Preservation Act. We have determined this project complies with the requirements of these laws provided you comply with all of the permit general and special conditions.

Please note that National General Condition 21, *Discovery of Previously Unknown Remains and Artifacts*, found in the *Nationwide Permit Terms and Conditions* enclosure, details procedures that must be followed should an inadvertent discovery occur. You must ensure that you comply with this condition during the construction of your project.

The authorized work complies with the Washington State Department of Ecology’s (Ecology) Water Quality Certification (WQC) requirements and Coastal Zone Management (CZM) consistency determination decision for this NWP. No further coordination with Ecology for WQC and CZM is required.

You have not requested a jurisdictional determination for this proposed project. If you believe the U.S. Army Corps of Engineers does not have jurisdiction over all or portions of your project you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

Our verification of this NWP authorization is valid until March 14, 2026, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work for the

NWP authorization has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2026, you will have until March 14, 2027, to complete the activity under the enclosed terms and conditions of this NWP. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

You are cautioned that any change in project location or plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work. Deviating from the approved plans could result in the assessment of criminal or civil penalties.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. All compliance reports should be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Division electronically at nws.compliance@usace.army.mil. Thank you for your cooperation during the permitting process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey. Referenced documents and information about our program are available on our website at www.nws.usace.army.mil, select “Regulatory Permit Information”. A copy of this letter with enclosure(s) will be furnished to Mr. Jeff Rudolph at jeff.rudolph@piercecountywa.gov. If you have any questions, please contact Ms. Colleen Anderson at colleen.c.anderson@usace.army.mil or (360) 916-1520.

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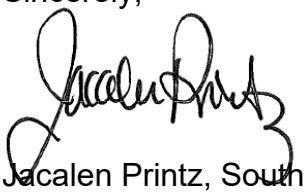
Sincerely,



Jacalen Printz, South Branch Chief
Regulatory Division

Enclosure(s)

cc:
Ecology (ecyrefedpermits@ecy.wa.gov)

US Army Corps of Engineers
Seattle District

NATIONWIDE PERMIT 3
Terms and Conditions

2021 NWPs - Final 41; Effective Date: February 25, 2022
amended with RGCs 10-14 June 28, 2024

A. Description of Authorized Activities
B. U.S. Army Corps of Engineers (Corps) National General Conditions for All Final 41 NWPs
C. Seattle District Regional General Conditions
D. Seattle District Regional Specific Conditions for this Nationwide Permit (NWP)
E. 401 Water Quality Certification (401 WQC) for this NWP
F. Coastal Zone Management Consistency Response for this NWP

In addition to any special condition that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit (NWP) authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

3. Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance

activity, 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.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL 2021 NWPs - FINAL 41

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

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

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

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

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

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

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

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

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

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

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

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. 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 pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

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

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

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

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

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

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

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

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

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

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

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

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

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

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

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

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

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

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects 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 commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on 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.

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

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

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

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

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

(b) For 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 by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

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

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

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

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

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, 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. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory

mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

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

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the 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)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

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

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

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

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible

mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

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

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

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

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

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

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

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

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot 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.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

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

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

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The 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 activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

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

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

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

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

completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

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

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

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or 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. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

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

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

(2) Location of the proposed activity;

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

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

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

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

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent 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 or 3/100-acre of stream bed 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 species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

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

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

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

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

used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the 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 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

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

(4) In cases 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.

C. SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to the 2021 NWPs - Final 41 NWPs for the Seattle District in Washington State, as applicable.

RGC 1, Project Drawings
Drawings must be submitted with a pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the United States will be affected. Drawings must be originals and not reduced copies of large-scale plans. Engineering drawings are not required. Existing and proposed site conditions (manmade and landscape features) must be drawn to scale.

RGC 2, Aquatic Resources Requiring Special Protection
A PCN is required for activities resulting in a loss of waters of the United States in wetlands in dunal systems along the Washington coast, mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, and wetlands in coastal lagoons.

RGC 3, New Bank Stabilization in Tidal Waters of Puget Sound
Activities involving new bank stabilization in tidal waters in Water Resource Inventory Areas (WRIAs) 8, 9, 10, 11, and 12 (within the areas identified on Figures 1a through 1e) cannot be authorized by NWP.

RGC 4, Commencement Bay
No permanent losses of wetlands or mudflats within the Commencement Bay Study Area may be authorized by any NWP (see Figure 2).

RGC 5, Bank Stabilization
All projects including new or maintenance bank stabilization activities in waters of the United States where salmonid species are present or could be present, requires PCN to the U.S. Army Corps of Engineers (Corps) (see NWP general condition 32).

For new bank stabilization projects only, the following must be submitted to the Corps:

a. The cause of the erosion and the distance of any existing structures from the area(s) being stabilized.

b. The type and length of existing bank stabilization within 300 feet of the proposed project.

c. A description of current conditions and expected post-project conditions in the waterbody.

d. A statement describing how the project incorporates elements avoiding and minimizing adverse environmental effects to the aquatic environment and nearshore riparian area, including vegetation impacts in the waterbody.

In addition to a. through d., the results from any relevant geotechnical investigations can be submitted with the PCN if it describes current or expected conditions in the waterbody.

RGC 6, Crossings of Waters of the United States
Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts or bridges, requires submittal of a PCN to the U.S. Army Corps of Engineers (see NWP general condition 32).

If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, the project must apply the stream simulation design method from the Washington Department of Fish and Wildlife located in the Water Crossing Design Guidelines (2013), or a design method which provides passage at all life stages at all flows where the salmonid species would naturally seek passage. If the stream simulation design method is not applied for a culvert where salmonid species are present or could be present, the applicant must provide a rationale in the PCN sufficient to establish one of the following:

a. The existence of extraordinary site conditions.

b. How the proposed design will provide equivalent or better fish passage and fisheries habitat benefits than the stream simulation design method.

Culverts installed under emergency authorization that do not meet the above design criteria will be required to meet the above design criteria to receive an after-the-fact nationwide permit verification.

RGC 7, Stream Loss
A PCN is required for all activities that result in the loss of any linear feet of streams.

RGC 8, Construction Boundaries

Permittees must clearly mark all construction area boundaries within waters of the United States before beginning work on projects that involve grading or placement of fill. Boundary markers and/or construction fencing must be maintained and clearly visible for the duration of construction. Permittees should avoid and minimize removal of native vegetation (including submerged aquatic vegetation) to the maximum extent possible.

RGC 9, ESA Reporting to NMFS
For any nationwide permit that may affect threatened or endangered species:

Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries, National Marine Fisheries Service (NMFS) under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this Nationwide Permit verification shall be reported to NMFS, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Seattle District of the U.S. Army Corps of Engineers at (206) 764-3495. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by the NMFS to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

RGC 10, Limitations on New Bank Stabilization Within the Salish Sea
The length of new bank stabilization within waters of the U.S., including new bank stabilization associated with maintenance activities that would expand previously authorized armoring length, cannot exceed 50 linear feet within the Salish Sea under any NWP.

RGC 11, Effects to Forage Fish Spawning Beaches, Drift Cells, and Feeder Bluffs)
No NWP activity can:

a. cause more than minimal adverse effects to forage fish spawning beaches or drift cells; or

b. prevent the functioning of feeder bluffs, including more than minimal adverse effects to sediment recruitment, transport, or deposition.

This regional general condition applies to all NWP activities within the Salish Sea. Information regarding the location of forage fish spawning beaches is available on the Washington Department of Fish and Wildlife's (WDFW) Forage Fish Spawning Map at https://wdfw.maps.arcgis.com/home/webmap/viewer.html?webmap=19b8f74e2d41470cbd80b1af8dedd6b3. Information regarding the location and movement of drift cells, shoreline stability, and coastal landforms, to include feeder bluffs, is available at the Washington State Department of Ecology's Coastal Atlas Map website: https://apps.ecology.wa.gov/coastalatlasmap. These maps are resources that can be used to help identify the location of forage fish spawning beaches, drift cells, and feeder bluffs; they are not a substitute for site-specific data. Information about forage fish, their spawning habitats, and spawning behavior are available through the WDFW. Additional information about the importance of these species as prey species for Endangered Species Act listed salmonids can be found on the National Marine Fisheries Service website.

RGC 12, Bank Stabilization Design Considerations
Bank stabilization activities, including maintenance activities, shall utilize living shorelines, vegetative stabilization, bioengineering, including but not limited to large woody material with intact root wads, and other soft bank stabilization approaches to the maximum practicable extent before considering hard bank stabilization methods such as bulkheads and rock revetments.

RGC 13, PCNs for Activities in Areas Where There May Be Treaty-Reserved Tribal Rights

To ensure compliance with General Condition 17, Tribal Rights, a pre-construction notification (PCN) is required for all NWPs associated with structures or fills in areas where Tribes have retained via treaty the right to fish in their usual and accustomed grounds and stations.

RGC 14, Maintenance of Existing Bank Stabilization Structures and Fills
(Applicable to NWP 3, Maintenance Activities) Maintenance of existing bank stabilization structures that expand the existing structure's footprint or dimensions either waterward, vertically, or linearly along the shoreline within the geographic jurisdiction of the U.S. Army Corps of Engineers are not eligible for NWP 3.

D. SEATTLE DISTRICT REGIONAL SPECIFIC CONDITIONS FOR THIS NWP: None

E. 401 WATER QUALITY CERTIFICATION: Depending on the geographic region of the work authorized by this verification, the appropriate 401 certifying authority has made the following determinations:

Washington Department of Ecology (Ecology) (Projects in all areas except as described for the other certifying agencies listed below): General and Specific WQC Conditions

A. State General Conditions for all Nationwide Permits

In addition to all of the U.S. Army Corps of Engineers' (Corps) national and Seattle District'sregional permit conditions, the following state general Water Quality Certification (WQC) conditions **apply to all NWPs whether granted or granted with conditions** in Washington where Ecology is the certifying authority.

Due to the lack of site specific information on the discharge types, quantities, and specific locations, as well as the condition of receiving waters and the quantity of waters (including wetlands) that may be lost, Ecology may need to review the project if one of the following stategeneral conditions is triggered.

This case-by-case review may be required, and additional information regarding the project and associated discharges may be needed, to verify that the proposed project would comply with state water quality requirements and if an individual WQC is required or if the project meets this programmatic WQC.

1. **In-water construction activities**. Ecology WQC review is required for projects or activities authorized under NWPs where the project proponent has indicated on the Joint Aquatic Resource Permit Application (JARPA) question 9e that the project or activity will not meet State water quality standards, or has provided information indicating that the project or activity will cause, or may be likely to cause or contributeto an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC).

Note: In-water activities include any activity within a jurisdictional wetland and/orwaters.

2. **Projects or Activities Discharging to Impaired Waters**. Ecology WQC review is required for projects or activities that will occur in a 303(d) listed segment of a waterbody or upstream of a listed segment and may result in further exceedances of the specific listedparameter to determine if the project meets this programmatic WQC or will require individual WQC.

To determine if your project or activity is in a 303(d) listed segment of a waterbody, visitEcology's Water Quality Assessment webpage for maps and search tools.

3. **Aquatic resources requiring special protection**. Certain aquatic resources are unique and difficult-to-replace components of the aquatic environment in Washington. Activities that would affect these resources must be avoided to the greatest extent practicable. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscapesettings.

Ecology WQC review is required for projects or activities in areas identified below to determine if the project meets this programmatic WQC or will require individual WQC.

a. Activities in or affecting the following aquatic resources:
    i. Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #14-06-029 and #14-06-030):
        - Estuarine wetlands.
        - Wetlands of High Conservation Value.
        - Bogs.
        - Old-growth forested wetlands and mature forested wetlands.
        - Wetlands in coastal lagoons.
        - Wetlands in dunal systems along the Washington coast.
        - Vernal pools.
        - Alkali wetlands.

    ii. Fens, aspen-dominated wetlands, camas prairie wetlands.

    iii. Category I wetlands.

    iv. Category II wetlands with a habitat score ≥ 8 points.

b. Activities in or resulting in a loss of eelgrass (Zostera marina) beds.

This state general condition does not apply to the following NWPs:
NWP 20 – Response Operations for Oil and Hazardous Substances
NWP 32 – Completed Enforcement Actions
NWP 48 – Commercial Shellfish Mariculture Activities

4. **Loss of More than 300 Linear Feet of Streambed.** For any project that results in the lossof more than 300 linear feet of streambed Ecology WQC review is required to determineif the project meets this programmatic WQC or will require individual WQC.

5. **Temporary Fills.** For any project or activity with temporary fill in wetlands or other waters for more than six months Ecology WQC review is required to determine if theproject meets this programmatic WQC or will require individual WQC.

6. **Mitigation.** Project proponents are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resourceswherever practicable. For projects requiring Ecology WQC review or an individual WQC with unavoidable impacts to aquatics resources, a mitigation plan must be provided.

    a. Wetland mitigation plans submitted for Ecology review and approval shall be based on the most current guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (available on Ecology's website) and shall, at aminimum, include the following:

        i. A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.

        ii. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).

iii. The rationale for the mitigation site that was selected.

iv. The goals and objectives of the compensatory mitigation project.

v. How the mitigation project will be accomplished, including construction sequencing, best management practices to protect water quality, proposed performance standards for measuring success and the proposed buffer widths.

vi. How it will be maintained and monitored to assess progress toward goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.

vii. How the compensatory mitigation site will be legally protected for the long term.

Refer to Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Ecology Publication #06-06-011b) and Selecting Wetland Mitigation Sites Using a Watershed Approach (Ecology Publications #09-06-032 (Western Washington) and #10-06-007 (Eastern Washington)) for guidance on selecting suitable mitigation sites and developing mitigation plans.

Ecology encourages the use of alternative mitigation approaches, includingcredit/debit methodology, advance mitigation, and other programmatic approaches such as mitigation banks and in-lieu fee programs. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. Information on alternative mitigation approaches is available on Ecology's website.

b. Mitigation for other aquatic resource impacts will be determined on a case-by-case basis.

7. **Stormwater Pollution Prevention**. All projects involving land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoiddischarge of pollutants in stormwater runoff to waters.

a. For land disturbances during construction, the applicant must obtain and implement permits (e.g., Construction Stormwater General Permit) where required and follow Ecology's current stormwater manual.

b. Following construction, prevention or treatment of on-going stormwater runofffrom impervious surfaces shall be provided.

Ecology's Stormwater Management and Design Manuals and stormwater permitinformation are available on Ecology's website.

8. **Application**. For projects or activities that will require Ecology WQC review, or anindividual WQC, project proponents must provide Ecology with a JARPA or the equivalent information, along with the documentation provided to the Corps, as described in national general condition 32, Pre-Construction Notification (PCN), including, where applicable:

a. A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project discharge(s) would cause, best management practices (BMPs), and proposed means to monitor the discharge(s).

b. List of all federal, state or local agency authorizations required to be used for anypart

of the proposed project or any related activity.

c. Drawings indicating the OHWM, delineation of special aquatic sites, and other waters of the state. Wetland delineations must be prepared in accordance with thecurrent method required by the Corps and shall include Ecology's Wetland Rating form. Wetland Rating forms are subject to review and verification by Ecology staff.

Guidance for determining the OHWM is available on Ecology's website.

d. A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See stategeneral condition 5.

e. Other applicable requirements of Corps NWP general condition 32, Corps regional conditions, or notification conditions of the applicable NWP.

Ecology **grants with conditions Water Quality Certification** (WQC) for this NWP provided that Ecology individual WQC review is not required per the state general conditions (see above)) and the following conditions:

1. The project or activity involves the complete replacement of a shoreline stabilizationusing hard armoring.

2. The project or activity increases the original footprint of the structure by more than1/10th acre in wetlands; or

3. The project or activity includes adding a new structure, such as a weir, flap gate/tidegate, or culvert to the site.

Environmental Protection Agency (EPA) (on Tribal Lands where Tribes Do Not Have Treatment in a Similar Manner as a State and Lands with Exclusive Federal Jurisdiction in Washington):

On behalf of the 28 tribes that do not have treatment in a similar manner as a state and for exclusive federal jurisdiction lands located within the state of Washington, EPA Region 10 has determined that CWA Section 401 WQC for the following proposed NWPs is granted with conditions. EPA Region 10 has determined that any discharge authorized under the following proposed NWPs will comply with water quality requirements, as defined at 40 C.F.R. § 121.1(n), subject to the following conditions pursuant to CWA Section 401(d).

General Conditions:

EPA General Condition 1 – Aquatic Resources of Special Concern

Activities resulting in a point source discharge in the following types of aquatic resources of special concern shall request an individual project-specific CWA Section 401 WQC: mature forested wetlands; bogs, fens and other peatlands; vernal pools; aspen-dominated wetlands; alkali wetlands; camas prairie wetlands; wetlands in dunal systems along the Oregon or Washington Coast; riffle-pool complexes of streams; marine or estuarine mud-flats; salt marshes; marine waters with native eelgrass or kelp beds; or marine nearshore forage fish habitat. To identify whether a project would occur in any of these aquatic resources of special concern, project proponents shall use existing and available information to identify the location and type of resources, including using the U.S. Fish and Wildlife Service's online digital National Wetland Inventory maps, identifying project location on topographical maps, and/or providing on-site determinations as required by the Corps. When a project requires a Pre-Construction Notification (PCN) to the Corps, project proponents shall work with the Corps to identify whether the project is in any of these specific aquatic resources of special concern.

EPA General Condition 2 – Soil Erosion and Sediment Controls

Turbidity shall not exceed background turbidity by more than 50 Nephelometric Turbidity Units (NTU) above background instantaneously or more than 25 NTU above background for more than ten consecutive days.[8] Projects or activities that are expected to exceed these levels require an individual project-specific CWA Section 401 WQC.

The turbidity standard shall be met at the following distances from the discharge:

Wetted Stream Width at Discharge Point	**Approximate Downstream Point to Sample to Determine Compliance**
Up to 30 feet	50 feet
>30 to 100 feet	100 feet
>100 feet to 200 feet	200 feet
>200 feet	300 feet
Lake, Pond, Reservoir	Lesser of 100 feet or maximum surface distance

For Marine Water	**Point of Compliance for Temporary Area of Mixing**
Estuaries or Marine Waters	Radius of 150 feet from the activity causing the turbidity exceedance

Measures to prevent and/or reduce turbidity shall be implemented and monitored prior to, during, and after construction. Turbidity monitoring shall be done at the point of compliance within 24 hours of a precipitation event of 0.25 inches or greater. During monitoring and maintenance, if turbidity limits are exceeded or if measures are identified as ineffective, then additional measures shall be taken to come into compliance and EPA shall be notified within 48 hours of the exceedance or measure failure.

EPA General Condition 3 - Compliance with Stormwater Pollution Prevention and the National Pollutant Discharge Elimination System Permit Provisions

For land disturbances during construction that 1) disturb one or more acres of land, or 2) will disturb less than one acre of land but are part of a common plan of development or sale that will ultimately disturb one or more acres of land, the permittee shall obtain and implement Construction Stormwater General Permit requirements,[9] including:

1. The permittee shall develop a Stormwater Pollution Prevention Plan (SWPPP)[10] and submit it to EPA Region 10 and appropriate Corps District; and
2. Following construction, prevention or treatment of ongoing stormwater runoff from impervious surfaces that includes soil infiltration shall be implemented.

EPA General Condition 4 – Projects or Activities Discharging to Impaired Waters

Projects or activities are not authorized under the NWPs if the project will involve point source discharges into an active channel (e.g., flowing or open waters) of a water of the U.S. listed as impaired under CWA Section 303(d) and/or if the waterbody has an approved Total Maximum Daily Load (TMDL) and the discharge may result in further exceedance of a specific parameter (e.g., total suspended solids, dissolved oxygen, temperature) for which the waterbody is listed or has an approved TMDL. The current lists of impaired waters of the U.S. under CWA Section 303(d) and waters of the U.S. for which a TMDL has been approved are available on EPA Region 10's web site at: https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-10.

EPA General Condition 5 – Notice to EPA

All project proponents shall provide notice to EPA Region 10 prior to commencing construction activities authorized by a NWP. This will provide EPA Region 10 with the opportunity to inspect the activity for the purposes of determining whether any discharge from the proposed project will violate this CWA Section 401 WQC. Where the Corps requires a PCN for an applicable NWP, the project proponent shall also provide the PCN to EPA Region 10. EPA Region 10 will provide written notification to the project proponent if the proposed project will violate the water quality certification of the NWP.

EPA General Condition 6 – Unsuitable Materials

The project proponent shall not use wood products treated with leachable chemical components (e.g., copper, arsenic, zinc, creosote, chromium, chloride, fluoride, pentachlorophenol), which result in a discharge to waters of the U.S., unless the wood products meet the following criteria:

1. Wood preservatives and their application shall be in compliance with EPA label requirements and criteria of approved EPA Registration Documents under the Federal Insecticide, Fungicide, and Rodenticide Act;
2. Use of chemically treated wood products shall follow the Western Wood Preservatives Institute (WWPI) guidelines and BMPs to minimize the preservative migrating from treated wood into the aquatic environment;
3. For new or replacement wood structures, the wood shall be sealed with non-toxic products such as water-based silica or soy-based water repellants or sealers to prevent or limit leaching. Acceptable alternatives to chemically treated wood include untreated wood, steel (painted, unpainted or coated with epoxy petroleum compound or plastic), concrete and plastic lumber; and
4. All removal of chemically treated wood products (including pilings) shall follow the most recent "EPA Region 10 Best Management Practices for Piling Removal and Placement in Washington State."

NWP Specific Conditions:

NWP 3 is conditionally certified, subject to the general conditions listed above, for all maintenance, repair or replacement activities authorized under this NWP, <u>except</u> that an individual project-specific WQC is required when the project involves:

1. Maintenance, repair, or replacement of shoreline stabilization using hard armoring approaches; or
2. Extending existing infrastructure beyond its prior footprint in fish bearing waters of the U.S.; or
3. Excavation or dredging in marine waters.

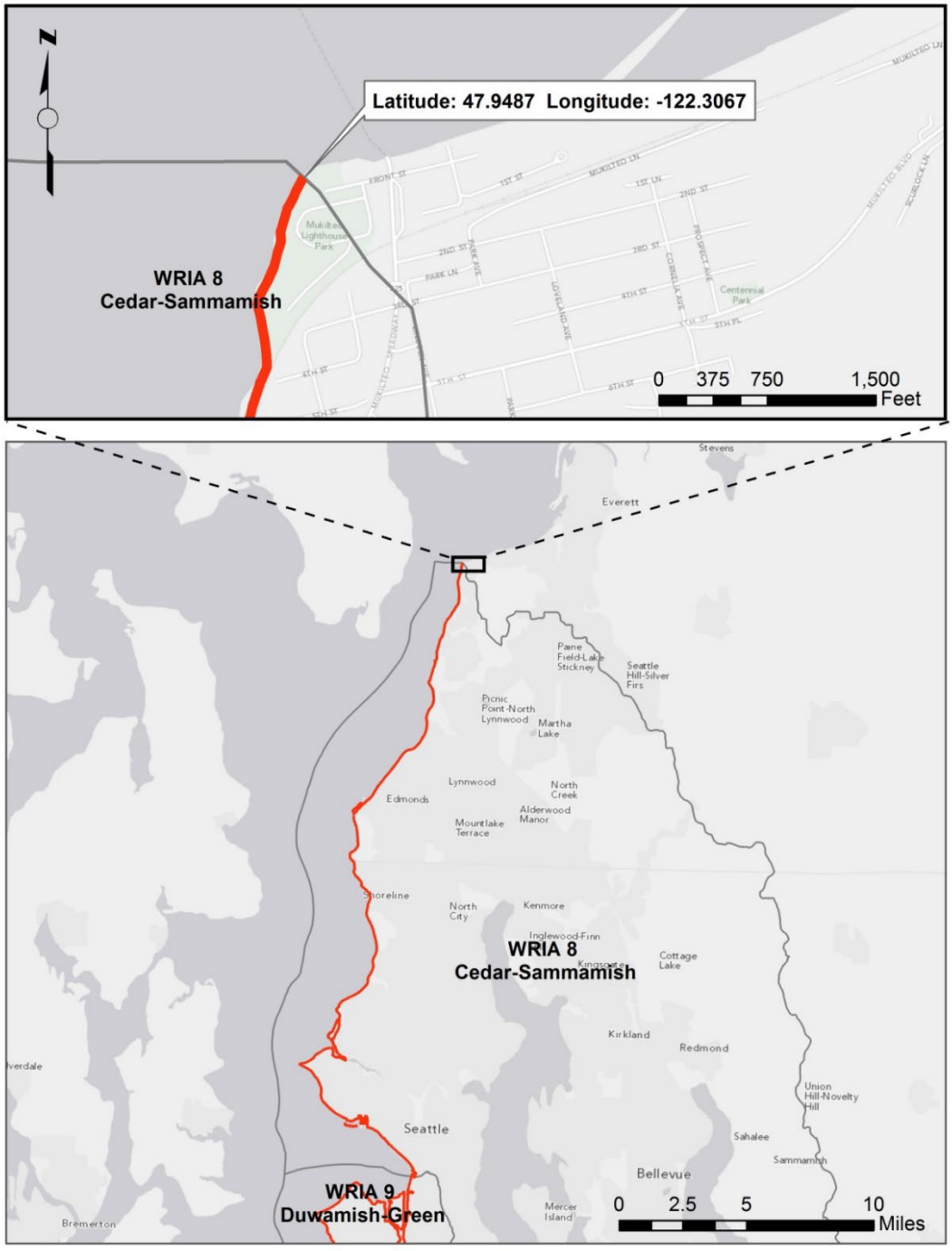
Specific Tribes with Certifying Authority (Projects in Specific Tribal Areas):
WQC was issued by the Swinomish Indian Tribal Community. WQC was waived by the Confederated Tribes of the Chehalis Reservation and Colville Indian Reservation, Kalispel Tribe of Indians, Port Gamble S'Klallam Tribe, Quinault Indian Nation, and the Spokane Tribe of Indians. WQC was denied by the Lummi Nation, Makah Tribe, Puyallup Tribe of Indians, and the Tulalip Tribes; therefore, individual WQC is required from these tribes.

F. COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY RESPONSE FOR THIS NWP:

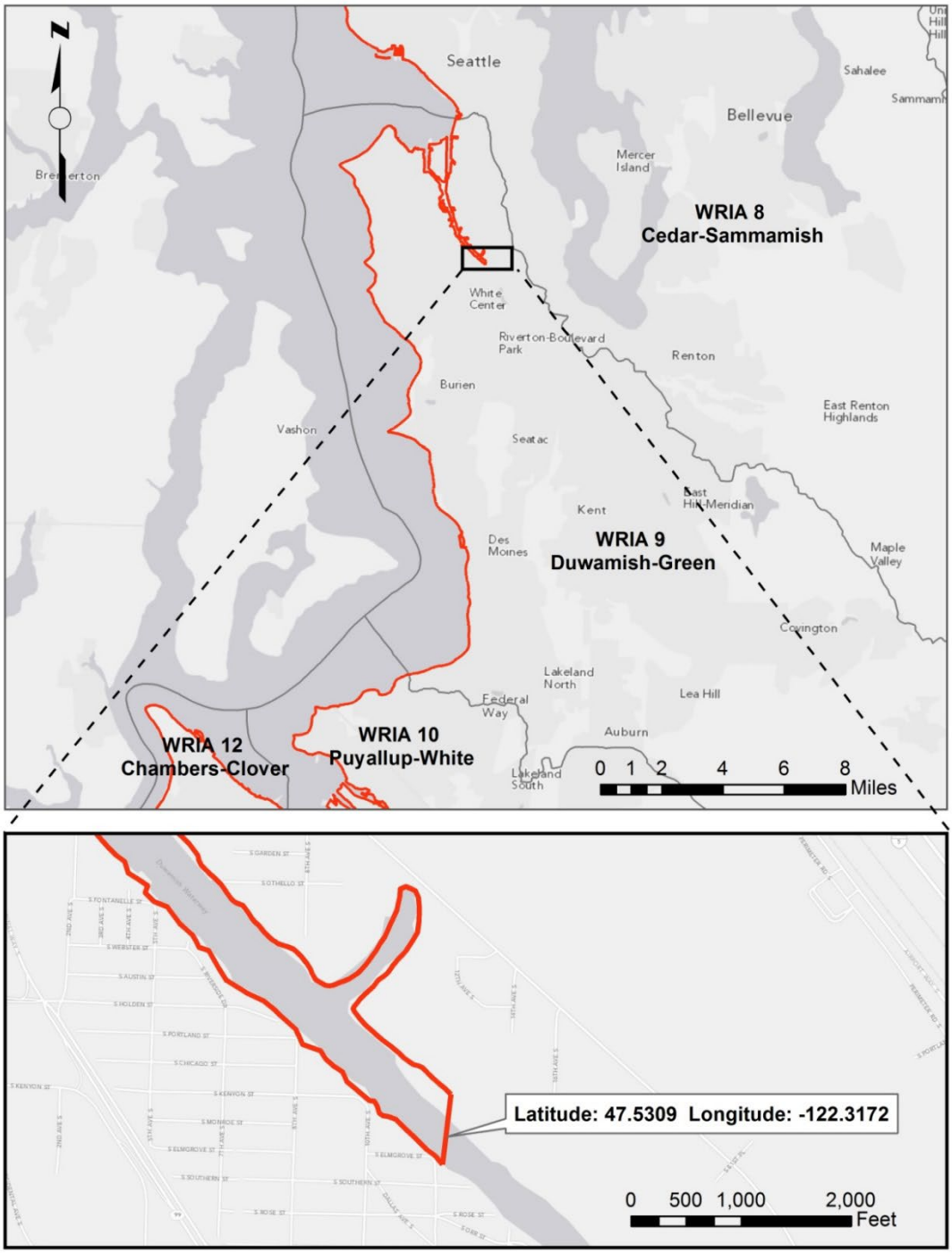
Ecology's determination is that they concur with conditions that this NWP is consistent with CZMA.

1. A CZM Federal Consistency Decision is required for projects or activities under this NWP if a State 401 Water Quality Certification is required.

Seattle District Regional General Conditions - Figures
Figure 1: RGC 3 - WRIAs 8, 9, 10, 11, and 12
a. WRIA 8



b. WRIA 9


N
Seattle
Sahalee
Bellevue
Mercer Island
Bremerton
WRIA 8
Cedar-Sammamish
White Center
Riverton-Boulevard Park
Renton
Burien
East Renton Highlands
Vashon
Seatac
East Hill-Meridian
Kent
Des Moines
WRIA 9
Duwamish-Green
Maple Valley
Covington
Lakeland North
Lea Hill
Federal Way
Auburn
WRIA 12
Chambers-Clover
WRIA 10
Puyallup-White
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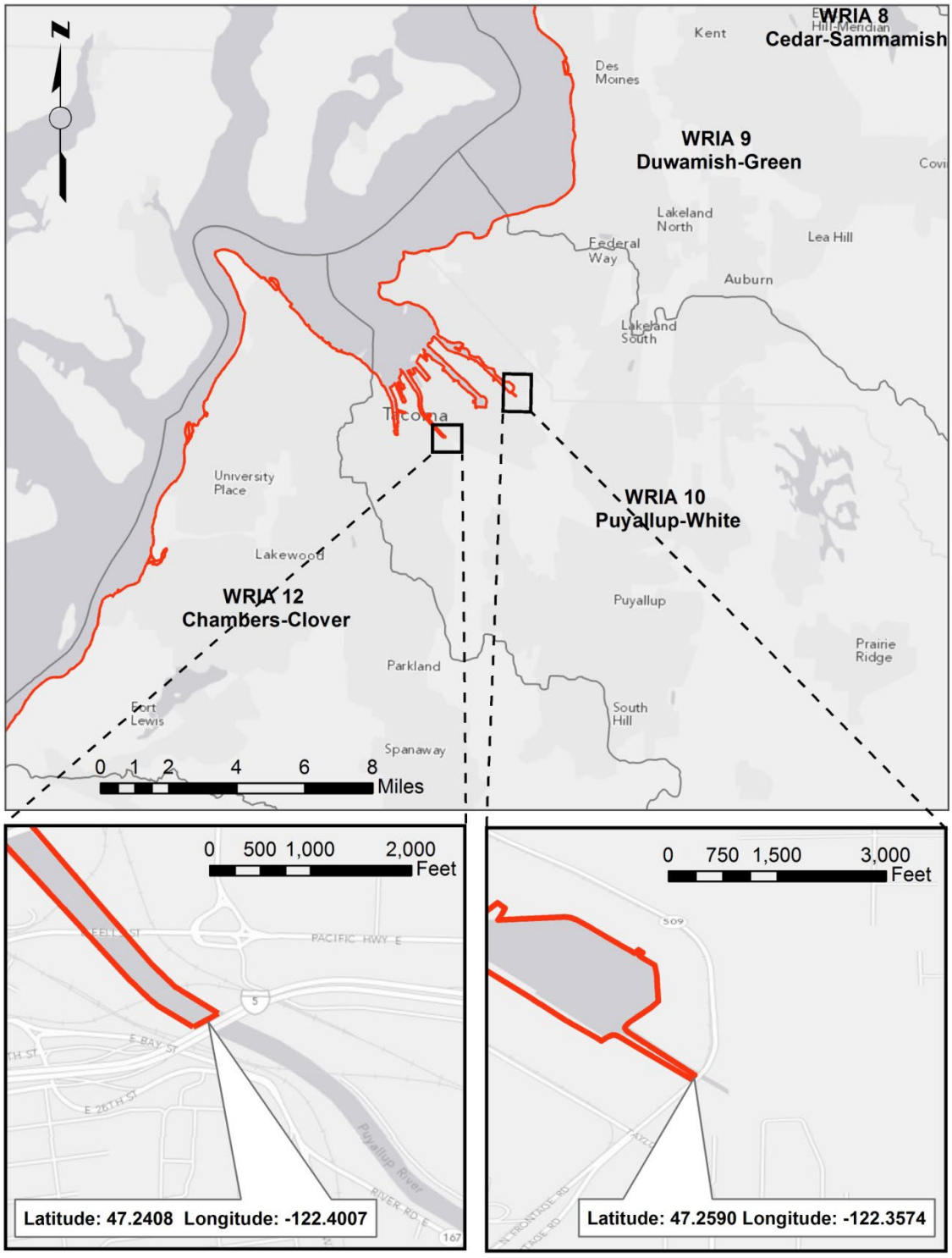
Feet

c. WRIA 10


N
WRIA 8
Cedar-Sammamish
Kent
Des Moines
WRIA 9
Duwamish-Green
Lakeland North
Federal Way
Lea Hill
Auburn
Lakeland South
Tacoma
University Place
WRIA 10
Puyallup-White
Lakewood
WRIA 12
Chambers-Clover
Puyallup
Prairie Ridge
Parkland
Fort Lewis
South Hill
Spanaway
0 1 2 4 6 8 Miles
0 500 1,000 2,000 Feet
PACIFIC HWY E
E BAY ST
E 26TH ST
Puyallup River
RIVER RD E
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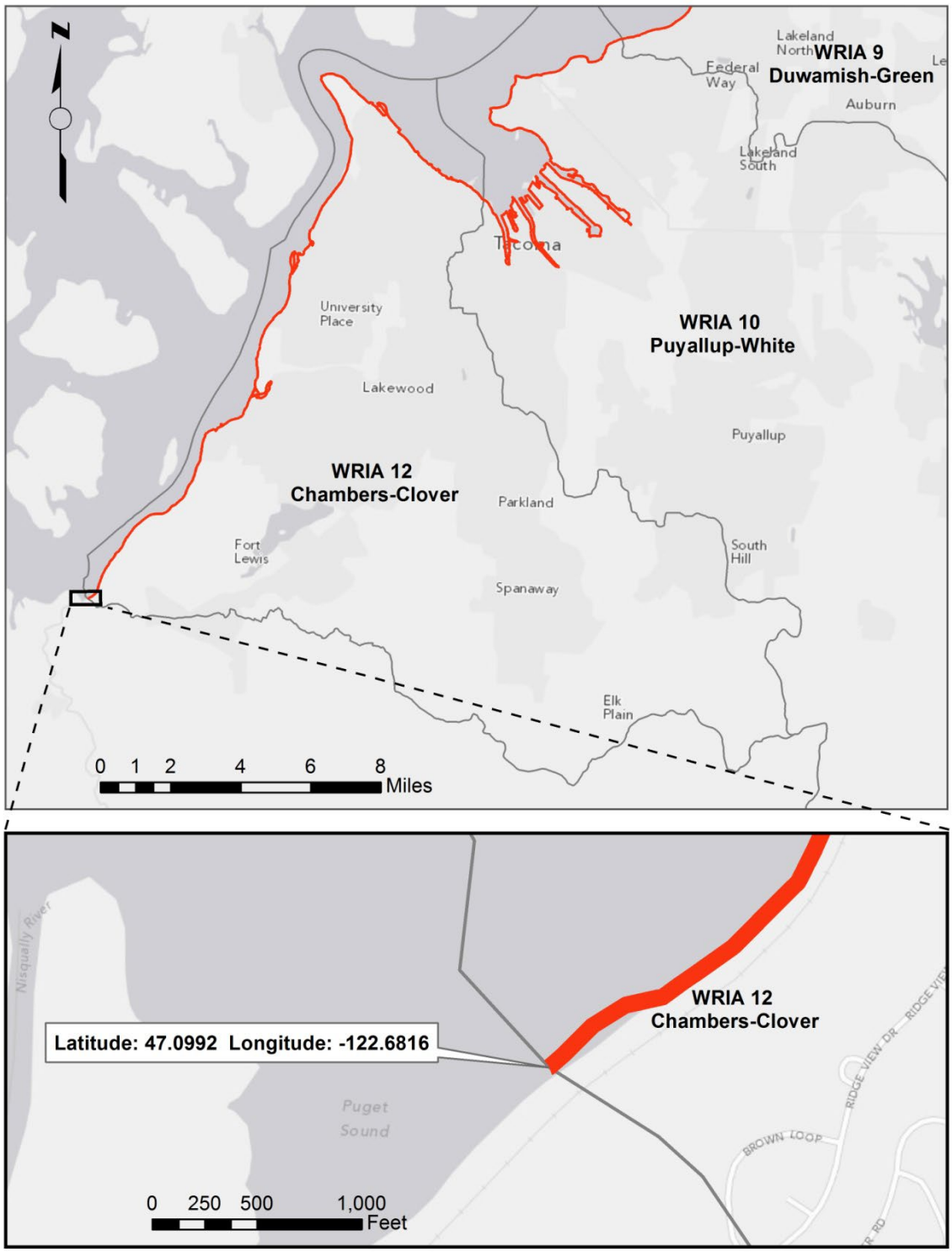
0 750 1,500 3,000 Feet
509
Latitude: 47.2590 Longitude: -122.3574

d. WRIA 12


N
Lakeland North
WRIA 9
Duwamish-Green
Federal Way
Auburn
Lakeland South
Tacoma
University Place
WRIA 10
Puyallup-White
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
0 1 2 4 6 8
Miles
Nisqually River
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WRIA 12
Chambers-Clover
Puget Sound
BROWN LOOP
RIDGE VIEW DR
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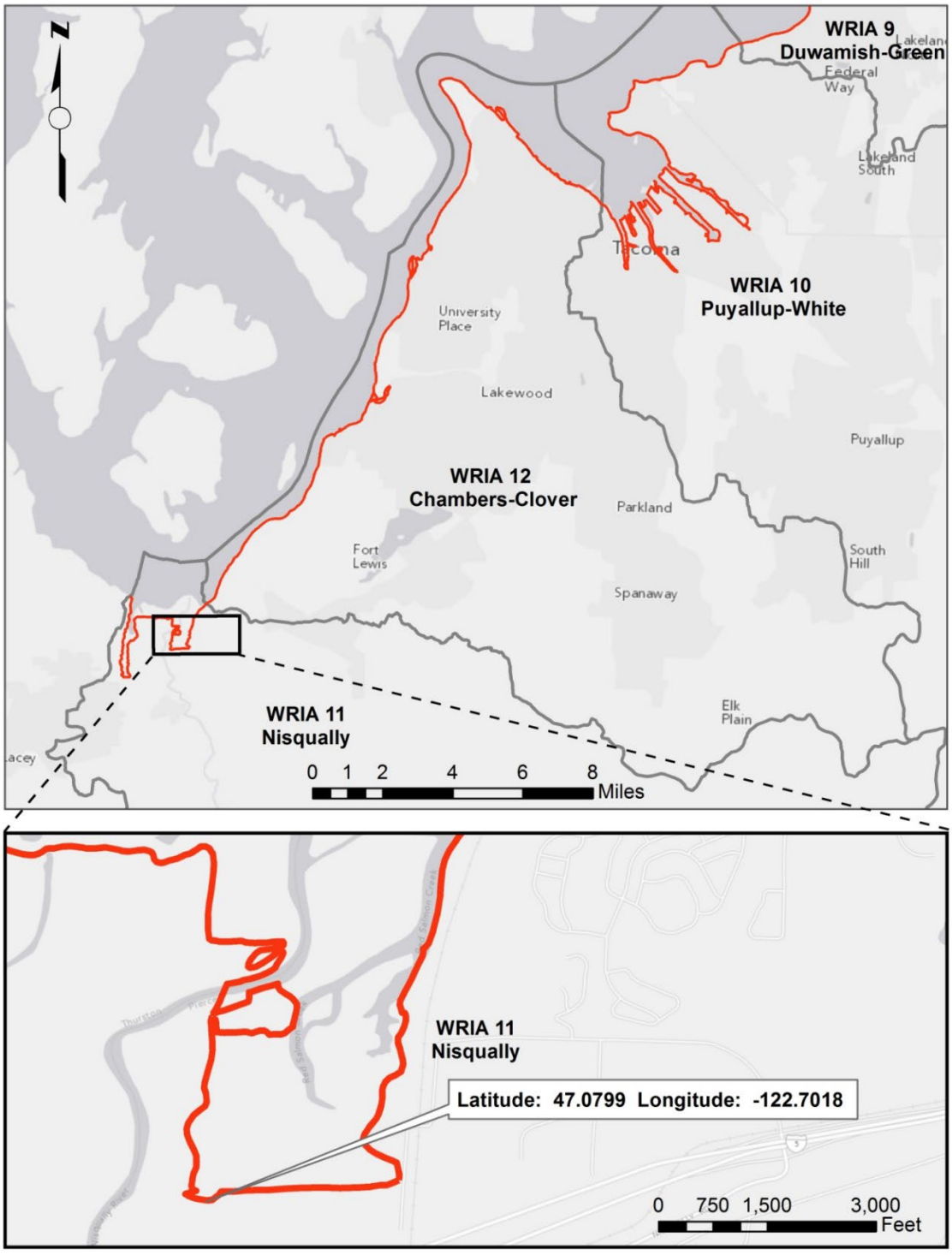
Feet

e. WRIA 11


WRIA 9
Duwamish-Green
Federal Way
Lakeland South
Tacoma
WRIA 10
Puyallup-White
University Place
Lakewood
Puyallup
WRIA 12
Chambers-Clover
Parkland
Fort Lewis
South Hill
Spanaway
Elk Plain
Lacey
WRIA 11
Nisqually
0 1 2 4 6 8
Miles
WRIA 11
Nisqually
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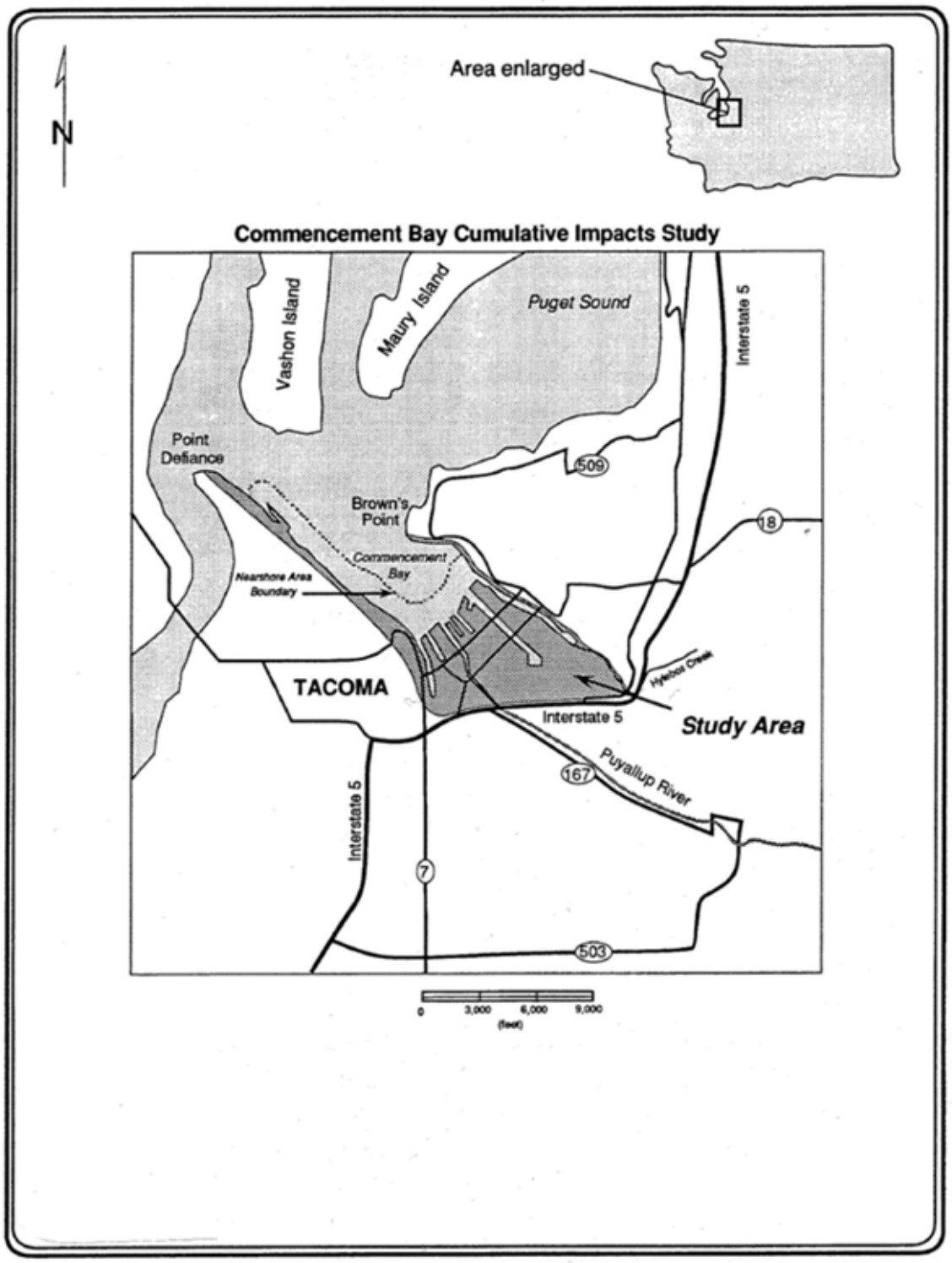
Feet

Figure 2. RGC 4 - Commencement Bay Study Area



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issue Date: 05/11/2026
Project End Date: 08/20/2030

Permit Type: HPA - Standard
Permit Number: 2025-6-317+02
Application ID: 0047710

PERMITTEE	AUTHORIZED AGENT
ATTENTION Pierce County Planning and Public Works Jeff Rudolph 4812 196th Street East Spanaway, Washington 98387-6710	

Project Name: Ski Park Bridge Replacement CRP 6108 P-111399-Bridge #PRT27195-E

Project Description: Pierce County Planning and Public Works (PPW) is proposing to replace the Ski Park Bridge for Pierce County Parks in 2026. The bridge spans a small tributary stream and has wetlands on both sides of it. It is 195 feet long by 15 feet wide built on creosote wood piers that support a wood superstructure with a pervious asphalt deck. The new bridge will be 204 feet long by 12 feet 2 inches wide. The bridge is part of the foothills trail system which provides foot and bicycle access throughout Pierce County. Work will consist of removing the creosote piers and bridge sub/superstructure. New concrete piers will be installed by using an auger to excavate the holes for the new concrete piers. After the piers are completed, cranes will be used to place the bridge superstructure on the concrete piers and bridge cap. The bridge size will remain with the same footprint as the old bridge. There will be no in-water work for this project. A temporary access road and staging area will need to be built in the adjacent wetland and wetland/stream buffer for the work to occur. Vegetation will also need to be removed. All imported fill be removed once the project is complete to pre-project conditions. PPW has prepared a mitigation plan to address project impacts that included a robust planting plan, and the construction of a new surface channel connecting one of the wetlands with the small tributary stream.

PROVISIONS

AUTHORIZED WORK TIMES

1. You may begin the project immediately and you must complete the project by August 20, 2030; provided: work to connect the mitigation channel to the unnamed tributary must only occur between July 1 and October 15 of a given year. All other project activities may occur year-round as needed, provided, measures to prevent erosion and turbidity within the unnamed tributary are in place and functioning properly for the duration of project activities.

PROJECT APPROVALS

2. Work must be accomplished per the plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled "ProjectPlanDrawings_20250326," uploaded to APPS July 8, 2025, "MitigationPlan_20250326 Mit Plan," uploaded to APPS July 8, 2025, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

INVASIVE SPECIES CONTROL

3. Follow Method 1 for low-risk locations (i.e., clean/drain/rinse/dry). Thoroughly remove visible dirt and debris from all equipment and gear—including vessels, boots, waders, drive mechanisms, wheels, tires, tracks, buckets, and undercarriage—before arriving at and leaving the job site to prevent the transport and introduction of aquatic invasive species. For contaminated or high-risk sites, refer to the Method 2 Decontamination protocol. Clean, rinse, and dry all decontamination equipment used and properly dispose of any water and chemicals used for cleaning. For additional decontamination details, including specific protocols for freshwater, marine, and estuarine environments, refer to the Washington Department of Fish and Wildlife's Invasive Species Management Protocols, available online at https://wdfw.wa.gov/species-habitats/invasive/prevention/clean-drain-dry#decontamination

NOTIFICATION REQUIREMENTS

4. You or your agent must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work, and again within seven days after completing the work. The notification must include the permittee's name, project location, starting date for work or date the work was completed, and the permit number. The Washington Department of Fish and Wildlife may conduct inspections during and after construction; however, the Washington Department of Fish and Wildlife will notify you or your agent before conducting the inspection.
5. FISH KILL/WATER QUALITY PROBLEM NOTIFICATION: If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

6. Establish staging areas (used for activities such as equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
7. Clearly mark boundaries to establish the limit of work associated with site access and construction.
8. Design and locate new temporary access roads to prevent erosion and sediment delivery to waters of the state.
9. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.
10. If wet or muddy conditions exist, in or near a riparian zone or wetland area, use equipment that reduces ground pressure.
11. Do not place or operate equipment within the wetted perimeter of the watercourse.

SEDIMENT, EROSION, AND POLLUTION CONTAINMENT

12. Store all construction and deconstruction material in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
13. Protect all disturbed areas from erosion. Maintain erosion and sediment control until all work and cleanup of the job site is complete.
14. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.
15. All erosion control materials that will remain onsite must be composed of 100% biodegradable materials.
16. Straw used for erosion and sediment control, must be certified free of noxious weeds and their seeds.
17. Route the construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.

18. If flow conditions arise that will result in erosion or siltation of waters of the state, stop all hydraulic project activities except those needed to control erosion and siltation.

CONSTRUCTION MATERIALS

19. Use only clean, suitable material as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).
20. Do not use bed material that is waterward of the ordinary high water line for backfill.
21. Use material for the approaches that is structurally stable and that will not harm fish life if it erodes into the water.

BRIDGE

22. Dismantle and mechanically remove as much of the existing bridge as possible. Prevent the existing bridge and associated construction materials from entering the stream when removing them.
23. Remove all existing creosote timber pilings and dispose of them in an upland area. Pilings must be cut off at the mudline or below the level of existing substrate.
24. Use clean materials to construct the structure. Do not use materials that would leach metals, petroleum products, or other hazardous materials.
25. Design and construct the bridge to pass water, ice, woody material and sediment likely to move under the bridge during the 100-year flood flows.
26. Locate the waterward face of all bridge elements including abutments, piers, pilings, sills, foundations, aprons, wing walls, and approach material landward of the ordinary high water line.

MITIGATION CHANNEL

27. Construct a mitigation channel connecting the wetland and unnamed tributary in accordance with page 4 of the approved plans entitled, "ProjectPlanDrawings_20250326," uploaded to APPS July 8, 2025.
28. In accordance with approved plans, the constructed channel will be approximately 120 feet long, four feet wide, and have a 0.54% gradient at the time of completion.
29. During construction, isolate the new channel from the flowing watercourse.
30. Positive drainage toward the main channel of the unnamed tributary is required to prevent fish stranding, and the bed throughout this channel must not contain pits, potholes, large depressions, or any vertical drops upon completion of the excavation and grading.
31. Place spoils from the new channel in an upland area above the limits of anticipated floodwater.
32. Any streambed material placed in the constructed channel must be composed of clean, rounded, uniformly-graded, non-porous material sized to match the adjacent section of mainstem channel.

DEMOBILIZATION AND CLEANUP

33. Replant the job site with the plant species composition and planting densities approved by the Washington Department of Fish and Wildlife, and in accordance with the approved plans.
34. Complete replanting of riparian vegetation during the first dormant season (late fall through late winter) after project completion per the approved plan. Maintain plantings in accordance with the performance standards specified on pages 7 and 8 of the approved plan document entitled, "MitigationPlan_20250326 Mit Plan," uploaded to APPS July 8, 2025. Failure to meet these performance standards in year five will require you to submit a plan with follow-up measures to achieve requirements or reasons to modify requirements.
35. Before the end of the in-water work period specified in the “timing limitations” provision, abandon temporary roads in wet or flood-prone areas.
36. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.
37. Remove temporary erosion and sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.

PROJECT LOCATION(S)

HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issue Date: 05/11/2026
Project End Date: 08/20/2030

Permit Type: HPA - Standard
Permit Number: 2025-6-317+02
Application ID: 0047710

Location		
Ski Park Bridge Replacement CRP 6108 P-111399-Bridge #PRT27195-E		
Latitude	**Longitude**	**County**
47.106177000000000	-122.147127000000000	Pierce
WRIA	**Waterbody**	**Tributary to**
WRIA	South Prairie Creek	South Prairie Creek

APPLIES TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval (HPA) pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this HPA is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state, and/or federal) that may be necessary for this project.

This Hydraulic Project Approval (HPA) shall be available on the job site at all times and all its provisions followed by the person(s) to whom this HPA is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval (HPA) is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this HPA.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil action against you, including, but not limited to, a stop work order or notice to comply, and/or a gross misdemeanor criminal charge, possibly punishable by a fine and/or imprisonment.

All Hydraulic Project Approvals (HPA) issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Washington Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this HPA is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HYDRAULIC PROJECT APPROVAL (HPA): You may request approval of minor modifications to the required work timing or the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require the issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics, or construction of your project that do not alter the project's impact to fish life or habitat and do not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification

through APPS. A link to APPS is at https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a minor modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by email to HPAapplications@dfw.wa.gov, or by mail to Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You should allow up to 45 days for the Department to process your request.

MAJOR MODIFICATIONS TO THIS HYDRUALIC PROJECT APPROVAL (HPA): You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require the issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a major modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by email to HPAapplications@dfw.wa.gov or by mail to Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You should allow up to 45 days for the Department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), the Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the WDFW employee who issued, denied, or conditioned the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by WDFW management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule:

   A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the WDFW Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Habitat Program Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issue Date: 05/11/2026
Project End Date: 08/20/2030

Permit Type: HPA - Standard
Permit Number: 2025-6-317+02
Application ID: 0047710

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule:

   A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Habitat Program Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Miles Penk
Regional Habitat Biologist
(360) 480-2908
miles.penk@dfw.wa.gov

For Director
DFW

Issuance Date: July 1, 2024
Effective Date: August 1, 2024
Expiration Date: July 31, 2029

PHASE I MUNICIPAL STORMWATER PERMIT

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit
for Discharges from
Large and Medium Municipal Separate Storm Sewer Systems

State of Washington
Department of Ecology
Olympia, WA 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this Permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this Permit are authorized to discharge to waters of the State in accordance with the special and general conditions which follow.

Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

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ADA ACCESSIBILITY

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request ADA Accommodation, contact Water Quality Reception at 360-407-6600. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's accessibility webpage[1] for more information.

For document translation services, call Water Quality Reception at 360-407-6600. Para publicaciones en español, por favor llame a la Recepción de Calidad del Agua al 360-407-6600.

[1] https://ecology.wa.gov/About-us/Accessibility-equity/Accessibility/

SPECIAL CONDITIONS

S1. PERMIT COVERAGE AND PERMITTEES

A. *Geographic Area of Permit Coverage*

This Permit covers discharges from large and medium Municipal Separate Storm Sewer Systems (MS4s) as established at Title 40 CFR 122.26, except for the Washington State Department of Transportation's MS4s.

For Secondary Permittees required to obtain coverage under this Permit, the minimum geographic area of coverage includes the portion of the MS4 which is located within the unincorporated areas of Clark, King, Snohomish, and Pierce Counties and the incorporated areas of the cities of Seattle and Tacoma. The Washington State Department of Ecology (Ecology) may establish additional geographic areas of coverage specific to an individual Secondary Permittee.

B. *Regulated Large and Medium Municipal Separate Storm Sewer Systems*

The following cities and counties have submitted a Duty to Reapply-Notice of Intent (NOI) for coverage to Ecology prior to February 1, 2024, and have coverage as Permittees beginning on the effective date of the Permit:

1. The City of Tacoma and the City of Seattle
2. Clark, King, Pierce, and Snohomish Counties

C. *Secondary Permittees*

The following entities have submitted a Duty to Reapply-Notice of Intent (NOI) for coverage to Ecology prior to February 1, 2024, and have coverage as Secondary Permittees, beginning on the effective date of the Permit:

1. Port of Seattle, excluding Seattle-Tacoma International Airport;
2. Port of Tacoma;
3. The University of Washington, Seattle; Seattle School District #1; Metropolitan Park District of Tacoma; Washington State Military Department; Tacoma Community College; Washington State Department of Corrections: Larch Corrections Center, Monroe Correctional Complex, Washington State Penitentiary, and Washington Corrections Center for Women.

D. Obtaining Coverage Under this Permit

Unless otherwise noted, the term "Permittee" includes city, county, or town Permittee, port Permittee, Co-Permittee, Secondary Permittee, and New Secondary Permittee.

E. Coverage for New Secondary Permittees

1. Entities meeting the requirements in S1.E.1.a-b below are required to apply for and obtain coverage under this Permit. Upon application and coverage the following entities will have coverage under this Permit as New Secondary Permittees:
    a. Active drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S1.B above, which own or operate MS4s serving non-agricultural land uses; and were not covered by the Permit prior to August 1, 2024.
    b. Other owners or operators of MS4s located in the Cities or unincorporated portions of the Counties listed in S1.B above; and were not covered by the Permit prior to August 1, 2024.
2. Application Requirements
    a. Submit a Notice of Intent (NOI) for Coverage under National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater General Permit provided on Ecology's website and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this Permit within 90 days of Ecology's receipt of a complete NOI.
    b. Each Permittee applying as Co-Permittee shall submit a NOI provided on Ecology's website. The NOI shall clearly identify the areas of the MS4 for which the Co-Permittee is responsible.

F. MS4s in Another City or County

All MS4s owned or operated by Permittees named in S1.B and located in another city or county area requiring coverage under this Permit or either the Western Washington Phase II Municipal Stormwater Permit or the Eastern Washington Phase II Municipal Stormwater Permit are also covered under this Permit.

S2. AUTHORIZED DISCHARGES

A. *Stormwater Discharges*

This Permit authorizes the discharge of stormwater to surface waters and to groundwaters of the State from MS4s owned or operated by each Permittee covered under this Permit in the geographic area covered by this Permit pursuant to S1.A subject to the following limitations:

1. Discharges to groundwaters of the State through facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not authorized under this Permit.
2. Discharges to groundwaters not subject to regulation under the federal *Clean Water Act* are authorized in this Permit only under state authorities, Chapter 90.48 RCW, the *Water Pollution Control Act*.

B. *Non-Stormwater Discharges*

This Permit authorizes discharges of non-stormwater to surface waters and groundwaters of the State from MS4s owned or operated by each Permittee covered under this Permit, in the geographic area covered pursuant to S1.A, only under one or more of the following conditions:

1. The discharge is authorized by a separate National Pollutant Discharge Elimination System (NPDES) or State Waste Discharge permit.
2. The discharge is from emergency firefighting activities. See Special Conditions S5.C.9, S6.D.3, S6.E.3 to address non-stormwater discharges (e.g., discharges associated with cleanup after the emergency).
3. The discharge is from another illicit or non-stormwater discharge that is managed by the Permittee as provided in S5.C.9., S6.D.3, or S6.E.3.

These discharges are also subject to the limitations in S2.A.1 and S2.A.2, above.

C. *Responsibilities and Liabilities*

This Permit does not relieve entities that cause illicit discharges, including spills of oil or hazardous substances, from responsibilities and liabilities under state and federal laws and regulations pertaining to those discharges.

D. *Compliance with State and Local Authorizations*

Discharges from MS4s constructed after the effective date of this Permit shall receive all applicable state and local permits and use authorizations, including compliance with Chapter 43.21C RCW (the *State Environmental Policy Act*).

E. Indian Country

This Permit does not authorize discharges of stormwater to waters within Indian Country as defined in 18 U.S.C. §1151 or to waters subject to water quality standards of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation, except where authority has been specifically delegated to Ecology by the U.S. Environmental Protection Agency. The exclusion of such discharges from this Permit does not waive any rights the State may have with respect to the regulation of the discharges. Indian Country includes:

1. All land within any Indian Reservation notwithstanding the issuance of any patent and including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
2. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
3. All off-reservation federal trust lands held for Native American Tribes.

   Puyallup Exception: Following the "*Puyallup Tribes of Indians Land Settlement Act of 1989*," 25 USC §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

S3. RESPONSIBILITIES OF PERMITTEES

A. *Compliance with Conditions*

Each Permittee, Co-Permittee and Secondary Permittee is responsible for compliance with the terms of this Permit for the MS4s that they own or operate.

1. Each Permittee, as listed in S1.B, is required to comply with all conditions of this Permit, except for S6 – *Stormwater Management Program for Secondary Permittees*.
2. The Port of Tacoma and Port of Seattle are required to comply with all conditions of this Permit except for S5 – *Stormwater Management Program* and S6.D – *Stormwater Management Program for Secondary Permittees*.
3. All Secondary Permittees, except for the Port of Tacoma and the Port of Seattle, are required to comply with all conditions of this Permit except for conditions S5 – *Stormwater Management Program*, S6.E – *Stormwater Management Program for the Port of Seattle and Port of Tacoma* and S8 – *Monitoring and Assessment*.

B. *Reliance on Another Entity*

Permittees may rely on another entity to satisfy one or more of the requirements of this Permit. Permittees that are relying on another entity to satisfy one or more or their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. Where permit responsibilities are shared, they shall be documented as follows:

1. Permittees and Co-Permittees that are continuing coverage under this Permit shall submit a statement that describes the permit requirements that will be implemented by other entities. The statement shall be signed by all participating entities. There is no deadline for submitting such a statement provided that this does not alter implementation deadlines. Permittees and Co-Permittees may amend their statement during the term of the Permit to establish, terminate, or amend their shared responsibilities statement, and submit the amended statements to Ecology.
2. Secondary Permittees shall submit an NOI that describes which requirements they will implement and identify the entities that will implement the other permit requirements in the area served by the Secondary Permittee's MS4. A statement confirming the shared responsibilities, signed by all participating entities, shall accompany the NOI. Secondary Permittees may amend their NOI, during the term of the Permit, to establish, terminate, or amend shared responsibility arrangements, provided this does not alter implementation deadlines.

C. Appendices

Unless otherwise noted, all appendices to this Permit are incorporated by this reference as if set forth fully within this Permit.

S4. COMPLIANCE WITH STANDARDS

A. *Prohibition of Discharge of Toxicants*

In accordance with RCW 90.48.520, the discharge of toxicants to waters of the State of Washington which would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited. The required response to such discharges is defined in Section S4.F, below.

B. *Compliance with Standards*

This Permit does not authorize a discharge which would be a violation of Washington State *Surface Water Quality Standards* (Chapter 173-201A WAC), *Groundwater Quality Standards* (Chapter 173-200 WAC), *Sediment Management Standards* (Chapter 173-204 WAC), or human health-based criteria in the *National Toxics Rule* (40 CFR 131.45). The required response to such discharges is defined in Section S4.F, below.

C. *MEP Standard*

The Permittee shall reduce the discharge of pollutants to the Maximum Extent Practicable (MEP).

D. *AKART Standard*

The Permittee shall use All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART) to prevent and control pollution of waters of the State of Washington.

E. *Responsibilities of Permittees*

In order to meet the goals of the *Clean Water Act* (CWA), and comply with S4.A, S4.B, S4.C, and S4.D, each Permittee shall comply with all of the applicable requirements of this Permit as defined in S3 – *Responsibilities of Permittees*.

F. *Violations of Water Quality Standards and Adaptive Management*

A Permittee remains in compliance with S4 despite any discharges prohibited by S4.A or S4.B, when the Permittee undertakes the following response toward long-term water quality improvement:

1. A Permittee shall notify Ecology in writing within 30 days of becoming aware, based on credible site-specific information that a discharge from the MS4 owned or operated by the Permittee is causing or contributing to a known or likely violation of water quality standards in the receiving water. Written notification provided under this subsection shall, at a minimum, identify the source of the site-specific information, describe the nature and extent of the known or likely violation in the receiving water, and explain the reasons why the MS4 discharge is believed to be causing or contributing to the problem. For ongoing or continuing violations, a single written notification to Ecology will fulfill this requirement.
2. In the event that Ecology determines, based on a notification provided under S4.F.1 or through any other means, that a discharge from a MS4 owned or operated by the Permittee is causing or contributing to a violation of water quality standards in a receiving water, Ecology will notify the Permittee in writing that an adaptive management response outlined in S4.F.3, below, is required unless:
    a. Ecology also determines that the violation of water quality standards is already being addressed by a Total Maximum Daily Load (TMDL) or other enforceable water quality cleanup plan; or
    b. Ecology concludes the MS4 contribution to the violation will be eliminated through implementation of other permit requirements.
3. Adaptive Management Response
    a. Within 60 days of receiving a notification under S4.F.2, or by an alternative date established by Ecology, the Permittee shall review its Stormwater Management Program (SWMP) and submit a report to Ecology. The report shall include:
        i. A description of the operational and/or structural Best Management Practices (BMPs) that are currently being implemented to prevent or reduce any pollutants that are causing or contributing to the violation of water quality standards, including a qualitative assessment of the effectiveness of each BMP.
        ii. A description of potential additional operational and/or structural BMPs that will or may be implemented in order to apply AKART on a site-specific basis to prevent or reduce any pollutants that are causing or contributing to the violation of water quality standards.

iii. A description of the potential monitoring or other assessment and evaluation efforts that will or may be implemented to monitor, assess, or evaluate the effectiveness of the additional BMPs.

iv. A schedule for implementing the additional BMPs including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation.

b. Ecology will, in writing, acknowledge receipt of the report within a reasonable time and notify the Permittee when it expects to complete its review of the report. Ecology will either approve the additional BMPs and implementation schedule or require the Permittee to modify the report as needed to meet AKART on a site-specific basis. If modifications are required, Ecology will specify a reasonable time frame in which the Permittee shall submit, and Ecology will review the revised report.

c. The Permittee shall implement the additional BMPs, pursuant to the schedule approved by Ecology, beginning immediately upon receipt of written notification of approval; or, as specified in Appendix 13.

d. The Permittee shall include with each subsequent Annual Report a summary of the status of implementation, and the results of any monitoring, assessment or evaluation efforts conducted during the reporting period. If, based on the information provided under this subsection, Ecology determines that modification of the BMPs or implementation schedule is necessary to meet AKART on a site-specific basis, the Permittee shall make such modifications as Ecology directs. In the event there are ongoing violations of water quality standards despite the implementation of the BMP approach of this Section, the Permittee may be subject to compliance schedules to eliminate the violation under WAC 173-201A-510(4) and WAC 173-226-180 or other enforcement orders as Ecology deems appropriate during the term of this Permit.

e. A TMDL or other enforceable water quality cleanup plan that has been approved and is being implemented to address the MS4's contribution to the water quality standards violation supersedes and terminates the S4.F.3 implementation plan.

f. Provided the Permittee is implementing the approved adaptive management response under this Section, the Permittee remains in compliance with Condition S4, despite any on-going violations of water quality standards identified under S4.A or B, above.

g. The adaptive management process provided under Section S4.F, is not intended to create a shield for the Permittee from any liability it may face under 42 U.S.C. 9601 *et seq*. or RCW 70.105D.

G. Revoke and Reissue Permit

Ecology may modify or revoke and reissue this General Permit in accordance with G14 – *General Permit Modification and Revocation,* if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this Permit, that are necessary to:

1. Reduce the discharge of pollutants to the MEP;
2. Comply with the state AKART requirements; or
3. Control the discharge of toxicants to waters of the State of Washington.

S5. STORMWATER MANAGEMENT PROGRAM

A. *Stormwater Management Program General Requirements*

Each Permittee listed in S1.B shall implement a Stormwater Management Program (SWMP) during the term of this Permit. A SWMP is a set of actions and activities comprising the components listed in S5 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 – *Compliance with TMDL Requirements* and S8 – *Monitoring and Assessment*.

1. Each Permittee shall prepare written documentation of their SWMP, called the SWMP Plan. The SWMP Plan shall be organized according to the program components in S5.C, or a format approved by Ecology, and shall be updated at least annually for submittal with the Permittee's Annual Report to Ecology (S9 – *Reporting Requirements*). The SWMP Plan shall be written to inform the public of the planned SWMP activities for the upcoming calendar year, and include a description of:
    a. Planned activities for each of the program components included in S5.C;
    b. Any additional planned actions to meet the requirements of applicable TMDLs pursuant to S7 – *Compliance with TMDL Requirements*; and
    c. Any additional planned actions to meet the requirements of S8 – *Monitoring and Assessment*.
2. Each Permittee shall track the cost or estimated cost of development and implementation of each component of the SWMP. This information shall be provided to Ecology with the Annual Report, beginning no later than March 31, 2027. Permittees shall provide annual average costs (or estimates) to implement the SWMP, and TMDL requirements, as well as the source(s) of funding for the stormwater program.
3. Each Permittee shall track the number of inspections, follow-up actions because of inspections, official enforcement actions and types of public education activities as required by the respective program component. This information shall be included in the Annual Report.

B. *Stormwater Management Program Standards*

The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the MEP, meet state AKART requirements, and protect water quality.

Permittees are to continue implementation of existing Stormwater Management Programs until they begin implementation of the updated Stormwater Management

Program in accordance with the terms of this Permit, including implementation schedules.

C. Stormwater Management Program Components

The SWMP shall include the components listed below. The requirements of the SWMP shall apply to MS4s, and areas served by MS4s owned or operated by the Permittee. To the extent allowable under state and federal law, all SWMP components are mandatory.

1. Legal Authority

Minimum performance measures:

a. Each Permittee shall be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Permittee to control discharges to and from MS4s owned or operated by the Permittee.

b. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall authorize or enable the Permittee, at a minimum, to:

   i. Control through ordinance, order, or similar means, the contribution of pollutants to MS4s owned or operated by the Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity;

   ii. Prohibit through ordinance, order, or similar means, illicit discharges to the MS4 owned or operated by the Permittee;

   iii. Control through ordinance, order, or similar means, the discharge of spills and disposal of materials other than stormwater into the MS4s owned or operated by the Permittee;

   iv. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;

   v. Require compliance with conditions in ordinances, permits, contracts, or orders; and

   vi. Within the limitations of state law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the MS4 and compliance with local ordinances.

2. MS4 Mapping and Documentation

The SWMP shall include an ongoing program for mapping and documenting the MS4.

Minimum performance measures:

a. Ongoing Mapping: Each Permittee shall maintain mapping data for the features listed below.

i. Known MS4 outfalls and known MS4 discharge points.

(a.) Map outfall size and material, where known.

ii. Receiving waters, other than groundwater.

iii. Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee, including all connections between these BMPs/facilities and tributary conveyances (mapped in accordance with this Section) and all associated emergency overflows.

iv. Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

v. Tributary conveyances to all known outfalls and discharge points with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. For counties, this requirement applies to urban/higher density rural sub-basins. For cities, this requirement applies throughout the city. The following features or attributes (or both) shall be mapped:

(a.) Tributary conveyance type, material, and size, where known.

(b.) Associated drainage areas.

(c.) Land uses.

vi. Connections between the MS4 owned or operated by the Permittee and other municipalities or other public entities.

vii. All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007. [2]

[2] Permittees do not need to map the following residential connections: individual driveways, sump pumps, or roof downspouts.

viii. Existing, known connections greater than or equal to 8 inches in nominal diameter to tributary conveyances mapped in accordance with S5.C.2.a.v. For Counties, this requirement applies to the area of the county within urban/higher density rural sub-basins mapped under the previous Permit. For cities, this requirement applies throughout the city.

ix. All known connections from the MS4 to a privately owned stormwater system.

b. New Mapping. Each Permittee shall:

i. No later than March 31, 2026, Permittees shall submit locations of all known MS4 outfalls according to the standard templates provided in the Annual Report. Report size and material of the outfalls, where known.

ii. No later than December 31, 2026, using available, existing data, map tree canopy to support stormwater management on Permittee-owned or operated properties. Permittees shall develop and follow a methodology to intentionally identify canopy for stormwater management purposes, which may be updated annually or as needed.

iii. No later than March 31, 2028, implement a methodology to map and assess acreage of MS4 tributary basins to outfalls with a 24-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems that have stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee. Submit with the March 31, 2028 Annual Report a map(s) (.pdf) and table (.xlsx) with a breakdown of MS4 tributary basins quantifying estimated acres managed or unmanaged by stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.

iv. No later than December 31, 2028, using available, existing data, map overburdened communities in relation to stormwater treatment and flow control BMPs/facilities, outfalls, discharge points, and tree canopy on Permittee-owned or operated properties.

v. No later than December 31, 2028, Counties shall complete mapping tributary conveyances, as described in S5.C.2.a.v, for the areas outside the previously mapped urban/higher density rural sub-basins.

c. The required format for mapping is electronic, with fully described mapping standards.

d. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.2.a. and b. above.

e. Upon request, and to the extent appropriate, Permittees shall provide mapping information to federally recognized Indian Tribes, municipalities, and other Permittees. This Permit does not preclude Permittees from recovering reasonable costs associated with fulfilling mapping information requests by federally recognized Indian Tribes, municipalities, and other Permittees.

3. Coordination

The SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this Permit.

The SWMP shall also include coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs, and projects within a watershed. Permittees shall document their efforts to establish the required coordination mechanisms.

Minimum performance measures:

a. Update, if needed, and implement an intra-governmental (internal) coordination agreement(s) or Executive Directive(s) to facilitate compliance with the terms of this Permit. Permittees that update their agreement(s) shall include a written description of internal coordination mechanisms in the Annual Report, due no later than March 31, 2025.

b. The SWMP shall include, when needed, coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs, and projects within adjoining or shared areas, including:

   i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s covered by a municipal stormwater permit.

   ii. Coordinating stormwater management activities for shared water bodies, or watersheds among Permittees to avoid conflicting plans, policies, and regulations.

c. Implement, and within 2 years following the addition of a new Secondary Permittee, establish and implement:

   i. Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s of the Permittee and any other Permittee covered by a municipal stormwater permit; and

   ii. Coordinating stormwater management activities for shared waterbodies among Permittees and Secondary Permittees, as necessary, to avoid conflicting plans, policies, and regulations.

4. Public Involvement and Participation

Permittees shall provide ongoing opportunities for public involvement and participation in the Permittee's SWMP and implementation priorities through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Each Permittee shall comply with applicable state and local public notice requirements when developing elements of the SWMP and SMAP.

Minimum performance measures:

a. Permittees shall create opportunities for the public, including overburdened communities, to participate in the decision-making processes involving the development, implementation, and update of the Permittee's SWMP and SMAP (SMAP applies to counties). Permittees shall document specific outreach measures for overburdened communities.

   i. Annually, document specific public involvement and participation opportunities provided to overburdened communities and specifically, highly impacted communities.

   ii. No later than December 31, 2026, document methods used to identify overburdened communities.

b. Each Permittee shall post on their website their SWMP Plan and the Annual Report, required under S9.A, no later than May 31 each year. All other submittals shall be available to the public upon request.

5. Controlling Runoff from New Development, Redevelopment, and Construction Sites

The SWMP shall include a program to prevent and control the impacts of runoff from new development, redevelopment, and construction activities. Refer to Appendix 10 for a list of approved manuals and ordinances. The program shall apply to private and public development, including transportation projects.

Minimum performance measures:

a. Each Permittee shall continue to implement existing programs approved under the 2019 Phase I Municipal Stormwater Permit until the program required in S5.C.5.b.iv applies. The program required in S5.C.5.b.iv applies to applications submitted:[3]

   i. On or after July 1, 2026.

   ii. Prior to July 1, 2016, that have not started construction[4] by July 1, 2021.

   iii. Prior to July 1, 2021, that have not started construction by July 1, 2026.

   iv. Prior to July 1, 2026, that have not started construction by July 1, 2031.

b. Site and subdivision scale requirements

   i. The minimum requirements, thresholds, and definitions in Appendix 1, or minimum requirements, thresholds, and definitions determined by Ecology to be equivalent to Appendix 1, for new development, redevelopment, and construction sites shall be included in ordinances or other enforceable documents adopted by the local government. Adjustment and exceptions criteria equivalent to those in Appendix 1 shall be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances using Ecology-approved basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds shall provide equal or similar protection of receiving waters and equal or similar levels of pollutant control as compared to Appendix 1.

[3] In this context, "application" means, at a minimum a complete project description, site plan, and, if applicable, SEPA checklist. Permittees may establish additional elements of a completed application.

[4] In this context "started construction" means the site work associated with, and directly related to the approved project has begun. For example: grading the project site to final grade or utility installation. Simply clearing the project site does not constitute the start of construction. Permittees may establish additional requirements related to the start of construction.

ii. The local requirements shall include the following requirements, limitations, and criteria that, when used to implement the minimum requirements in Appendix 1, will protect water quality, reduce the discharge of pollutants to the MEP, and satisfy the State requirement under Chapter 90.48 RCW to apply AKART prior to discharge:

(a.) Site planning requirements.

(b.) BMP selection criteria.

(c.) BMP design criteria.

(d.) BMP infeasibility criteria.

(e.) LID competing needs criteria.

(f.) BMP limitations.

Permittees shall document how the criteria and requirements will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.

Permittees who choose to use the requirements, limitations, and criteria in the Stormwater Management Manual for Western Washington (SWMMWW), or an equivalent manual approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

iii. Ecology review and determination of the local manuals and ordinances to be functionally equivalent is required. The Permittee shall submit draft enforceable requirements, technical standards, and a manual that corresponds to updates identified in Appendix 10, Part 2, to Ecology no later than July 1, 2025. Ecology will review and provide written response to the Permittee. If Ecology takes longer than 180 days to provide a written response the required deadline for adoption and effective date will be automatically extended by the number of calendar days that Ecology exceeds a 180-day period for written response.

(a.) The Permittee shall submit the required significant changes to the local programs as required in Appendix 10, Part 2, and in the format described in Appendix 10, Part 2, Table 3.

(b.) Additional significant changes shall be submitted for equivalency review with the rationale, and any tests, or

documentation to demonstrate that the proposal meets AKART and MEP. Incomplete submittals will not be reviewed. Permittees shall follow the submittal format in Appendix 10, Part 2, Table 4.

iv. No later than July 1, 2026, each Permittee shall adopt and make effective a local program that meets the requirements in S5.C.5.b.i through ii, above. Manuals and ordinances determined to be functionally equivalent to Appendix 1 and the SWMMWW under this Section will be listed in Appendix 10, Part 3, following a permit modification.

(a.) In the case of circumstances beyond the Permittee's control, such as litigation or administrative appeals that may result in noncompliance with the requirements of this Section, the Permittee shall promptly notify Ecology and submit a written request for an extension.

v. The program shall include the legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved under the provisions of this Section.

vi. The program shall include a permitting process with site plan review, inspection, and enforcement capability to meet the following standards for both private and public projects, using qualified personnel:

(a.) Review all stormwater site plans submitted to the Permittee for proposed development that meet the thresholds in S5.C.5.b.i, above.

(b.) Inspect, prior to clearing and construction, all permitted development sites that meet the thresholds in S5.C.5.b.i, and that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7. As an alternative to evaluating each site according to Appendix 7, Permittees may choose to inspect all construction sites that meet the minimum thresholds in S5.C.5.b.i.

(c.) Inspect all permitted development sites that meet the thresholds in S5.C.5.b.i, above, during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforce, as necessary, based on the inspection.

(d.) Each Permittee shall manage maintenance activities to inspect all permanent stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential developments at least twice per 12-month period with no less than four months between inspections, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized), to identify maintenance needs and enforce compliance with maintenance standards as needed.

(e.) Inspect all permitted development sites that meet the thresholds in S5.C.5.b.i upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities. Verify that a maintenance plan is completed and responsibility for maintenance is assigned for stormwater treatment and flow control BMPs/facilities. Enforce, as necessary, based on the inspection.

(f.) Compliance with the inspection requirements in (b)-(e) above shall be determined by the presence of an established inspection program designed to inspect all sites that meet the thresholds in S5.C.5.b.i and ii. Compliance shall be determined by achieving at least 80% of required inspections annually. The inspections may be combined with other inspections provided they are performed using qualified personnel.

(g.) The program shall include a procedure for keeping records of inspections and enforcement actions by staff including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.

(h.) The program shall include an enforcement strategy to respond to issues of non-compliance.

vii. The program shall make available to representatives of proposed new development and redevelopment, as applicable: the link to the online Construction Stormwater General Permit Notice of Intent (NOI) form for construction activity, a link to the online Industrial Stormwater General Permit NOI form for industrial activity, and a link to the online registration requirements for Underground Injection Control (UIC) wells. Permittees shall continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits issued by Ecology.

Each Permittee shall ensure that all staff whose primary job duties are implementing the program to Control Stormwater Runoff from New Development, Redevelopment, and Construction Sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. As determined necessary by the Permittee, follow-up training shall be provided to address changes in procedures, techniques, or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

6. Stormwater Planning

Each Permittee shall implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters.

Minimum performance measures:

a. Each Permittee shall continue to convene an inter-disciplinary team to inform and assist in the development, progress, and influence of this program.

b. Coordination with long-range plan updates.

i. Each Permittee shall describe how stormwater management needs and protection/improvement of receiving water health are (or are not) informing the long-range or comprehensive planning update processes and influencing policies and implementation strategies in their jurisdiction in the Annual Report, due March 31, 2027. The Annual Report shall describe the water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health through planning, considering stormwater management needs or limitations.

c. Low Impact Development (LID) code-related requirements.

i. Permittees shall continue to require LID Principles and LID BMPs when updating, revising, and developing new local development-related codes, rules, standards, or other enforceable documents, as needed.

The intent shall be to make LID the preferred and commonly used approach to site development. The local development-related codes, rules, standards, or other enforceable documents shall be designed to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible.

(a.) Annually, each Permittee shall assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers. If applicable, the report shall also describe mechanisms adopted to encourage or require implementation of LID Principles or LID BMPs.

ii. No later than December 31, 2028, adopt and implement tree canopy goals and policies to support stormwater management. Permittees shall consider how existing or future tree canopy can support stormwater management and water quality improvements in receiving waters. Establish a long-term (e.g. 5, 10 year or longer) goal of canopy, existing or future projection, to be used for stormwater management that is appropriate to the jurisdiction. Specific considerations related to canopy for stormwater management on Permittee-owned or operated lands shall include (but are not limited to):

(a.) Maintaining or increasing canopy in overburdened communities

(b.) Maintaining existing mature canopy.

Document considerations, reasoning, and rationale for goals and policies.

d. Stormwater Management Action Planning

i. Each county Permittee shall describe in their SWMP how the watershed-scale stormwater plans developed during the 2013 Permit term are being used to inform their S5.C.7 project prioritization and selection.

ii. No later than March 31, 2027, each county Permittee shall develop a Stormwater Management Action Plan (SMAP) for a new single sub-basin or catchment area or additional actions for an existing SMAP located within the geographic areas for which watershed-scale stormwater plans were developed in the 2013 Permit. If choosing additional actions for an existing SMAP, revise previous SMAP submitted in 2022. The required SMAP content is described in the Stormwater Management Action Planning Guidance (Ecology, 2024. Publication 24-10-027). A purpose of the SMAP is to support implementation in the Stormwater Management for Existing Development (SMED) Program with the identification of strategic investments through the identification of projects and actions. The SMAP shall identify:

(a.) Specific short-term actions (i.e., actions or projects to be accomplished within six years).

(b.) Specific long-term actions (i.e., actions or projects to be accomplished within seven to 20 years).

(c.) Land management/development strategies and/or actions needed for water quality management if these were not articulated in the watershed-scale stormwater plans. Include these in (a) and (b).

(d.) Focused, enhanced, or customized implementation of stormwater management actions related to Permit sections within S5, including:

- IDDE field screening,
- Prioritization of Source Control inspections,
- O&M inspections or enhanced maintenance, or
- Public Education and Outreach behavior change programs.

Identified actions shall support other specifically identified stormwater management strategies and actions for the basin overall, or for the catchment area particularly.

(e.) Include a description of the stormwater facility retrofits needed for the area, including projects that address transportation-related runoff from high traffic areas. These retrofits can be reported in the Stormwater Management for Existing Development Program (S5.C.7).

(f.) A revised and updated implementation schedule and budget sources.

(g.) Actions that will benefit overburdened communities, including specifically Vulnerable Populations and Highly Impacted Communities.

(h.) A county Permittee may choose to prepare a SMAP for a catchment area in an alternative watershed by conducting a similar process and considering the range of issues outlined in the Stormwater Management Action Planning Guidance (Ecology, 2024. Publication 24-10-027). If this option is chosen, no later than March 31, 2027, a county Permittee shall submit a SMAP for an alternative watershed.

iii. Permittees selecting an alternative watershed pursuant to S5.C.6.d.ii.(h) may rely on another jurisdiction to meet all or part of SMAP requirements at a watershed scale, provided a SMAP is completed for at least one priority catchment located within the Permittee's jurisdiction.

7. Stormwater Management for Existing Development

Each Permittee shall implement a Stormwater Management for Existing Development Program (SMED) to prevent or reduce impacts to waters of the State caused by discharges from the MS4. Impacts that shall be addressed include disturbances to watershed hydrology and stormwater pollutant discharges. (This program component was formerly called Structural Stormwater Controls.)

The program shall consider impacts caused by stormwater discharges from areas of existing development; including runoff from highways, streets and roads owned or operated by the Permittee; and areas of new development, where impacts are anticipated as development occurs.

Minimum performance measures:

a. The program shall address impacts that are not adequately controlled by the other required actions of the SWMP.

   i. The program shall consider the following projects:

      (a.) New flow control facilities.

      (b.) New treatment (or treatment and flow control) facilities.

      (c.) New LID BMPs.

      (d.) Retrofit of existing treatment and/or flow control facilities.

      (e.) Maintenance with capital construction costs ≥ $25,000.

      (f.) Property acquisition for water quality and/or flow control benefits (not associated with future facilities).

   ii. Permittees should consider other projects to address impacts, such as:

      (a.) Restoration of riparian buffers.

      (b.) Restoration of forest cover.

      (c.) Floodplain reconnection projects on water bodies that are not flow control exempt per Appendix 1.

      (d.) Permanent removal of impervious surfaces.

      (e.) Street sweeping.

      (f.) Line cleaning.

      (g.) Watershed collaboration.

   iii. Permittees may not use in-stream culvert replacement or channel restoration projects for compliance with this requirement.

   iv. The SMED Program may also include a program designed to implement small-scale projects that are not planned in advance.

b. Each Permittee's SWMP Plan shall describe the SMED Program, including the following:

   i. The SMED Program goals.

   ii. The planning process used to develop the SMED Program, including:

      (a.) The geographic scale of the planning process.

(b.) Issues and regulations addressed.

(c.) Steps in the planning process.

(d.) Types of characterization information considered.

(e.) Amount budgeted for implementation.

(f.) The public involvement process.

(g.) Prioritization process, procedures and criteria used to select the SMED projects. Include how potential benefits to overburdened communities, including specifically vulnerable populations and highly impacted communities, were used in selection.

c. With each Annual Report, each Permittee shall provide a list of planned, individual projects scheduled for implementation during this Permit term for the purpose of meeting S5.C.7.d. This list shall include at a minimum the information specified in Appendix 12.

d. Each Permittee shall achieve 1,000 SMED Program Points no later than March 31, 2028. This may include points accrued for projects after December 31, 2022. SMED Program Points shall be calculated per Appendix 12, as follows:

i. 600 Design Report stage Program Points, and

ii. 400 Constructed or Completed Maintenance stage Program Points.

iii. A minimum of 275 of the 1,000 SMED Program points shall be achieved with Project Types listed above at S5.C.7.a.i.(a)-(e). These points may be accrued by any combination of Design Report stage or Constructed or Completed maintenance stage projects.

iv. A minimum of 400 Program Points shall be achieved with Constructed or Completed Maintenance stage projects. Additional Program points for Constructed or Completed Maintenance stage projects may substitute for Design Report stage Program points.

8. Source Control Program for Existing Development

The Permittee shall implement a program to reduce pollutants in runoff from areas of existing development that discharge to the MS4. The program shall include application of source control BMPs, inspections, and enforcement.

Minimum performance measures:

a. Permittees shall enforce ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (see Appendix 8 to identify pollutant generating sources).

   Permittees shall update and make effective the ordinance(s), or other enforceable documents, as necessary to meet the requirements of this Section no later than August 1, 2026.

   The requirements of this subsection are met by using the source control BMPs in Volume IV of the Stormwater Management Manual for Western Washington, or a functionally equivalent manual approved by Ecology. In cases where the manual(s) lack guidance for a specific source of pollutants, the Permittee shall work with the owner/operator to implement or adapt BMPs based on the best professional judgement of the Permittee.

   Applicable operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs, or treatment BMPs/facilities, or both, shall be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, groundwater, or sediment management standards because of inadequate stormwater controls. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee, in accordance with S5.C.8.c., below.

b. Permittees shall continue to implement a program to identify publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the Permittee's MS4. The Permittee shall update the inventory at least once every 5 years. The program shall include a source control inventory which lists:

   i. Businesses and/or sites identified based on the presence of activities that are pollutant generating (refer to Appendix 8); and

   ii. Other pollutant generating sources, based on complaint response, such as home-based businesses, and multi-family sites.

c. Permittees shall continue to implement an inspection program, performed by qualified personnel, for sites identified pursuant to S5.C.8.b., above.

   i. All identified sites with a business address shall be provided, by mail, telephone, electronic communications, or in-person, information about

activities that may generate pollutants and the source control requirements applicable to those activities. This information may be provided all at one time or spread out over the Permit term to allow for some tailoring and distribution of the information during site inspections.

ii. The Permittee shall annually complete the number of inspections equal to 20% of the businesses and/or sites listed in their source control inventory to assess BMP effectiveness and compliance with source control requirements. The Permittee may count follow-up compliance inspections at the same site toward the 20% inspection rate. The Permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or sub-basin.

iii. Each Permittee shall inspect 100% of sites identified through credible complaints.

iv. Permittees may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.

v. Annual Reporting of inspections shall be organized by business type or activities with potential to generate pollutants to the MS4. Standard Industrial Code (SIC), Major Group, and NAICS numbers may be provided for reference as noted in Appendix 8.

d. Permittees shall implement a progressive enforcement policy to require sites to come into compliance with stormwater requirements within a reasonable time period, as specified below:

i. If the Permittee determines, through inspections or otherwise, that a site has failed to adequately implement required BMPs, the Permittee shall take appropriate follow-up action(s), which may include phone calls, letters, emails, or follow-up inspections.

ii. When a Permittee determines that a site has failed to adequately implement BMPs after a follow-up inspection(s) the Permittee shall take enforcement action as established through authority in its municipal code or ordinances, or through the judicial system.

iii. Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating an effort to bring sites into compliance. Each Permittee shall also maintain records of sites that are not inspected because the property owner denies entry.

iv. A Permittee may refer non-emergency violations of local ordinances to Ecology, provided, the Permittee also makes a documented effort of progressive enforcement. At a minimum, a Permittee's enforcement effort shall include documentation of inspections and warning letters or notices of violation.

v. Application and enforcement of local ordinances at sites, identified pursuant to S5.C.8.b, including sites with discharges authorized by a separate NPDES permit.

e. Permittees shall train staff who are responsible for implementing the Source Control Program to conduct these activities. The ongoing training program shall cover the legal authority for source control, source control BMPs and their proper application, inspection protocols, lessons learned, typical cases, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. Permittees shall document and maintain records of the training provided and the staff trained.

9. Illicit Connections and Illicit Discharges Detection and Elimination

The SWMP shall include an ongoing program designed to prohibit non-stormwater discharges, prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.

Minimum performance measures:

a. The program shall include procedures for reporting and correcting or removing illicit connections, spills, and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4.

Illicit connections and illicit discharges shall be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.

b. Permittees shall continue to implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater and illicit discharges into the Permittee's MS4. The ordinance or other regulatory mechanism in effect as of the effective date of this Permit shall be revised, if necessary, to meet the requirements of this Section no later than July 1, 2027.

   i. *Allowable Discharges*: The ordinance or other regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges:

      (a.) Diverted stream flows

      (b.) Rising groundwaters

      (c.) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20))

      (d.) Uncontaminated pumped groundwater

      (e.) Foundation drains

      (f.) Air conditioning condensation

      (g.) Irrigation water from agricultural sources that is commingled with urban stormwater

      (h.) Springs

      (i.) Uncontaminated water from crawl space pumps

      (j.) Footing drains

      (k.) Flows from riparian habitats and wetlands

      (l.) Non-stormwater discharges authorized by another NPDES or State Waste Discharge permit

      (m.) Non-stormwater discharges from emergency firefighting activities in accordance with S2 – Authorized Discharges

   ii. *Conditionally Allowable Discharges*: The ordinance or other regulatory mechanism, may allow the following categories of non-stormwater discharges only if the stated conditions are met:

(a.) Discharges from potable water sources including, but not limited to, water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.

(b.) Discharges from lawn watering and other irrigation runoff, including from reclaimed water sources. These discharges shall be minimized through, at a minimum, public education activities (see S5.C.11) and water conservation efforts.

(c.) Discharges from swimming pool, spa, and hot tub. The discharges shall be dechlorinated/debrominated to a total residual concentration of 0.1 ppm or less; free from sodium chloride; pH-adjusted and reoxygenated, if necessary; volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d.) Street and sidewalk wash water and water used to control dust. The Permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.11) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of street wash and dust control water used.

(e.) Routine external building washdown that does not use detergents for buildings built or renovated before 1950 and after 1980. These discharges shall be reduced through, at a minimum, public education activities (see S5.C.11) and water conservation efforts.

Commercial, industrial, and multi-story residential structures constructed or renovated between the years 1950 and 1980 i.e., those most likely to have PCB-containing building material, shall be assessed for PCB-containing materials consistent with *How to Find and Address PCBs in Building Materials* (Ecology, 2024, Publication No. 22-04-024), prior to routine building washdown to MS4. Structures confirmed or suspected to have

PCB-containing materials shall not discharge washdown to the MS4.

Single-family residential buildings are exempt from PCB assessment prior to building washdown, for the purposes of this section. Structures built between 1950-1980 and determined to be without PCB-containing materials may conduct routine building washdown (without detergents) as described above.

(f.) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

iii. The Permittee shall further address any category of discharges in S5.C.9.b.i or ii, above, if the discharges are identified as significant sources of pollutants to waters of the State.

c. Each Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. The program shall include the following components:

i. Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources. These procedures may also include source control inspections.

The Permittee shall implement a field screening methodology appropriate to the characteristics of the MS4 and water quality concerns. Screening for illicit connections may be conducted using the *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual* (Herrera Environmental Consultants, Inc., May 2020.); or another method of comparable or improved effectiveness. The Permittee shall document the field screening methodology in the Annual Report.

(a.) Each Permittee shall implement an ongoing field screening program of, on average, 12% of the Permittee's known MS4 each year.

ii. A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges.

iii. An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities might encounter or otherwise observe an illicit discharge or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of the trainings provided and the staff trained.

d. Each Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4. The program shall include:

i. Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall address the evaluation of whether the discharge shall be immediately contained and steps to be taken for containment of the discharge.

ii. Procedures for the post-emergency clean-up of firefighting activities:

(a.) No later than December 31, 2026, the Permittee shall coordinate with firefighting agencies/departments that serve the areas that discharge to the MS4 to ensure Permittees are notified when PFAS-containing AFFFs are used during emergency firefighting activities.

(b.) No later than January 1, 2027, Permittee shall update and implement procedures to minimize discharges to the MS4 during post-emergency clean-up and disposal activities; including but not limited to immediate clean-up in all situations where PFAS-containing AFFFs have been used, diversions, and other measures that prevent discharges to the MS4. The Permittee is not expected to deploy control measures during an emergency.

iii. Procedures for tracing the source of an illicit discharge; including visual inspections, and when necessary, opening manholes, using mobile cameras, collecting and analyzing water samples, and/or other detailed inspection procedures.

iv. Procedures for eliminating the discharge; including notification of appropriate owners or operators of interconnected MS4s; notification of the property owner; technical assistance; follow-up inspections; and use of the compliance strategy developed pursuant to S5.C.9.d.iv, including escalating enforcement and legal actions if the discharge is not eliminated.

v. Compliance with the provisions in S5.C.9.d.i, ii, and iv, above, shall be achieved by meeting the following timelines:

(a.) Immediately respond to all illicit discharges, including spills, which are determined to constitute a threat to human health, welfare, or the environment consistent with General Condition G3.

(b.) Investigate (or refer to the appropriate agency with authority to act) within 7 days, on average, any complaints, reports, or monitoring information that indicates a potential illicit discharge.

(c.) Initiate an investigation within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.

(d.) Upon confirmation of an illicit connection, use enforcement authority in a documented effort to eliminate the illicit connection within 6 months. All known illicit connections to the MS4 shall be eliminated.

e. Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills and illicit connections, to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staff. Permittees shall document and maintain records of the training provided and the staff trained.

f. Each Permittee shall either participate in a regional emergency response program or develop and implement procedures to investigate and respond to spills and improper disposal into the MS4 owned or operated by the Permittee.

g. Recordkeeping: Each Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section. In the Annual Report, each Permittee shall submit data for all of the illicit discharges, spills, and illicit connections, including those that were found by, reported to, or investigated by the Permittee during the previous calendar year. The data shall include the information and format specified in Appendix 14 and WQWebIDDE. Each Permittee shall record their data directly into WQWebIDDE or submit the information to Ecology with the Annual Report following the requirements of Appendix 14.

10. Operation and Maintenance Program

Each Permittee shall implement and document a program to regulate maintenance activities and to conduct maintenance activities by the Permittee to prevent or reduce stormwater impacts.

Minimum performance measures:

a. Maintenance Standards. Each Permittee shall implement maintenance standards that are as protective, or more protective, of facility function than those specified in the Stormwater Management Manual for Western Washington (SWMMWW), or a Phase I program approved by Ecology. For facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. No later than July 1, 2026, each Permittee shall update their maintenance standards as necessary to meet the requirements in this Section.[5]

   i. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standard between inspections and/or maintenance is not a permit violation.

   ii. Unless there are circumstances beyond the Permittee's control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

[5] If Ecology takes longer than 180 days to provide a written response as outlined in S5.C.5.b.3iii, the required deadline for adoption and effective date will be automatically extended by the number of calendar days that Ecology exceeds a 180-day period for written response.

(a.) Within 1 year for typical maintenance of facilities, except catch basins;

(b.) Within 6 months for catch basins; and

(c.) Within 2 years for maintenance that requires capital construction of less than $25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond the Permittee's control.

b. Maintenance of stormwater facilities regulated by the Permittee:

i. Each Permittee shall evaluate and, if necessary, update existing ordinances or other enforceable documents requiring maintenance of all stormwater facilities regulated by the Permittee (including catch basins that are part of the facilities regulated by the Permittee), in accordance with maintenance standards established under S5.C.10.a, above.

ii. Each Permittee shall annually inspect all stormwater facilities regulated by the Permittee to enforce compliance with adopted maintenance standards as needed based on inspection. The inspection program is limited to facilities to which the Permittee can legally gain access, provided the Permittee shall seek access to all stormwater facilities regulated by the Permittee. Inspections shall be conducted by qualified personnel or a qualified third party.

iii. Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – Certification and Signature.

iv. Compliance with the inspection requirements of S5.C.10.b.ii, above, shall be determined by the presence of an established inspection program designed to inspect all facilities, and achieving at least 80% of required inspections annually.

v. The Permittee shall require cleaning of catch basins regulated by the Permittee if they are found to be out of compliance with established maintenance standards in the course of inspections conducted at facilities under the requirements of S5.C.8 – *Source Control Program for Existing Development*, and S5.C.9 – *Illicit Connections and Illicit Discharges Detection and Elimination*, or if the catch basins are part of the stormwater facilities inspected under the requirements of S5.C.10 – *Operation and Maintenance Program*.

c. Maintenance of stormwater facilities owned or operated by the Permittee:

i. Each Permittee shall implement a program to annually inspect all stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee. Permittees shall implement appropriate maintenance action(s) in accordance with adopted maintenance standards. The inspection program shall be implemented by qualified personnel.

ii. Permittees may reduce the inspection frequency based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – Certification and Signature.

iii. Each Permittee shall implement a program to conduct spot checks of potentially damaged stormwater treatment and flow control BMPs/facilities after major storm events (24-hour storm event with a 10-year or greater recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all stormwater treatment and flow control BMPs/facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established under S5.C.10.a, above, based on the results of the inspections.

iv. Compliance with the inspection requirements of S5.C.10.c.i, and ii, above, shall be determined by the presence of an established inspection program designed to inspect all sites and achieving at least 95% of required inspections annually.

d. Maintenance of Catch Basins Owned or Operated by the Permittee

i. Each Permittee shall annually inspect all catch basins and inlets owned or operated by the Permittee, or implement alternatives below.

Alternatives to the standard approach of inspecting all catch basins annually: Permittees may apply the following alternatives to all or portions of their system.

(a.) The annual catch basin inspection schedule may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – Certification and Signature.

(b.) Annual inspections may be conducted on a "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs. Include an inspection of the catch basin immediately upstream of any MS4 outfall, discharge point, or connections to public or private storm systems if applicable. Clean all catch basins within a given circuit for which the inspection indicates cleaning is needed to comply with maintenance standards established under S5.C.10.a, above.

(c.) The Permittee may clean all pipes, ditches, catch basins, and inlets within a circuit once during the Permit term. Circuits selected for this alternative shall drain to a single point.

ii. The disposal of decant water shall be in accordance with the requirements in Appendix 6 – *Street Waste Disposal*.

iii. Compliance with the inspection requirements of S5.C.10.d.i, above, shall be determined by the presence of an established inspection program designed to inspect all catch basins and inlets, or implemented alternative, and achieving at least 95% of required inspections.

e. Each Permittee shall implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. No later than December 31, 2027, update documented practices, policies, and procedures. Lands owned or maintained by the Permittee include, but are not limited to: parking lots, streets, roads, highways, buildings, parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

   The following activities shall be addressed:

   i. Pipe cleaning.

   ii. Cleaning of culverts that convey stormwater in ditch systems.

   iii. Ditch maintenance.

   iv. Street cleaning.

   v. Road repair and resurfacing, including pavement grinding.

   vi. Snow and ice control.

   vii. Utility installation.

   viii. Maintaining roadside areas, including vegetation management.

   ix. Dust control.

   x. Pavement striping maintenance.

   xi. Application of fertilizers, pesticides, and herbicides according to the instructions for their use, including reducing nutrients and pesticides and using alternatives that minimize environmental impacts.

   xii. Sediment and erosion control.

   xiii. Landscape maintenance and vegetation disposal.

   xiv. Trash and pet waste management.

   xv. Building exterior cleaning and maintenance.

(a.) For Permittee-owned buildings, built or renovated between 1950-1980, update policies, practices, or procedures to include Source Control BMPs to minimize PCBs from entering the MS4. Permittees shall not discharge washdown to the MS4 if the structure is confirmed or suspected to have PCB-containing materials.

xvi. Preparing for building renovation or demolition.

(a.) For Permittee-owned buildings, update policies, practices, or procedures to include Source Control BMPs for building materials to prevent PCBs from entering the MS4 in preparation for and during demolition and renovations.

f. No later than July 1, 2027, develop and implement a municipal street sweeping program to focus on priority areas and times during the year that would reasonably be expected to result in the maximum water quality benefits to receiving waters. The following program elements shall be included:

i. Priority areas: Apply street sweeping program to curbed municipal streets in MS4 drainage areas that discharge to outfalls and meet any of the following criteria :

(a.) High traffic streets, such as arterials or collectors.

(b.) Streets that serve commercial or industrial land use areas.

ii. Program timing: Sweep high priority areas at least once between July and September and at least three additional times a year as determined by the Permittee to provide additional water quality benefits. For calendar year 2027, only one sweeping event is required between July and December.

(a.) Compliance during this permit term shall be determined by the records of a sweeping program designed to sweep all priority areas identified and sweeping at least 90% of priority area at each sweeping event.

(b.) Permittee may document reasoning for alternative sweeping timing and frequency based on local conditions (e.g. climate) and estimated pollutant deposition quantities. Documentation shall be based on actual maintenance experience and be certified in accordance with G19 – *Certification and Signature*.

iii. Operational Procedures: Procedures to follow equipment design performance specifications to ensure that street sweeping equipment is operated at the proper design speed with appropriate verification, and that equipment is properly maintained.

iv. Street Waste Disposal: Dispose of sweeper waste material in accordance with Appendix 6- *Street Waste Disposal*.

v. Reporting: No later than March 31, 2028, submit with the Annual Report the following information about the priority area-focused municipal sweeping program:

(a.) Areas swept identified on a map (i.e. streets that are considered high traffic (estimated number of vehicles served/or arterials or collectors, and streets serving commercial or industrial land use),

(b.) Sweeping date(s),

(c.) Sweeping frequency,

(d.) Type of sweeper used,

(e.) Total curb miles of priority areas and curb miles swept, and

(f.) Approximation of street waste solids removed for each sweeping event (indicate unit of measurement and wet or dry weight, where available).

g. Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities or another NPDES permit that authorizes stormwater discharges associated with the activity. Maintain and update SWPPPs to include the following information. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of BMPs. At a minimum, the SWPPP shall include:

i. A detailed description of the operational and structural BMPs in use at the facility and a schedule for implementation of additional BMPs when needed. BMPs selected shall be consistent with the Stormwater Management Manual for Western Washington, or Phase I program approved by Ecology. The SWPPP shall be updated as needed to maintain relevancy with the facility.

ii. At the minimum, annual inspections of the facility, including visual observations of discharges, to evaluate the effectiveness of the BMPs, identify maintenance needs, and determine if additional or different BMPs are needed. The results of these inspections shall be documented in an inspection report or check list.

iii. An inventory of the materials and equipment stored on-site, and the activities conducted at the facility which may be exposed to precipitation or runoff and could result in stormwater pollution.

iv. A site map showing the facility's stormwater drainage, discharge points, and areas of potential pollutant exposure.

v. A plan for preventing and responding to spills at the facility which could result in an illicit discharge.

h. Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, operation and maintenance standards, inspection procedures, relevant SWPPPs, selecting appropriate BMPs, street sweeper operation, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns. Follow-up training shall be provided as needed to address changes in procedures, techniques, requirements, or staffing. Permittees shall document and maintain records of training provided. The staff training records to be kept include dates, activities or course descriptions, and names and positions of staff in attendance.

i. Maintain records of the activities conducted to meet the requirements of this Section.

11. Education and Outreach Program

The SWMP shall include an education and outreach program designed to:

- Build general awareness about methods to address and reduce impacts from stormwater runoff;
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts; and
- Create stewardship opportunities that encourages community engagement in addressing the impacts from stormwater runoff.

Permittees may choose to meet these requirements individually or as a member of a regional group. Regional collaboration on general awareness or behavior change programs, or both, includes Permittees developing a consistent message, determining best methods for communicating the message, and when appropriate, creating strategies to effect behavior change. If a Permittee chooses to adopt one or more elements of a regional program, the Permittee should participate in the regional group and shall implement the adopted element(s) of the regional program in the local jurisdiction.

Minimum performance measures:

a. Each Permittee shall implement an education and outreach program. The program design shall be based on local or regional (or a combination of both) water quality information and priority audience characteristics to identify high priority audiences, subject areas, and/or BMPs. Based on the priority audience's demographic, the Permittee shall consider delivering its selected messages in language(s) other than English, as appropriate for the priority audience.

   i. General awareness: Permittees shall build general awareness with the following audiences and subject areas.

      (a.) Priority audiences: General Public (including school age children, college/university, trade students, and overburdened communities), and businesses (including home-based and mobile business)

      Subject areas:

      - General impacts of stormwater on surface waters, including impacts from impervious surfaces and of the hazards associated with illicit discharges and improper disposal of waste.
      - LID principles and LID BMPs.

      (b.) Priority audiences: Engineers, contractors, developers, property owners/managers, and land use planners.

      Subject areas**:**

      - Technical standards for stormwater site and erosion control plans.
      - LID principles and LID BMPs.

- Stormwater treatment and flow control BMPs/facilities.
- Source control BMPs for building materials to reduce pollution to stormwater, including but not limited to stormwater pollution from PCB-containing materials.

(c.) Permittees shall provide subject area information to the priority audience on an ongoing or strategic schedule.

ii. Behavior change: To affect behavior change, Permittees shall select, at a minimum, one priority audience and one BMP:

(a.) Priority audiences: Residents, landscapers, property managers/owners, school-age children, college/university, trade students, or businesses (including home-based and mobile businesses).

BMPs:

- Use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps, and other hazardous materials.
- Prevention of illicit discharges.
- Yard care techniques protective of water quality;
- Use and storage of pesticides and fertilizers and other household chemicals.
- Carpet cleaning.
- Repair and maintenance BMPs for vehicles, equipment, and/or home buildings.
- Pet waste management and disposal.
- LID principles and LID BMPs.
- Stormwater facility maintenance, including LID facilities.
- Dumpster and trash compactor maintenance.
- Litter and debris prevention.
- (Audience specific) Source Control BMPs (refer to S5.C.8).

- (Audience specific) Locally important, stormwater-related subject area.

(b.) Social marketing campaign development. Based on the recommendation from 2024 evaluation and report, no later than July 1, 2025, each Permittee shall follow social marketing practices and methods and develop a campaign that is tailored to the community, including the development of a program evaluation plan. Each Permittee shall:

(1.) Develop a strategy and schedule to implement the existing campaign more effectively;
(2.) Develop a strategy and schedule to expand the existing campaign to a new priority audience or BMPs; or
(3.) Develop a strategy and schedule for a new priority audience and BMP behavior change campaign.

(c.) Behavior change campaign implementation. No later than September 1, 2025, begin to implement the strategy developed in S5.C.11.a.ii.(b).

(d.) Behavior change campaign evaluation. No later than March 31, 2029, evaluate and submit report on:

(1.) The changes in understanding and adoption of behaviors resulting from the implementation of the strategy; and
(2.) Any changes to the campaign to be more effective; describe the strategies and process to achieve the results.

(e.) Behavior change campaign adaptive management. Permittees shall use results of the evaluation to continue to direct effective methods for implementation of the ongoing behavior change program.

iii. Stewardship. Each Permittee shall provide, partner with, or promote stewardship opportunities to encourage residents or businesses to participate in activities or events planned and organized within the community, such as: stream teams, storm drain marking, volunteer monitoring, riparian plantings, and watershed habitat improvement. Permittees may provide, partner with, or promote stewardship opportunities created or organized by existing organizations (including non-permittees).

S6. STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

A. *Secondary Permittees and New Secondary Permittees Coverage*

This Section applies to all Secondary Permittees and all New Secondary Permittees whether coverage under this Permit is obtained individually, or as a Co-Permittee with a city, town, county, and/or another Secondary Permittee.

New Secondary Permittees subject to this Permit shall fully meet the requirements of this Section as modified in footnotes in S6.D below, or as established as a condition of coverage by Ecology.

1. To the extent allowable under state, federal and local law, all components are mandatory for each Secondary Permittee covered under this Permit, whether covered as an individual Permittee or as a Co-Permittee.
2. Each Secondary Permittee shall develop and implement a Stormwater Management Program (SWMP). A SWMP is a set of actions and activities comprising the components listed in S6 and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 – *Compliance with TMDL Requirements*, and S8 – *Monitoring and Assessment*. The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the Maximum Extent Practicable (MEP) and protect water quality.
3. Unless an alternate implementation schedule is established by Ecology as a condition of permit coverage, the SWMP shall be developed and implemented in accordance with the schedules contained in this Section and shall be fully developed and implemented no later than four and one-half years from initial permit coverage date. Secondary Permittees that are already implementing some or all of the required SWMP components shall continue implementation of those components.
4. Secondary Permittees may implement parts of their SWMP in accordance with the schedule for cities, towns, and counties in S5, provided they have signed a memorandum of understanding or other agreement to jointly implement the activity or activities with one or more jurisdictions listed in S1.B and submitted a copy of the agreement to Ecology.
5. Each Secondary Permittee shall prepare written documentation of the SWMP, called the SWMP Plan. The SWMP Plan shall be updated annually to include a description of program activities for the upcoming calendar year and shall be submitted with the Annual Report.

6. Conditions S6.A, S6.B, and S6.C are applicable to all Secondary Permittees covered under this Permit. In addition:
    a. S6.D is applicable to all Secondary Permittees, except the Port of Seattle and the Port of Tacoma.
    b. S6.E is applicable only to the Port of Seattle and the Port of Tacoma.

B. Coordination

Secondary Permittees shall coordinate stormwater-related policies, programs, and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall coordinate among departments of the Secondary Permittee to ensure compliance with the terms of this Permit.

C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee shall be able to demonstrate that it can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from MS4s owned or operated by the Secondary Permittee.

This legal authority may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar instruments.

D. Stormwater Management Program for Secondary Permittees

The SWMP for Secondary Permittees shall include the following components.

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

a. Storm drain inlets owned or operated by the Secondary Permittee that are in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly labeled with a message similar to "Dump no waste – Drains to water body."[6]

   As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.D.3.d and S6.D.6.a.i, below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable shall be re-labeled within 90 days.

[6] New Secondary Permittees shall label all inlets as described in S6.D.1.a no later than four years from the initial date of permit coverage.

b. Each year, beginning no later than three years from the initial date of Permit coverage, public ports, colleges, and universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Distribution may be by hard copy or electronic means. Appropriate topics may include, but are not limited to:

   i. How stormwater runoff affects local waterbodies.

   ii. Proper use and application of pesticides and fertilizers.

   iii. Benefits of using well-adapted vegetation.

   iv. Alternative equipment washing practices, including cars and trucks that minimize pollutants in stormwater.

   v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of vehicle wastes, including the location of hazardous waste collection facilities in the area.

   vi. Hazards associated with illicit connections and illicit discharges.

   vii. Benefits of litter control and proper disposal of pet waste.

   viii. Source control BMPs for building materials to reduce pollution to stormwater including, but not limited to, stormwater pollution from PCB-containing materials.

2. Public Involvement and Participation

Each year, no later than May 31, each Secondary Permittee shall:

a. Make the Annual Report available on the Permittee's website; and

b. Make available on the Permittee's website the latest updated version of the SWMP Plan.

3. Illicit Discharge Detection and Elimination

Each Secondary Permittee shall:

a. From the initial date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.

b. Implement appropriate policies prohibiting illicit discharges[7] and an enforcement plan to ensure compliance with illicit discharge policies.[8] These policies shall address, at a minimum: illicit connections; non-stormwater discharges, including spills of hazardous materials; and improper disposal of pet waste and litter. Policies shall be revised, if necessary, to meet the requirements of this Section no later than July 1, 2027.

i. *Allowable discharges*: The policies do not need to prohibit the following categories of non-stormwater discharges:

(a.) Diverted stream flows

(b.) Rising groundwaters

(c.) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20))

(d.) Uncontaminated pumped groundwater

(e.) Foundation drains

(f.) Air conditioning condensation

(g.) Irrigation water from agricultural sources that is commingled with urban stormwater

(h.) Springs

(i.) Uncontaminated water from crawl space pumps

(j.) Footing drains

(k.) Flows from riparian habitats and wetlands

(l.) Discharges from emergency firefighting activities in accordance with S2 – *Authorized Discharges*

(m.) Non-stormwater discharges authorized by another NPDES or State Waste Discharge permit

[7] New Secondary Permittees shall develop and implement appropriate policies prohibiting illicit discharges and identify possible enforcement mechanisms as described in S6.D.3.b, no later than one year from initial date of permit coverage.

[8] New Secondary Permittees shall develop and implement an enforcement plan as described in S6.D.3.b no later than 18 months from the initial date of permit coverage.

ii. *Conditionally allowable discharges*: The policies may allow the following categories of non-stormwater discharges only if the stated conditions are met and such discharges are allowed by local codes:

(a.) Discharges from potable water sources including, but not limited to, water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.

(b.) Discharges from lawn watering and other irrigation runoff, including reclaimed water sources. These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.

(c.) Discharges from swimming pools, spas, and hot tubs. The discharges shall be dechlorinated/debrominated to a total residual concentration of 0.1 ppm or less, free from sodium chloride, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d.) Street and sidewalk wash water, water used to control dust that does not use detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used.

(e.) Routine external building washdown that does not use detergents for buildings built or renovated before 1950 and after 1980. These discharges shall be reduced through, at minimum, public education activities or water conservation efforts, or both.

Commercial, multi-story residential, and industrial structures constructed or renovated between the years 1950 and 1980 (i.e. those most likely to have PCB containing building materials), shall be assessed for PCB-containing materials consistent with *How to Find and Address PCBs in Building Materials* (Ecology, 2024, Publication No. 22-04-024) prior to routine building washdown to the MS4. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown water to the MS4. Structures built or renovated between 1950-1980 and determined to be without PCB-containing materials may conduct routine building washdown (without detergents) as described above.

(f.) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Secondary Permittee which addresses control of such discharges.

iii. The Secondary Permittee shall address any category of discharges in S6.D.3.b.i or ii, above, if the discharge is identified as a significant source of pollutants to waters of the State.

c. Maintain a storm sewer system map showing the locations of all known storm drain outfalls and discharge points, labeling the receiving waters (other than groundwater), and delineating the areas contributing runoff to each outfall and discharge point. Make the map (or completed portions of the map) available on request to Ecology and to the extent appropriate to other Permittees.

i. No later than December 31, 2026, the required format for mapping is an electronic format with fully described mapping standards.[9]

ii. No later than March 31, 2027, Secondary Permittees shall submit locations of all known MS4 outfalls according to the standard templates provided in the Annual Report. This reporting shall include the size and material of the outfalls.

[9] New Secondary Permittees shall meet the requirements of S6.D.3.c no later than four and one-half years from the initial date of permit coverage.

d. Conduct field inspections and visually inspect for illicit discharges at all known MS4 outfalls and discharge points. Visually inspect at least one third (on average) of all known outfalls and discharge points each year, beginning no later than two years from the initial date of permit coverage. Implement procedures to identify and remove illicit discharges. Keep records of inspections and follow-up activities.

   Screening for illicit connections may be conducted using the *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual* (Herrera Environmental Consultants, Inc., May 2020.); or another method of comparable or improved effectiveness.

e. Implement a spill response plan that includes coordination with a qualified spill responder.[10]

f. No later than two years from initial date of permit coverage, provide staff training or coordinate with existing training efforts to educate staff on proper BMPs for preventing illicit discharges, including spills. Train all Secondary Permittee staff who, as part of their normal job responsibilities, have a role in preventing such illicit discharges.

4. Construction Site Stormwater Runoff Control

From the initial date of permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.

b. Ensure that all construction projects under the functional control of the Secondary Permittee which require a construction stormwater permit obtain coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an individual NPDES permit prior to discharging construction related stormwater.

c. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

[10] New Secondary Permittees shall develop and implement a spill response plan as described in S6.D.3.e no later than four and one-half years from the initial date of permit coverage.

d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements or hire trained contractors to perform the work.

e. Coordinate, as requested, with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances, which are under the functional control of the Secondary Permittee during land disturbing activities and/or the construction period.

5. Post-Construction Stormwater Management for New Development and Redevelopment

From the initial date of permit coverage, each Secondary Permittee shall:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4.

b. Coordinate with the local jurisdiction regarding projects owned or operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Each Secondary Permittee shall:

a. Implement a municipal Operation and Maintenance (O&M) Plan to minimize stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan shall include appropriate pollution prevention and good housekeeping procedures for all the following operations, activities, and/or types of facilities that are present within the Secondary Permittee's boundaries and under the functional control of the Secondary Permittee.[11] The O&M Plan Shall be updated as needed, no later than July 1, 2027.

   i. Stormwater collection and conveyance systems, including catch basins, stormwater pipes, open channels, culverts, and stormwater treatment and flow control BMPs/facilities. The O&M Plan shall address, at a minimum: scheduled inspections and maintenance activities, including

[11] New Secondary Permittees shall develop and implement the Operation and Maintenance Plan described in S6.D.6.a no later than three and a half years from the initial date of permit coverage.

cleaning and proper disposal of waste removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and annually inspect and maintain all stormwater facilities to ensure facility function.

Secondary Permittees shall establish maintenance standards that are as protective, or more protective, of facility function than those specified in Chapter 4, Volume V of the Stormwater Management Manual for Western Washington.

Secondary Permittees shall review their maintenance standards to ensure they are consistent with the requirements of this Section.

Secondary Permittees shall conduct spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities following major storm events (24-hour storm event with a 10-year or greater recurrence interval).

ii. *Roads, highways, and parking lots*. The O&M Plan shall address, but is not limited to deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4.

iii. *Vehicle fleets*. The O&M Plan shall address, but is not limited to storage, washing, and maintenance of Secondary Permittee vehicle fleets; and fueling facilities. Secondary Permittees shall conduct all vehicle and equipment washing and maintenance in a self-contained covered building or in designated wash and/or maintenance areas.

iv. *External building maintenance*. The O&M Plan shall address, building exterior cleaning and maintenance including cleaning, washing, painting; maintenance and management of dumpsters; other maintenance activities. For buildings owned by the Secondary Permittee and built or renovated between 1950 and 1980, the O&M Plan shall include Source Control BMPs to minimize PCBs from entering the MS4 prior to exterior building washdown. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown water to the MS4.

v. *Preparing Permittee-owned buildings for renovation or demolition*. The O&M Plan shall address Source Control BMPs for building materials to prevent PCBs from entering the MS4 in preparation for and during demolition and renovations.

vi. *Parks and open space*. The O&M Plan shall address but is not limited to proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash and pet waste management.

vii. *Material storage facilities, and heavy equipment maintenance or storage yards*. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities owned or operated by the Secondary Permittee and not covered under the Industrial Stormwater General Permit or under another NPDES permit that authorizes stormwater discharges associated with the activity.

viii. *Other facilities* that would reasonably be expected to discharge contaminated runoff. The O&M Plan shall address proper stormwater pollution prevention practices for each facility.

b. From the initial date of permit coverage, Secondary Permittees shall also have permit coverage for all facilities operated by the Secondary Permittee that are required to be covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities or another NPDES permit that authorizes discharges associated with the activity.

c. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.D.6.a.i through a.viii above.

d. No later than three years from the initial date of permit coverage, Secondary Permittees shall implement a program designed to train all employees whose primary construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:

i. The importance of protecting water quality.

ii. The requirements of this Permit.

iii. Operation and maintenance requirements.

iv. Inspection procedures.

v. Ways to perform their job activities to prevent or minimize impacts to water quality.

vi. Procedures for reporting water quality concerns, including potential illicit discharges (including spills).

E. Stormwater Management Program for the Port of Seattle and Port of Tacoma

Permittees that are already implementing some or all the Stormwater Management Program (SWMP) components in this Section shall continue implementation of those components of their SWMP.

The SWMP for the Port of Seattle and the Port of Tacoma shall include the following components:

1. Education Program

The SWMP shall include an education program aimed at tenants and Permittee employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Minimum performance measure:

a. The Permittee shall make educational materials available to tenants and Permittee employees whose job duties could impact stormwater.

b. No later than September 30, 2027, storm drain inlets owned or operated by the Ports that are in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly labeled with a message similar to “Dump no waste – Drains to water body” no later than September 30, 2027.

c. As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.E.3.d and S6.E.6.b below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable shall be re-labeled within 90 days.

2. Public Involvement and Participation

Each Permittee shall make the latest updated version of the SWMP Plan available to the public. The most recent SWMP Plan and Annual Report shall be posted on the Permittee's website no later than May 31 each year.

3. Illicit Discharge Detection and Elimination

The SWMP shall include a program to identify, detect, remove, and prevent illicit connections and illicit discharges, including spills, into the MS4s owned or operated by the Permittee.

Minimum performance measures:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee's MS4 is located that govern non-stormwater discharges.

b. Implement appropriate policies prohibiting illicit discharges and an enforcement plan to ensure compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges, including spills of hazardous materials; and improper disposal of pet waste and litter. Policies shall be revised, if necessary, to meet the requirements of this Section no later than July 1, 2027.

   i. *Allowable Discharges*: The policies do not need to prohibit the following categories of non-stormwater discharges:

      (a.) Diverted stream flows.

      (b.) Rising groundwaters.

      (c.) Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20)).

      (d.) Uncontaminated pumped groundwater.

      (e.) Foundation drains.

      (f.) Air conditioning condensation.

      (g.) Irrigation water from agricultural sources that is commingled with urban stormwater.

      (h.) Springs.

      (i.) Uncontaminated water from crawl space pumps.

(j.) Footing drains.

(k.) Flows from riparian habitats and wetlands.

(l.) Discharges from emergency firefighting activities in accordance with S2 – Authorized Discharges.

(m.) Non-stormwater discharges authorized by another NPDES permit.

ii. *Conditionally Allowable Discharges*: The policies may allow the following categories of non-stormwater discharges only if the stated conditions are met and such discharges are allowed by local codes:

(a.) Discharges from potable water sources, including but not limited to, water line flushing, hyper-chlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4.

(b.) Discharges from lawn watering and other irrigation runoff, including from reclaimed water sources. These discharges shall be minimized through, at a minimum, public education activities and water conservation efforts conducted by the Permittee and/or the local jurisdiction.

(c.) Discharges from swimming pools, spas, and hot tubs. The discharges shall be dechlorinated/debrominated to a total residual chlorine concentration of 0.1 ppm or less, free from sodium chloride, pH-adjusted and reoxygenated if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. Discharges shall be thermally controlled to prevent an increase in temperature of the receiving water. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.

(d.) Street and sidewalk wash water, water used to control dust that does not use detergents. The Ports of Seattle and Tacoma shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Port and/or the local jurisdiction. To avoid washing pollutants into the MS4, the amount of street wash and dust control water used shall be minimized.

(e.) Routine external building washdown that does not use detergents for buildings built or renovated before 1950 and after 1980. These discharges shall be reduced through, at minimum, public education activities or water conservation efforts, or both.

Commercial, multi-story residential, and industrial structures constructed or renovated between the years 1950 and 1980 (i.e. those most likely to have PCB containing building materials), shall be assessed consistent with *How to Find PCBs in Building Materials* (Ecology, 2024; Publication No. 22-040-024) prior to routine building washdown to MS4. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown to the MS4. Structures built between 1950-1980 and determined to be without PCB-containing materials may proceed with routine building washdown (without detergents) as described above.

(f.) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

iii. The Permittee shall address any category of discharges in S6.E.3.b.i or ii above if the discharges are identified as significant source of pollutants to waters of the State.

c. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Permittee-owned properties. Permittees shall gather and maintain mapping data for the features listed below on an ongoing basis:

i. Known MS4 outfalls and discharge points, receiving waters (other than groundwater), and land uses for property owned by the Permittee, and all other properties served by MS4s known to and owned or operated by the Permittee.

ii. No later than March 31, 2027, Permittees shall submit locations of all known MS4 outfalls according to the standard templates provided in the Annual Report. This reporting shall include the size and material of the outfalls.

iii. Tributary conveyances (including size, material, and type attributes where known), and the associated drainage areas of MS4 outfalls and discharge points with a 12-inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems.

iv. Known connections greater than or equal to 8 inches in nominal diameter to tributary conveyances mapped in accordance with S6.E.3.c.ii.

v. To the extent consistent with national security laws and directives, each Permittee shall make available to Ecology upon request, available maps depicting the information required in S6.E.3.c.i through iv. above. The required format for mapping is electronic with fully described mapping standards.

vi. Implement a program to document operation and maintenance records for stormwater treatment and flow control BMPs/facilities and catch basins.

vii. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the city or county in which the Permittee is located.

d. Conduct field screening of at least 20% of the MS4 each year for the purpose of detecting illicit discharges and illicit connections. Field screening methodology shall be appropriate to the characteristics of the MS4 and water quality concerns. Implement procedures to identify and remove any illicit discharges and illicit connections. Keep records of inspections and follow-up activities.

   Screening for illicit connections may be conducted using the *Illicit Connection and Illicit Discharge Field Screening and Source Tracing Guidance Manual* (Herrera Environmental Consultants, Inc., May 2020); or another method of comparable or improved effectiveness.

e. Implement a spill response plan that includes coordination with a qualified spill responder.

f. Provide ongoing staff training or coordinate with existing training efforts to educate staff on proper BMPs for preventing illicit discharges, including spills, and for identifying, reporting, and responding as appropriate. Train all Permittee staff who, as part of their normal job responsibilities, have a role in preventing such discharges. Keep records of training provided and staff trained.

4. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff from construction activities under the functional control of the Permittee.

Minimum performance measures:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern construction phase stormwater pollution prevention measures. To the extent allowed by local ordinances, rules, and regulations, comply with the applicable minimum technical requirements for new development and redevelopment contained in Appendix 1.

b. Ensure all construction projects under the functional control of the Permittee which require a construction stormwater permit obtain coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction Activities or an individual NPDES permit prior to discharging construction related stormwater.

c. Coordinate with the local jurisdiction(s) regarding projects owned or operated by other entities which discharge into the Permittee's MS4, to assist the local jurisdiction(s) with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

d. Provide staff training or coordinate with existing training efforts to educate Permittee staff responsible for implementing construction stormwater erosion and sediment control BMPs and requirements or hire trained contractors to perform the work.

e. Coordinate as requested with Ecology or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the functional control of the Permittee during active land disturbing activities and/or the construction period.

5. Post-Construction Stormwater Management for New Development and Redevelopment

The SWMP shall include a program to address post-construction stormwater runoff from new development and redevelopment projects. The program shall establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4. To the extent allowed by local ordinances, rules, and regulations, comply with the applicable the minimum technical requirements for new development and redevelopment contained in Appendix 1.

b. Coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Permittee's MS4, to assist the local jurisdiction in achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).

6. Operation and Maintenance Program

The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control BMPs/facilities and catch basins to ensure that BMPs continue to function properly.

Minimum performance measures:

a. Each Permittee shall implement an Operation and Maintenance (O&M) manual for all stormwater treatment and flow control BMPs/facilities and catch basins that are under the functional control of the Permittee and which discharge stormwater to its MS4, or to an interconnected MS4.

   i. Retain a copy of the O&M manual in the appropriate Permittee department and routinely update following discovery or construction of new stormwater facilities.

   ii. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective, than those specified in the Stormwater Management Manual for Western Washington. For existing stormwater facilities which do not have maintenance standards, the Permittee shall develop a maintenance standard. Each Permittee shall update maintenance standards, as necessary, to meet the requirements of this Section.

iii. The purpose of the maintenance standard is to determine if maintenance is required. The maintenance standard is not a measure of the facility's required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance is not a permit violation. Maintenance actions shall be performed within the time frames specified in S6.E.6.b.ii.

iv. Building exterior cleaning and maintenance

The O&M Plan shall address, at a minimum: building exterior cleaning and maintenance including cleaning, washing, painting; maintenance and management of dumpsters; and other maintenance activities. For buildings owned by the Secondary Permittee and built or renovated between 1950 and 1980, the O&M Plan shall include Source Control BMPs to minimize PCBs from entering the MS4, prior to exterior building washdown. Structures confirmed or suspected to have PCB-containing materials shall not discharge washdown water to the MS4.

v. Preparing Permittee-owned buildings for renovation or demolition

The O&M Plan shall address Source Control BMPs for building materials to prevent pollutants, including PCBs, from entering the MS4 in preparation for and during demolition and renovations.

b. The Permittee will manage maintenance activities to inspect all stormwater facilities listed in the O&M manual annually and take appropriate maintenance action in accordance with the O&M manual.

i. The Permittee may change the inspection frequency to less than annually, provided the maintenance standards are still met. Reducing the annual inspection frequency shall be based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 – *Certification and Signature*.

ii. Unless there are circumstances beyond the Permittees control, when an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed:

(a.) Within 1 year for wet pool facilities and retention/detention ponds.

(b.) Within 1 year for typical maintenance of facilities, except catch basins.

(c.) Within 6 months for catch basins.

(d.) Within 2 years for maintenance that requires capital construction of less than $25,000.

Circumstances beyond the Permittee's control include denial or delay of access by property owners, denial or delay of necessary permit approvals, and unexpected reallocations of maintenance staff to perform emergency work. For each exceedance of the required timeframe, the Permittee shall document the circumstances and how they were beyond their control.

c. Sweeping

i. No later than July 1, 2027, develop and implement a street sweeping program on lands owned or operated by the Permittee at least once between July and September and at least three additional times each year, as determined by the Permittee to provide additional water quality benefits. For calendar year 2027, only one sweeping event is required.

(a.) Compliance during this permit term shall be determined by the records of a sweeping program designed to sweep least 90% of mapped areas at each sweeping event.

(b.) Permittees may document reasoning for alternative sweeping timing and frequency based on local conditions (e.g. climate) and estimated pollutant deposition quantities. Documentation shall be based on actual maintenance experience and be certified in accordance with G19 – *Certification and Signature*.

ii. Follow equipment design performance specifications to ensure that street sweeping equipment is operated at the proper design speed with appropriate verification, and that it is properly maintained.

iii. Permittee shall dispose of sweeper waste material in accordance with Appendix 6- *Street Waste Disposal*.

iv. Reporting: No later than March 31, 2028, submit with the Annual Report the following information about the priority area-focused municipal sweeping program:

(a.) Areas swept identified on a map (i.e. streets that are considered high traffic (estimated number of vehicles served/or arterials or collectors), and streets serving commercial or industrial land use),

(b.) Sweeping dates,

(c.) Sweeping frequency,

(d.) Type of sweeper used,

(e.) Total curb miles and curb miles swept, and

(f.) Approximation of street waste solids removed for each sweeping event (indicate unit of measurement and wet or dry weight, where available).

d. The Permittee shall provide appropriate training for Permittee maintenance staff.

e. The Permittee will maintain records of inspections and maintenance activities.

7. Source Control in Existing Developed Areas

The SWMP shall include the development and implementation of one or more Stormwater Pollution Prevention Plans (SWPPPs). A SWPPP is a documented plan to identify and implement measures to prevent and control the contamination of discharges of stormwater to surface or groundwater. SWPPP(s) shall be prepared and implemented for all Permittee-owned lands, except environmental mitigation sites owned by the Permittee, that are not covered by a NPDES permit issued by Ecology that authorizes stormwater discharges.

Minimum performance measures:

a. SWPPP(s) shall be updated as necessary to reflect changes at the facility.

b. The SWPPP(s) shall include a facility assessment including a site plan, identification of pollutant sources, and description of the drainage system.

c. The SWPPP(s) shall include a description of the source control BMPs used or proposed for use by the Permittee. Source control BMPs shall be selected from the Stormwater Management Manual for Western Washington (or an equivalent manual approved by Ecology). Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. Where necessary, a schedule for implementation of structural BMPs shall be included in the SWPPP(s).

d. The Permittee shall maintain a list of sites covered by the SWPPP(s) required under this Permit. At least 20% of the listed sites shall be inspected annually.

e. The SWPPP(s) shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer.

f. The SWPPP(s) shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills, and improper disposal. When the Permittee submits a notification pursuant to G3, the Permittee shall also notify the city or county it is located in.

g. The SWPPP(s) shall include a component related to inspection and maintenance of stormwater facilities and catch basins that is consistent with the Permittee's O&M Program, as specified in S6.E.6 above.

8. Monitoring Program

Monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.

S7. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs are TMDLs which have been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this Permit, whichever is later.

A. TMDL Specific Requirements

1. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2. Each Permittee shall keep records of all actions required by this Permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation shall be included as part of the Annual Report submitted to Ecology. Each Annual Report shall include a summary of relevant SWMP and Appendix 2 activities conducted in the TMDL area to address the applicable TMDL parameter(s).
2. For applicable TMDLs not listed in Appendix 2, compliance with this Permit shall constitute compliance with those TMDLs.

S8. MONITORING AND ASSESSMENT

A. *Regional Status and Trends Monitoring*

1. Clark, King and Snohomish Counties, the Cities of Seattle and Tacoma, and the Ports of Seattle and Tacoma chose S8.A.2 Regional Status and Trends Monitoring, Option a in the Phase I Municipal Stormwater Permit, August 1, 2019– July 31, 2024. These Permittees shall make a one-time payment into the Stormwater Action Monitoring (SAM) collective fund to implement regional small streams and marine nearshore areas status and trends monitoring in Puget Sound or, urban streams in the Lower Columbia River basin. This payment is due on or before December 1, 2024. Submit payment according to Section S8.D.
2. Clark, King, Pierce, and Snohomish Counties, the Cities of Seattle and Tacoma, and the Ports of Seattle and Tacoma shall notify Ecology in writing which of the following two options for regional status and trends monitoring (S8.A.2.a or S8.A.2.b) the Permittee chooses to carry out during this Permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2024. Either option will fully satisfy the Permittee's obligations under this Section (S8.A.2). Each Permittee shall select a single option for this permit term.
    a. Make annual payments into a SAM collective fund to implement regional receiving water status and trends monitoring of small streams and marine nearshore areas in Puget Sound or, urban streams in the Lower Columbia River basin. The annual payments into the SAM collective fund are due on or before August 15 each year beginning in 2025. Submit payments according to Section S8.D.

    Or

    b. Conduct stormwater discharge monitoring per the requirements in S8.C.

B. *Stormwater Management Program Effectiveness and Source Identification Studies*

1. Clark, King, Pierce, and Snohomish Counties, the City of Seattle, and the Ports of Seattle and Tacoma chose S8.B.2 Effectiveness Studies, Option a. in the Phase I Municipal Stormwater Permit August 1, 2019– July 31, 2024. These Permittees shall pay into the SAM collective fund to implement effectiveness studies and source identification studies. The payment is due before on or before December 1, 2024. Submit payment according to Section S8.D.

2. Clark, King, Pierce, and Snohomish Counties, the Cities of Seattle and Tacoma, and the Ports of Seattle and Tacoma shall notify Ecology in writing which of the following three options (S8.B.2.a or S8.B.2.b or S8.B.2.c) for effectiveness and source identification studies the Permittee chooses to carry out during this permit term. The written notification with G19 signature is due to Ecology no later than December 1, 2024. Any of these three options (S8.B.2.a or S8.B.2.b or S8.B.2.c) will fully satisfy the Permittee's obligations under this Section (S8.B.2). Each Permittee shall select a single option for this permit term.

    a. Make annual payments into a SAM collective fund to implement effectiveness and source identification studies. The annual payments into the SAM collective fund are due on or before August 15 each year beginning in 2025. Submit payments according to Section S8.D.

    Or

    b. Conduct stormwater discharge monitoring per the requirements in S8.C.

    Or

    c. Both: make annual payments into a SAM collective fund to implement regional effectiveness and source identification studies and independently conduct a Stormwater Management Program (SWMP) effectiveness study approved by Ecology.

        i. Permittees selecting this option shall make payments equal to one-half of the amounts listed in Appendix 11 for S8.B. The annual payments are due are due on or before August 15 each year beginning in 2025. Submit payments according to Section S8.D.

        ii. The SWMP effectiveness study shall be conducted in accordance with the requirements below:

            (a.) Write a detailed proposal describing: the purpose, objectives, design, and methods of the independent effectiveness study; anticipated outcomes including the question that will be answered; expected modifications to the Permittee's SWMP; relevance to other Permittees; and plans for sharing the findings with other Permittees. The proposal shall be prepared in accordance with the SWMP Effectiveness Study Proposal and QAPP Template (July 1, 2019, version 1.0) and submitted no later than February 1, 2025, to Ecology for review and approval.

(b.) Within 120 days of Ecology's approval of the detailed proposal, submit a draft QAPP to Ecology. The QAPP shall be prepared in accordance with the SWMP Effectiveness Study Proposal and QAPP template (July 1, 2019, version 1.0). Within 60 days of receiving Ecology's comments, submit a final QAPP to Ecology for review and approval.

(c.) Implement the study in accordance with the schedule in the approved final QAPP. Data and analyses shall be reported annually in accordance with the Ecology-approved QAPP.

3. All Permittees shall provide information as requested for effectiveness and source identification studies that are under contract with Ecology as active SAM projects. These requests will be limited to records of SWMP activities and associated data tracked and/or maintained in accordance with *S5 – Stormwater Management Program* and/or *S9 – Reporting and Recordkeeping Requirements*. A maximum of three requests during the permit term from the SAM Coordinator will be transmitted to the Permittee's permit coordinator via Ecology's regional permit manager. The Permittee shall have 90 days to provide the requested information.

C. Stormwater Discharge Monitoring

1. No later than June 30, 2025, the City of Tacoma shall submit data and a final report for the stormwater discharge monitoring that was conducted pursuant to S8.B *Stormwater Management Program Effectiveness and Source Identification Studies*, Option b. in the *Phase I Municipal Stormwater Permit*, August 1, 2019 – July 31, 2024.

2. This Section applies only to Permittees who choose to conduct stormwater discharge monitoring per S8.A.2.b, S8.A.3.b.ii, and/or S8.B.2.b in lieu of participation in the *Regional Status and Trends Monitoring* and/or *Stormwater Management Program Effectiveness and Source Identification Studies*. These Permittees shall conduct monitoring in accordance with Appendix 9 and an Ecology-approved QAPP as follows:

    a. Cities and counties who choose the option to conduct stormwater discharge monitoring for either S8.A Regional Status and Trends Monitoring or S8.B Stormwater Management Program Effectiveness and Source Identification Studies shall monitor five independent discharge locations; ports shall monitor two independent discharge locations. Permittees are encouraged to continue monitoring at locations monitored under S8.C.2 of the Phase I Municipal Stormwater Permit August 1, 2019 –

July 31, 2024 and/or S8.D of the *Phase I Municipal Stormwater Permit*, February 16, 2007 – February 15, 2012.

i. Cities and counties who choose the option to conduct stormwater discharge monitoring for both S8.A *Regional Status and Trends Monitoring* and S8.B *Effectiveness and Source Identification Studies* shall conduct this monitoring at a total of ten locations; at least seven locations shall be independent (up to three locations may be nested in other basins).

ii. Ports who choose the option to conduct stormwater discharge monitoring for both S8.A and S8.B shall conduct this monitoring at four independent locations.

b. No later than February 1, 2025, each Permittee shall submit a draft Stormwater Discharge Monitoring QAPP to Ecology for review and approval. The QAPP shall be prepared in accordance with the requirements in Appendix 9. The final QAPP shall be submitted to Ecology for approval as soon as possible following finalization, and before August 15, 2025, or within 60 days of receiving Ecology's comments on the draft QAPP (whichever is later).

c. Flow monitoring at new discharge monitoring locations shall begin no later than October 1, 2025, or within 30 days of receiving Ecology's approval of the final QAPP (whichever is later). Stormwater discharge monitoring shall be fully implemented no later than October 1, 2025, at previous or existing discharge monitoring locations and no later than October 1, 2026, at new discharge monitoring locations.

d. Data and analyses shall be reported annually in accordance with the Ecology-approved QAPP. Each Permittee shall enter into the Department's Environmental Information Management (EIM) database, all water and solids concentration data collected pursuant to Appendix 9, as applicable.

i. Within 60 days of completing the study, publish a final report with the results of the study and recommended future actions based on findings, include a summary of results.

D. Payments into the Stormwater Action Monitoring Collective Fund

1. This Section applies to all Permittees who choose to make annual payments into the SAM collective funds for *S8.A Regional Status and Trends Monitoring* and/or *S8.B Effectiveness and Source Identification Studies*.
2. Permittees submitting payment for S8.A.1. or S8.B.1., payment amounts are listed in Appendix 11 of the Phase I Municipal Stormwater Permit, August 1, 2019– July 31, 2024.
3. Each Permittee's S8.A.2 or S8.B.2. payment amounts are listed in Appendix 11.
    a. For annual payments for S8.B.2 due on August 15, 2025 and thereafter, Permittees that choose option S8.B.2.c shall pay half the amount indicated for S8.B in Appendix 11.
4. Mail payments according to the instructions in the invoice sent to the Permittee approximately three months in advance of each payment due date.

S9. REPORTING AND RECORDKEEPING REQUIREMENTS

A. Annual Report Submittal

1. No later than March 31 of each year beginning in 2025, each Permittee shall submit an Annual Report. The reporting period for the first Annual Report will be from January 1, 2024, through December 31, 2024. The reporting period for all subsequent Annual Reports shall be the previous calendar year unless otherwise specified.
2. Permittees shall submit Annual Reports electronically using Ecology's Water Quality Permitting Portal (WQWebPortal) available on Ecology's website unless otherwise directed by Ecology.
3. Permittees unable to submit electronically through Ecology's WQWebPortal shall contact Ecology to request a waiver and obtain instructions on how to submit an Annual Report in an alternative format.

B. Records Retention

Each Permittee is required to keep all records related to this Permit and the SWMP for at least five years after the expiration date of this Permit.

C. Records Available to the Public

Each Permittee shall make all records related to this Permit and the Permittee's SWMP available to the public at reasonable times during business hours. The Permittee will provide a copy of the most recent Annual Report to any individual or entity, upon request.

1. A reasonable charge may be assessed by the Permittee for making photocopies of records.
2. The Permittee may require reasonable advance notice of intent to review records related to this Permit.

D. Annual Report for Cities, Towns, and Counties

The Annual Report for Permittees listed in S1.B shall include the following:

1. A copy of the Permittee's current Stormwater Management Program Plan (SWMP Plan) as required by S5.A.1.
2. Submittal of the Annual Report form as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this Permit during the reporting period.

3. Attachments to the Annual Report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this Permit during the reporting period, or as a required submittal. Refer to Appendix 3 for Annual Report questions.
4. If applicable, notice that the MS4 is relying on another entity to satisfy any of the obligations under the Permit.
5. Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
6. A notification of any annexations, incorporations, or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.

E. Annual Report for Secondary Permittees

Each Annual Report shall include the following:

1. A copy of the Permittee's current Stormwater Management Program Plan (SWMP Plan), as required by S6.A.2.
2. Submittal of the Annual Report as provided by Ecology pursuant to S9.A, describing the status of implementation of the requirements of this Permit during the reporting period.
3. Attachments to the Annual Report form including summaries, descriptions, reports, and other information as required, or as applicable, to meet the requirements of this Permit during the reporting period. Refer to Appendix 4 for Annual Report questions for Secondary Permittees, and Appendix 5 for Annual Report questions for the Ports of Seattle and Tacoma.
4. If applicable, notice that the MS4 is relying on another entity to satisfy any of the obligations under this Permit.
5. Certification and Signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
6. A notification of any jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this Permit shall be consistent with the terms and conditions of this Permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this Permit.

G3. NOTIFICATION OF DISCHARGE INCLUDING SPILLS

If a Permittee has knowledge of a discharge, including spill(s), into or from a MS4, which could constitute a threat to human health, welfare, or the environment, the Permittee, shall:

A. Take appropriate action to correct or minimize the threat to human health, welfare and/or the environment.

B. Notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge.

C. Immediately report spills or other discharges which might cause bacterial contamination of marine waters, such as discharges resulting from broken sewer lines and failing onsite septic systems, to the Ecology regional office and to the Washington State Department of Health, Shellfish Program.

D. Immediately report spills or discharges of oils or hazardous substances to the Ecology regional office and to the Washington Emergency Management Division, (800) 258-5990.

G4. BYPASS PROHIBITED

The intentional bypass of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); *and*

B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss.

G5. RIGHT OF ENTRY

The Permittee shall allow Ecology or an authorized representative of Ecology (including an authorized contractor acting as a representative of Ecology), upon the presentation of credentials and such other documents as may be required by law to:

A. To enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this Permit;

B. To have access to, and copy at reasonable cost and at reasonable times, any records that shall be kept under the terms of the Permit;

C. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit;

D. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

G6. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

G7. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the Permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

G9. MONITORING

A. ***Representative Sampling****:* Samples and measurements taken to meet the requirements of this Permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

B. ***Records Retention****:* The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least five years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology. On request, monitoring data and analysis shall be provided to Ecology.

C. ***Recording of Results****:* For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates and times the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. ***Test Procedures****:* All sampling and analytical methods used to meet the monitoring requirements in this Permit shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this Permit or approved in writing by Ecology.

E. ***Flow Measurement****:* Where flow measurements are required by other conditions of this Permit, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. ***Lab Accreditation****:* The Permittee shall ensure that all monitoring data that it is required to submit to Ecology under this Permit is prepared by a laboratory registered or accredited under the provisions of Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Flow, temperature, and settleable solids are exempt from this requirement. Conductivity, turbidity, and pH are also exempt from

this requirement, unless the laboratory must be registered or accredited for any other parameter. Quick methods of field detection of pollutants are exempted from this requirement when the purpose of the sampling is identification and removal of a suspected illicit discharge.

G. ***Additional Monitoring****:* Ecology may establish specific monitoring requirements in addition to those contained in this Permit by administrative order or permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the MS4 or to waters of the State. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the *Street Waste Disposal Guidelines* in Appendix 6. Solids generated from maintenance of the MS4 may be reclaimed, recycled, or reused when allowed by local codes and ordinances. Soils that are identified as contaminated pursuant to Chapter 173-350 WAC shall be disposed at a qualified solid waste disposal facility (see Appendix 6).

G11. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

G12. REVOCATION OF COVERAGE

The director may terminate coverage under this General Permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

A. Violation of any term or condition of this General Permit.

B. Obtaining coverage under this General Permit by misrepresentation or failure to disclose fully all relevant facts.

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

D. A determination that the permitted activity endangers human health or the environment or contributes significantly to water quality standards violations.

E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465.

Revocation of coverage under this General Permit may be initiated by Ecology or requested by any interested person.

G13. TRANSFER OF COVERAGE

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

This General Permit may be modified, revoked, and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, any of the following:

A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this General Permit.

B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this General Permit.

C. A water quality management plan containing requirements applicable to the category of dischargers covered under this General Permit is approved.

D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this General Permit are unacceptable.

E. Changes made to State law reference this Permit.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12, G14, or 40 CFR 122.62 shall report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this Permit will be required. Ecology may then require submission of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this Permit until it is modified or reissued.

G16. APPEALS

A. The terms and conditions of this General Permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this General Permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.

B. The terms and conditions of this General Permit, as they apply to an individual discharger, can be appealed, in accordance with Chapter 43.21B RCW, within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the General Permit's applicability or non-applicability to that individual discharger.

C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this General Permit. If the terms and conditions of this General Permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

D. Modifications of this Permit can be appealed in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G17. PENALTIES

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this Permit by reference.

G18. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this Permit after the expiration date of this permit, the permittee shall apply for and obtain a new Permit. Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this Permit.

G19. CERTIFICATION AND SIGNATURE

All formal submittals to Ecology shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or ranking elected official.

B. All formal submittals required by this Permit shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology, ***and***

2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the Stormwater Management Program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under General Condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the Stormwater Management Program, a new authorization satisfying the requirements of General Condition G19.B.2 shall be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a formal submittal under this Permit shall make the following certification:

> "I certify under penalty of law, that this document 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 information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

G20. NON-COMPLIANCE NOTIFICATION

In the event a Permittee is unable to comply with any of the terms and conditions of this Permit, the Permittee shall:

A. Notify Ecology of the failure to comply with the permit terms and conditions in writing within 30 days of becoming aware that the non-compliance has occurred. The written notification to Ecology shall include all of the following:

1. A description of the non-compliance, including the reference(s).
2. Beginning and ending dates of the non-compliance, or if the Permittee has not corrected the non-compliance, the anticipated date of correction.
3. Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the non-compliance.

B. Take appropriate action to stop or correct the condition of non-compliance.

G21. UPSETS

Permittees shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets." The conditions are as follows:

A. ***Definition***. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. ***Effect of an upset***. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (C) of this condition are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, will not constitute final administrative action subject to judicial review.

C. ***Conditions necessary for demonstration of upset***. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
2. The permitted facility was at the time being properly operated; and
3. The Permittee submitted notice of the upset as required in 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice of noncompliance).
4. The Permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate).

D. ***Burden of proof***. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G22. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Ecology, within a reasonable time, any information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Ecology upon request, copies of records required to be kept by this permit.

G23. OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Ecology, it shall promptly submit such facts or information.

G24. OTHER REQUIREMENTS OF 40 CFR

The other requirements of 40 CFR Part 122.41 and 40 CFR Part 122.42 are incorporated in this permit by reference.

DEFINITIONS AND ACRONYMS

This Section includes definitions for terms used in the body of the Permit and in all the appendices except Appendix 1. Terms defined in Appendix 1 are necessary to implement requirements related to Appendix 1.

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

AKART means All Known, Available and Reasonable methods of prevention, control, and Treatment. See also *State Water Pollution Control Act*, RCW 90.48.010 and RCW 90.48.520.

All Known, Available and Reasonable methods of prevention, control and Treatment refers to the State *Water Pollution Control Act*, RCW 90.48.010 and RCW 90.48.520.

Applicable TMDL means a TMDL which has been approved by EPA on or before the issuance date of this Permit, or prior to the date that Ecology issues coverage under this Permit, whichever is later.

Aqueous Film-Forming Foam (AFFF) is a type of foam used to fight liquid-fueled fires (i.e., those started by oil, gasoline, or other flammable liquids).

Beneficial Uses means uses of waters of the State, which include but are not limited to: use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the State.

Best Management Practices are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by Ecology that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

B-IBI means Benthic Index of Biotic Integrity.

BMP means Best Management Practice.

Bypass means the diversion of stormwater from any portion of a stormwater treatment facility.

Circuit means a portion of a MS4 discharging to a single point or serving a discrete area determined by traffic volumes, land use, topography, or the configuration of the MS4.

Component or Program Component means an element of the Stormwater Management Program listed in Special Condition S5 – *Stormwater Management Program for Permittees* or S6

– *Stormwater Management Program for Secondary Permittees*, or S7 – *Compliance with Total Maximum Daily Load Requirements*, or S8 – *Monitoring and Assessment*.

Constructed or Completed Maintenance Stage means completed and operational construction projects, fully executed property purchases, implemented maintenance actions, and completed restoration projects. A restoration project is not considered completed until any maintenance warranty times established with the construction contract have been completed, or vegetation establishment can be verified.

Conveyance System means that portion of the municipal separate storm sewer system designed or used for conveying stormwater.

Co-Permittee means an owner or operator of a MS4 which is in a cooperative agreement with at least one other applicant for coverage under this Permit. A Co-Permittee is an owner or operator of a regulated MS4 located within or in proximity to another regulated MS4. A Co-Permittee is only responsible for permit conditions relating to the discharges from the MS4 the Co-Permittee owns or operates. See also 40 CFR 122.26(b)(1).

CWA means the federal Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 *et seq*.).

Design Report Stage means project feasibility is established, BMP(s) are selected and their location(s) identified, site lay-out is established, project cost is developed, and proposed schedule is created.

Director means the Director of the Washington State Department of Ecology, or an authorized representative.

Discharge Point means the location where a discharge leaves the Permittee's MS4 through the Permittee's MS4 facilities/BMPs designed to infiltrate.

Entity means a governmental body, or a public or private organization.

EPA means the U.S. Environmental Protection Agency.

Fully Stabilized means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (such as riprap, gabions, or geotextiles) which prevents erosion.

General Permit means a permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

Groundwater means water in a saturated zone or stratum beneath the surface of the land or below a surface water body. Refer to Chapter 173-200 WAC.

Hazardous Substance means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or WAC 173-303-100.

Heavy Equipment Maintenance or Storage Yard means an uncovered area where any heavy equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are washed or maintained, or where at least five pieces of heavy equipment are stored on a long-term basis.

Highway means a main public road connecting towns and cities.

Hydraulically Near means runoff from the site discharges to the sensitive feature without significant natural attenuation of flows that allows for suspended solids removal. See Appendix 7 Determining Construction Site Sediment Damage Potential for a more detailed definition.

Hyperchlorinated means water that contains more than 10 mg/Liter chlorine.

Illicit Connection means any infrastructure connection to the MS4 that is not intended, permitted, or used for collecting and conveying stormwater or non-stormwater discharges allowed as specified in this Permit (S5.C.9, S6.D.3, and S6.E.3). Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the MS4.

Illicit Discharge means any discharge to a MS4 that is not composed entirely of stormwater or of non-stormwater discharges allowed as specified in this Permit (S5.C.9, S6.D.3 and S6.E.3).

Impervious Surface means a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or stormwater areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

Land Disturbing Activity means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

LID means Low Impact Development.

LID BMP means Low Impact Development Best Management Practices.

LID Principles means land use management strategies that emphasize conservation, use of on-site natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Low Impact Development means a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices means distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MS4 means Municipal Separate Storm Sewer System.

Municipal Separate Storm Sewer System means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the State.
2. Designed or used for collecting or conveying stormwater.

3. Which is not a combined sewer.
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
5. Which is defined as "large" or "medium" or "small" or otherwise designated by Ecology pursuant to 40 CFR 122.26.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Native Vegetation means vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest, and which reasonably could have been expected to naturally occur on the site. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

New Development means land disturbing activities, including Class IV-General Forest Practices that are conversions from timber land to other uses; structural development, including construction or installation of a building or other structure; creation of hard surfaces; and subdivision, short subdivision, and binding site plans, as defined and applied in Chapter 58.17 RCW. Projects meeting the definition of redevelopment shall not be considered new development. Refer to Appendix 1 for a definition of hard surfaces.

New Secondary Permittee means a Secondary Permittee that is covered under a Municipal Stormwater General Permit and was not covered by the Permit prior to July 1, 2024.

NOI means Notice of Intent.

Notice of Intent means the application for, or a request for coverage under a General NPDES Permit pursuant to WAC 173-226-200.

Notice of Intent for Construction Activity means the application form for coverage under the Construction Stormwater General Permit.

Notice of Intent for Industrial Activity means the application form for coverage under the General Permit for Stormwater Discharges Associated with Industrial Activities.

NPDES means National Pollutant Discharge Elimination System.

O&M means operation and maintenance.

Outfall means a point source as defined by 40 CFR 122.2 at the point where a discharge leaves the Permittee's MS4 and enters a surface receiving waterbody or surface receiving waters.

Outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other surface waters and are used to convey primarily surface waters (i.e., culverts).

Overburdened Community means a geographic area where vulnerable populations face combined, multiple environmental harms and health impacts, and includes, but is not limited to, highly impacted communities.

> "Vulnerable populations" means population groups that are more likely to be at higher risk for poor health outcomes in response to environmental harms, due to:
>
> (i) Adverse socioeconomic factors, such as unemployment, high housing and transportation costs relative to income, limited access to nutritious food and adequate health care, linguistic isolation, and other factors that negatively affect health outcomes and increase vulnerability to the effects of environmental harms; and
>
> (ii) sensitivity factors, such as low birth weight and higher rates of hospitalization.
>
> "Vulnerable populations" includes, but is not limited to:
>
> - Racial or ethnic minorities;
> - Low-income populations;
> - Populations disproportionately impacted by environmental harms; and
> - Populations of workers experiencing environmental harms.
>
> "Highly impacted community" means a community designated by the Department of Health based on cumulative impact analyses or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151

PCBs means Polychlorinated biphenyls.

Permittee unless otherwise noted, includes city, town, or county Permittee, port Permittee, Co-Permittee, Secondary Permittee, and New Secondary Permittee.

PFAS means Per- and Poly-fluoroalkyl Substances.

Physically Interconnected means that one MS4 is connected to another storm sewer system in such a way that it allows for direct discharges to the second system. For example, the roads with drainage systems and municipal streets of one entity are physically connected directly to a storm sewer system belonging to another entity.

Project Site means that portion of a property, properties, or rights-of-way subject to land disturbing activities, new hard surfaces, or replaced hard surfaces. Refer to Appendix 1 for a definition of hard surfaces.

QAPP means Quality Assurance Project Plan.

Qualified Personnel means someone who has professional training in the aspects of stormwater management for which they are responsible and are under the functional control of the Permittee. Qualified Personnel may be staff members, contractors, or trained volunteers with professional certification. Permittees may train and certify volunteers.

Qualified Third Party means someone who has professional training in the aspects of stormwater management for which they are responsible but are hired by private entities and not under the functional control of the Permittee. Qualified Third Parties may be contractors or consultants.

Quality Assurance Project Plan means a document that describes the objectives of an environmental study and the procedures to be followed to achieve those objectives.

RCW means the Revised Code of Washington State.

Receiving Waterbody or **Receiving Waters** means naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, or groundwater, to which a MS4 discharges.

Reclaimed water means water derived in any part from a wastewater with a domestic wastewater component that has been adequately and reliably treated to meet the requirements of Chapter 173-219 WAC, so that it can be used for beneficial purposes. Reclaimed water is not considered a wastewater**.**

Redevelopment means, on a site that is already substantially developed (i.e., has 35% or more of existing hard surface coverage), the creation or addition of hard surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development including construction, installation or expansion of a building or other structure; replacement of hard surface that is not part of a routine maintenance activity; and land disturbing activities. Refer to Appendix 1 for a definition of hard surfaces.

Runoff is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also “Stormwater.”

SAM means Stormwater Action Monitoring

Secondary Permittee is an operator of a MS4 which is not a city, town, or county. Secondary Permittees include special purpose districts and other public entities that meet the criteria inS1.E.1.

Sediment/Erosion-Sensitive Feature means an area subject to significant degradation due to the effects of construction runoff, or areas requiring special protection to prevent erosion. See Appendix 7 Determining Construction Site Sediment Transport Potential for a more detailed definition.

Shared Waterbodies means waterbodies, including downstream segments, lakes, and estuaries, that receive discharges from more than one Permittee.

Significant Contributor means a discharge that contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or in-stream habitat conditions.

Source Control BMP means a structure or operation that is intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. The SWMMWW separates source control BMPs into two types. Structural Source Control BMPs are physical, structural, or mechanical devices, or facilities that are intended to prevent pollutants from entering stormwater. Operational BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff, drainage, and interflow.

Stormwater Action Monitoring is the regional stormwater monitoring program for Washington State. This means a stormwater-focused monitoring and assessment program consisting of: status and trends monitoring in small streams and marine nearshore areas, Stormwater Management Program effectiveness studies, and source identification projects. The priorities and scope for SAM are set by a formal stakeholder group that selects the studies and oversees the program's administration.

Stormwater Associated with Industrial and Construction Activity means the discharge from any conveyance which is used for collecting and conveying stormwater, which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, or associated with clearing, grading and/or excavation, and is required to have an NPDES permit in accordance with 40 CFR 122.26.

Stormwater Facilities Regulated by the Permittee means permanent stormwater treatment and flow control BMPs/facilities located in the geographic area covered by the Permit and which are not owned by the Permittee and are known by the Permittee to discharge into MS4 owned or operated by the Permittee.

Stormwater Facility Retrofits means both: projects that retrofit existing treatment and/or flow control facilities; and new flow control or treatment facilities or BMPs that will address impacts from existing development.

Stormwater Management Program means a set of actions and activities designed to reduce the discharge of pollutants from the MS4 to the MEP and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable TMDLs pursuant to S7 Compliance with TMDL Requirements, and S8 Monitoring and Assessment.

Stormwater Treatment and Flow Control BMPs/Facilities means detention facilities, permanent treatment BMPs/facilities; and bioretention, vegetated roofs, and permeable pavements that help meet minimum requirement #6 (treatment), #7 (flow control), or both.

Surface Waters includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.

SWMMWW and ***Stormwater Management Manual for Western Washington*** means the technical manual (Publication No. 24-10-013) published by the Department of Ecology in 2024.

SWMP means Stormwater Management Program.

TMDL means Total Maximum Daily Load.

Total Maximum Daily Load means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation shall include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation shall also account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

Tributary Conveyance means pipes, ditches, catch basins, and inlets owned or operated by the Permittee and designed or used for collecting and conveying stormwater.

UGA means Urban Growth Area.

Urban Growth Area means those areas designated by a county pursuant to RCW 36.70A.110.

Urban/Higher Density Rural Sub-Basins means all areas within or proposed to be within the UGA, or any sub-basin outside the UGA with 50% or more area comprised of lots less than 5 acres.

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

Water Quality Standards means Surface Water Quality Standards, Chapter 173-201A WAC, Groundwater Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards, Chapter 173-204 WAC.

Waters of the State includes those waters as defined as *Waters of the United States* in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and *Waters of the State* as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters,

underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.

Waters of the United States refers to the definition in 40 CFR 122.2.

PIERCE COUNTY

Office of the County Council
930 Tacoma Ave S., Rm. 1046
Tacoma, WA 98402

Robert E. Mack
Pierce County Hearing Examiner

May 15, 2026

Pierce County Parks
9112 Lakewood Drive SW
Lakewood, WA, 98499
garett.tapia@piercecountywa.gov

RE: **Shoreline Variance:** Ski Park Bridge Replacement
Application Number: 1065040
Tax Parcel Number: 0519271032

Dear Applicant:

Transmitted herewith is the Report and Decision of the Pierce County Hearing Examiner regarding your request for the above-entitled matter.

Very truly yours,

ROBERT E. MACK

Pierce County Hearing Examiner

REM/sh

cc: Parties of Record

PIERCE COUNTY

HEARING EXAMINER

FINDINGS, CONCLUSIONS, AND DECISION

CASE NUMBER:	**Shoreline Variance:** Ski Park Bridge Replacement **Application Number:** 1065040 **Tax Parcel Number:** 0519271032
APPLICANT(S):	Pierce County Parks 9112 Lakewood Drive SW Lakewood, WA, 98499 garett.tapia@piercecountywa.gov
COUNTY CONTACT:	Kelsey Bean, Associate Planner
PROPOSAL:	Pierce County Planning and Public Works (PPW) proposes replacing the Ski Park Bridge for Pierce County Parks in 2026. The bridge spans a small tributary stream and is bordered by wetlands. It is 195 feet long by 15 feet wide built on creosote wood piers that support a wood superstructure topped by an asphalt deck. New concrete piers will be installed by using an auger to excavate the holes for the new concrete piers. After the piers are completed, cranes will be used to place the bridge superstructure on the concrete piers and bridge cap. Construction will require temporary filling of some wetlands.
PARCEL NUMBER(S):	0519271032
LOCATION:	The nearest address is 21000 block of South Prairie Carbon Road East, Orting, WA 98360. The site is not within a Community Plan Area and is in the Parks & Recreation (PR) Zoning Classification. It is located within the SE ¼ of the NE ¼ of Section 27, T19N, R5E, W.M., in Council District #1.

LAND USE DESIGNATION(S):	Parks & Recreation (PR)
PUBLIC HEARING DATE:	May 6, 2026 at 1:00 p.m.
DECISION DATE:	May 15, 2026
DECISION:	The Shoreline Variance Application is granted, with conditions.

SUMMARY OF RECORD

Exhibits Admitted:

1. Staff Report
2. Application Land Use
3. Required Findings
4. SEPA Checklist
5. SEPA Determination
6. Request for Review and Response
7. Notice of Application (NOA)
8. Certification of Distribution for the NOA
9. Declaration of Posting (uploaded 03-18-2026)
10. REVISED Public Meeting Notice (uploaded 04-16-2026)
11. Certification of Distribution for the Public Meeting Notice
12. Agenda for the Examiner's Hearing
13. Legal Notice for the Examiner's Hearing
14. Agency Comments
15. Site Plan (dated 01-22-2026)
16. Staff PowerPoint Presentation

On considering the testimony and exhibits submitted at the open record public hearing, the Hearing Examiner enters the following findings and conclusions.

Persons Testifying or Commenting:

i) Kelsey Bean, Pierce County Associate Planner
ii) Garrett Tapia, Parks Construction Manager
iii) Jeff Rudolph, Environmental Biologist

FINDINGS

1. The Hearing Examiner has admitted documentary evidence into the record, heard testimony, and taken this matter under advisement.

2. Pursuant to the State Environmental Policy Act and the Pierce County Environmental Regulations, Title 18E, a Mitigated Determination of Nonsignificance (MDNS) was issued on September 3, 2025, with a comment deadline of September 17, 2025. The SEPA determination was not appealed.

3. Public and Legal Notice were issued as follows:
    - February 26, 2026: Notice of Application (NOA), was sent to property owners within a radius of 300 feet, but not less than two parcels deep, around the exterior boundaries of the subject property.
    - March 18, 2026: The site was posted a public notice sign and confirmed with a Declaration of Posting.
    - April 16, 2026: Public meeting notice for the public hearing was sent to property owners within a radius of 300 feet, but not less than two parcels deep, around the exterior boundaries of the subject property.
    - April 22, 2026: Legal notice was published in the official County newspaper (Tacoma News Tribune) advertising the hearing by the Pierce County Hearing Examiner

4. The application, Pierce County Planning and Public Works ("PPW"), proposes to replace the current Ski Park bridge in the summer of 2026. The bridge path is part of the Foothills Trail system and is owned by Pierce County Parks. The bridge crosses a tributary stream. The stream has wetlands located on both banks.

5. The current bridge is 195 feet long and 15 feet wide. Its surface is a wood superstructure topped with an asphalt deck, and is supported by creosote wood piers. The proposal is to replace the current wood piers with concrete piers. The replacement bridge would have to be similar dimensionally with the current bridge.

6. It is extraordinarily difficult, if not physically impossible, to replace the current bridge without having heavy equipment access to the area through current wetlands. The replacement concrete piers would be installed in excavated holes. After the piers are installed, construction cranes would need to be used to place the proposed bridge superstructure on top of the concrete piers, and thereafter to surface the path structure.

7. The site is not included in a Community Plan Area. It is zoned Parks and Recreation ("PR").

8. All legal notices were posted or otherwise published.

9. Vehicles and construction equipment would access the site from South Prairie Carbon Road East.

10. The site is also located within a Conservancy Shoreline jurisdiction. The entire project site is located within a Shoreline and Wetland buffer zones.

11. No public comments were received in response to the application.

12. A comment letter was submitted by the Puyallup Tribe of Indians. That letter suggested the possible inclusion of additional conditions and features for the project. These would include the planting of more trees than planned, a mowing plan for grasses, and incorporating meanders and pools into the current stream site. The stream is a tributary to South Prairie Creek.

13. The existing use as part of a public trail is consistent with the applicable zoning. It also enhances public enjoyment of a shoreline.

14. The proposal is subject to variance criteria found in the Pierce County Code.

15. Under PCC 18S.60.070.A-D, a shoreline variance may be granted in extraordinary circumstances related to the physical character or configuration of a property when "strict implementation" of the Code would "impose unnecessary hardship on the applicate or thwart the policies found in the Shoreline Management Act (Act)." PCC 18S.60.070.A.

16. A shoreline variance cannot authorize developments prohibited under the Pierce County Master Program. A variance may be issued if an applicant can demonstrate that "denial of the permit would result in a thwarting of the policy enumerated in the Act due to extort extraordinary circumstances, . . ." in addition, a variance may be granted if "the public interest would suffer no substantial detrimental effect." PCC 18S.60.070.D.

17. In this case, "strict implementation" of the Code would impose an unnecessary hardship on the applicant and its project. The proposed use and development are not prohibited by the County Master Program. Indeed, the public parks and pedestrian access elements of the Master Program are supportive of the project. Denying the permit here would result in thwarting the policy of the SMA for public access to shorelines. Allowing the current bridge to fail, and not be replaced, would result in substantial detrimental effects to the public interest.

18. There are special circumstances for the subject property, as discussed in the Staff Report, pp.7-8. The current bridge and its replacement are located in critical areas, including a fish-bearing stream and its associated wetlands. It is not physically possible to relace the bridge without temporarily filling some wetlands to support the heavy equipment necessary for the project's construction.

19. Strict application of bulk and dimensional standards would preclude replacement of the existing foot bridge, and therefore preclude reasonable use of the property as a public pedestrian trail. The Examiner agrees with the staff discussion of this point, found at the Staff Report, p. 8.

20. The unique conditions of the site, and consequently a denial of a variance to allow alleviation of the hardships to the site proposed by this project, are not the result of any deed restrictions or actions by the bridge owner.

21. The project design is compatible with adjacent land uses, the County Comprehensive Plan, and PCC 18S.60.070. The project will not cause adverse impacts to its associated shorelines. Replacement of creosote wood piers with concrete piers will improve water quality of the stream.

22. Granting the subject Shoreline Variance application will not constitute a grant of special privilege denied to other properties in the vicinity.

23. The requested Shoreline Variance is the minimum necessary to effectuate the subject proposed project.

24. No cumulative adverse impacts that may result from similar projects in the subject area will result from granting the variance request.

25. Strict application of dimensional standards found in PCC Title 18S would preclude all reasonable use of the subject property.

26. Granting the requested Shoreline Variance will not impair public rights of navigation or use of the shoreline. Indeed, the proposed project will protect in the long-term public use of the subject shoreline.

27. Based on all of the above, the Examiner finds that the application meets all requirements of the County Code for issuance of a Shoreline Variance.

CONCLUSIONS

1. The Hearing Examiner has jurisdiction to decide this matter.

2. As set out in the Findings above, the requested Variance meets all applicable provisions of the County Code, including those found in Title 18S PCC.

3. The proposed project will ensure reasonable public access to the subject shoreline, and will improve eventually the water quality of the subject tributary stream.

DECISION

The requested Shoreline Variance is granted, subject to the Conditions set out below.

CONDITIONS

1. The decision set out here is based on representations made and exhibits entered into the record at the public hearing conducted by the Hearing Examiner. Any substantial change in any subject plan, proposal, or condition of approval after issuance of this

decision shall be subject to the approval of the Hearing Examiner, and may require further and additional hearings.

2. The project or proposal authorized by this decision is subject to all federal, state and local laws, ordinances, and regulations, whether or not they are specifically identified in the decision. Compliance with such laws, ordinances, and regulations is a condition precedent to the approval granted here, and is a continuing requirement of such approvals. By accepting the decision rendered here, the applicant represents that the approved development and activities will comply with such laws, ordinances, and regulations. If, during the term of the approval granted, the development and activities are not in compliance with any such laws, ordinances, and regulations, the Hearing Examiner is to be informed, and may convene a hearing on the matter.

3. The Shoreline Variance requires approval by the Washington State Department of Ecology.

4. Development of the approved project shall be started and completed consistent with the timelines in Washington Administrative Code (WAC) Section 173-27-090.

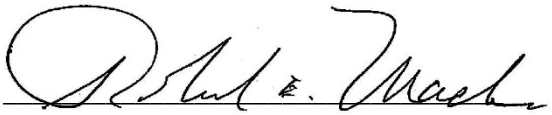
5. All applicable County permits, such as a building permit, shall be approved prior to any construction. Additional requirements and conditions may be imposed through the permit review processes.

6. Prior to issuance of project construction permits, the Applicant shall submit a revised replanting plan that shows 42 trees, 261 shrubs, 1,044 groundcover plants, and meets the requirements of PCC 18S.30.030.G.2

7. Prior to the issuance of a building permit, site development permit, and the initiation of any grading, clearing or filling on the parcel, a professional archaeologist, as defined by WAC 25- 48, shall be retained by the Applicants to perform an archaeological survey of the project site and to prepare a Cultural Resources Survey Report for the project site. At a minimum, the report shall: 1) summarize research, survey methodologies and field efforts; 2) document conclusions; and 3) offer recommendations. The Cultural Resources Survey shall be provided to and circulated by the County to the State Department of Archaeology and Historic Preservation and Tribes (Nisqually, Squaxin Island, and Puyallup) for a comment period of not less than 30 days prior to County approval, or the initiation of any ground disturbing activity on the site. If the survey shows that cultural resources are present, or are likely to be found during construction, the applicant shall work with the State and the interested Tribe to establish appropriate mitigation and, if necessary, to obtain appropriate permits prior to the start of work on the site. No clearing or grading activities shall be permitted prior to compliance with this condition.

8. To the extent applicable, the Applicant shall work with the Puyallup Tribe of Indians, and the Washington Departments of Fish and Wildlife, and Ecology, to consider inclusion at the subject tributary stream of restoration or enhancements that would improve fish habitat.

By:



Robert E. Mack
Pierce County Hearing Examiner

TRANSMITTED this 15th day of May 2026, to the following:

APPLICANTS: Pierce County Parks
c/o Garrett Tapia
9112 Lakewood Drive SW
Lakewood, WA, 98499
garett.tapia@piercecountywa.gov

OTHERS:

PIERCE COUNTY PLANNING AND PUBLIC WORKS

PIERCE COUNTY BUILDING DIVISION

PIERCE COUNTY DEVELOPMENT ENGINEERING DEPARTMENT

PIERCE COUNTY PUBLIC WORKS AND UTILITIES DEPARTMENT

TACOMA-PIERCE COUNTY HEALTH DEPARTMENT

FIRE PREVENTION BUREAU

PIERCE COUNTY PARKS AND RECREATION

PIERCE COUNTY COUNCIL

PIERCE COUNTY RESOURCE MANAGEMENT

PIERCE COUNTY CODE ENFORCEMENT

CASE NUMBER: **Shoreline Variance:** Ski Park Bridge Replacement
Application Number: 1065040
Tax Parcel Number: 0519271032

NOTICE

1. RECONSIDERATION:

Any aggrieved party or person affected by the decision of the Examiner may file with the Planning and Public Works Department a written request for reconsideration including appropriate filing fees within seven (7) working days.

Per PCC 1.22.130, the reconsideration request must be filed with PPW along with the associated fee using the link on the following website (not via email): Administrative Appeals | Pierce County, WA - Official Website. The "Appeal of Hearing Examiner" tab provides information on reconsideration requests.

The direct link where the appeal application form can be attached and filed is here: Notice of Appeal Submission.

2. APPEAL OF EXAMINER'S DECISION:

The final decision by the Examiner may be appealed in accordance with Ch. 36.70C RCW.

NOTE: In an effort to avoid confusion at the time of filing a request for reconsideration, please attach this page to the request for reconsideration.

RESOURCES:

Administrative Appeals
https://www.piercecountywa.gov/7676/Administrative-Appeals

Hearing Examiner Webpage:
https://www.piercecountywa.gov/6170/Hearing-Examiner

Appeals Customer Guide:
https://www.piercecountywa.gov/DocumentCenter/View/140215/Appeals-Customer-Guide?bidId=

Planning and Public Works
2401 South 35th Street, Suite 2
Tacoma, Washington 98409
www.piercecountywa.gov/pals

Information: (253) 798-3762

Permit No: **1059480**
Application Date: 09/18/2025
Issued Date: 07/23/2026
Expiration Date: 07/23/2027

Site Dev Commercial Permit

Tier: Tier 1

This permit is issued by Pierce County giving PIERCE COUNTY - PARKS permission according to approved plans, application, and restrictions on record to: Perform site development work to replace Ski Park Bridge in 2026

Site Address: 16735 SOUTH PRAIRIE CARBON RIVER RD E
Proj. Appl Name: PPW - Sky Park Bridge

Inspection Area: 14
RTSQQ: 05192714
Parcel No(s): 0519271032

Property Owner: PIERCE COUNTY - PARKS
9850 64TH ST W
UNIVERSITY PLACE WA 98467

Phone No:

Applicant: Pierce County Parks
9850 64TH ST W
UNIVERSITY PL WA 98467

Phone No: 253-306-3920

Zone 1:
Zone 2:
Community Area: North East Pierce County

Fee Amount	Fee Description	Quantity	Feet (Sq/Ln)	Valuation
Fee Exempt	Review - Drainage Plan Abbreviated (<5,000 sf imp)			

Total Fees
$0.00 Total Paid
$0.00 Balance Due

Planning and Public Works
2401 South 35th Street, Suite 2
Tacoma, Washington 98409
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Application Date: 09/18/2025
Issued Date: 07/23/2026
Expiration Date: 07/23/2027

Site Dev Commercial Permit

Tier: Tier 1

This application/permit currently expires on 07/23/2027.

The following notes apply to applications under review by Planning and Public Works:

- This is a non-transferable application.

- After you have received an approval or request for additional information from each department reviewing your application, an expiration date will be displayed in the permit system. To check the expiration date, go to www.piercecountywa.gov/permit.

- This application will expire if you take more than 360 cumulative days to respond to requests for additional information. Each time we ask for additional information, the number of days from the request until a complete resubmittal is received is counted. Once you have used a combined total of 360 days this application expires.

-It is the responsibility of the applicant/property owner to obtain all necessary approvals/permits from state, federal, and other agencies that have regulatory authority.

The following note applies to permits issued by Planning and Public Works:

- It is the responsibility of the applicant/property owner to obtain all necessary approvals/permits from state, federal, and other agencies that have regulatory authority.

Conditions of Approval

1. Issuance of a Site Development Permit by Pierce County does not imply or signify that the proposed work complies with the requirements of or is allowed by other County ordinances, regulations or requirements, or state or federal laws. The owner agrees to accept sole responsibility and liability for compliance with all state, federal and local rules, requirements, laws, ordinances and regulations.

2. The permit must be posted by the owner at the driveway location for the duration of construction activity. The owner will be responsible for the weather proofing of the permit, posting apparatus and maintenance.

3. The County is authorized to make inspections and take such actions as required to enforce these regulations. The County representative shall present proper credentials and make a reasonable effort to contact the owner before entering onto private property.

4. Should the County become aware of conditions that invalidate the original design data used to obtain the permit or determine that the applicant is not complying with the conditions of the permit or approved plans, the County may revoke the original permit and/or order work stopped on the project. The County may require the owner to submit a new application for review and approval.

5. The County may remove, correct, or replace any improperly constructed facility, structure, or portion thereof which was allowed through an issued Site Development Permit. The owner shall pay all expenses incurred by the County. If Pierce County is required to bring an action to recover such costs, the County will recover reasonable attorney fees and interest at twelve percent per annum to run from the date work was completed by the County. Owners must agree to this provision as a condition of issuance of any permit authorized by these regulations.

6. All work associated with the Site Development Permit must be completed and approved by the County prior to receiving final inspection for building permits.

7. The Inspection component of the application fee is an annual fee that accrues and must be paid prior to permit issuance, and every year on the anniversary date of permit issuance, until the permit receives final inspection approval. It is the applicant's responsibility to provide accurate and complete point of contact information for billing, and to notify the County of any changes in this data. The applicant will not be able to obtain inspections, project related approvals or release of financial guarantees if/when there are outstanding unpaid fees associated with the application or permit in question.

8. Permit Life.
For Site Development Permits NOT associated with violations:
Site Development Permits are valid for one year from the date the permit is issued or final plat approval (when applicable) whichever comes last. A Site Development Permit may be extended once, for one year, if deemed appropriate by the County and any applicable fees are paid. A one year extension request must be made, in writing, 30 days prior to the permit expiring. The request must demonstrate a good cause for delay.
For Site Development Permits issued to resolve a violation:
Site Development Permits issued to resolve a violation must be receive a final inspection approval within 180 days of the issuance of the permit. A permit may receive a onetime 90 day extension if deemed appropriate by the County. To request a permit extension, pay the permit extension fee prior to the permit expiring.

When to Call for Inspection
The owner is responsible for requesting each of the following at least forty-eight (48) hours in advance:

* Preconstruction Meeting: This meeting is normally between the site superintendent and inspector.

* Erosion Control Inspection: Proponent must ensure that all required erosion control measures are properly installed and request an inspection before proceeding with clearing.

* Completion of Clearing Inspection: This is to be completed after clearing and stripping is complete and before proceeding with road or storm drainage construction.

* Earthwork Inspection: Proponent must notify inspector when starting storm drainage construction, prior to backfilling underground storm drainage facilities, prior to installing any storm drainage control assemblies and to obtain approval of earthwork inspection prior to paving. Note: Projects of significant size may have multiple earthwork Inspections.

* Final Site Development Inspection: Request this inspection when all required improvements are complete and the site is stable.

Contacting the Development Engineering Inspector
To schedule an inspection or contact your inspector visit our website at: www.piercecountywa.gov/pals and click on On-line Permit Information Center. To reach Development Engineering Inspection Support call 253-798-3762.

Planning and Public Works
2401 South 35th Street, Suite 2
Tacoma, Washington 98409
www.piercecountywa.gov/pals

Information: (253) 798-3762

Permit No: **1059480**
Application Date: 09/18/2025
Issued Date: 07/23/2026
Expiration Date: 07/23/2027

Site Dev Commercial Permit

Tier: Tier 1

Final Project Approval
The County will not approve developments, perform final building inspections, release financial guarantees related to drainage and erosion control or accept final construction until the following have been completed:

* Construction Inspection Reports and As-built Drawings of the site development work have been prepared by the Project Engineer and accepted by the County.

* Conditions of approval have been fulfilled.

* Site is stabilized and temporary erosion control measures are removed.

* Project successfully passes County inspections.

Change Order Review
The County may require that owner initiated plan changes and/or field revisions to the approved construction plans are done using a Change Order Review form. This form can be found in Appendix R of the Storm Drainage Manual. Changes that require significant review may require applying for a Site Development Permit for "Revisions to Approved Plans." This must be submitted with the appropriate fees.

ENVIRONMENTAL DOCUMENTATION

PLAN AND PROCEDURES FOR THE INADVERTENT DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

Pierce County Planning and Public Works

Introduction

The Inadvertent Discovery Plan is intended to provide clear guidance related to the management of an unexpected discovery or unearthing of cultural artifacts, archaeological features or other evidence of cultural materials and/or of skeletal material of human or unknown origin during projects not governed by a DAHP-issued excavation permit, or by a Monitoring or Site Protection Plan for a specific area or activity. The following Inadvertent Discovery Plan (IDP) outlines procedures to follow, in accordance with state and federal laws, if cultural resources including archaeological materials or human remains are discovered.

This plan is to be implemented without exception whenever such discoveries occur, and applies to Pierce County staff, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by Pierce County, or occurring on unincorporated Pierce County land i.e., "project proponents."

This plan does not supersede or satisfy requirements for Monitoring, Site Protection, or other plans developed to address concerns at known cultural resource sites.

Pre-project Responsibilities

Prior to ground disturbing activities, the project proponent will notify work crews/machine operators that they are obligated to cease work in the immediate area and notify supervisory personnel upon discovery of any bones or objects of human manufacture, particularly suspected Native American artifacts. This action will be repeated prior to commencement of work in new locations, after significant changes in field staff, and if work is re-started after a hiatus. Field supervisors will be made aware of their responsibilities for interim protection and notification as detailed below.

On-Site Responsibilities

Specific Procedures for the Inadvertent Discovery of Archaeological or Historic Resources
In the event that cultural resources (not including human remains) are encountered during project implementation, the following actions will be taken:

STEP 1: STOP WORK. All work within the discovery area and a surrounding buffer adequate and sufficient to prevent further disturbance will cease. The field supervisor will notify the project proponent immediately.

STEP 2: NOTIFY COUNTY ARCHAEOLOGIST. The project proponent will immediately contact the Pierce County Archaeologist an archaeological monitor is present, they will notify the Pierce County Archaeologist.

1. If the Pierce County Archaeologist determines that potentially significant archaeological materials or historic sites are present, the project proponent will be advised of interim protective measures. Work may resume outside the buffer, unless the Pierce County archaeologist directs otherwise.

2. The Pierce County Archaeologist will initiate Tribal and DAHP consultation regarding evaluation of the find's significance, potential for effects caused by the project, and subsequent treatment plans or Memoranda of Agreement (MOA).

3. Wherever possible, the preferred treatment of significant archaeological resources and historic sites will be in situ preservation. If a treatment plan requires that such resources be excavated or removed, an agreement must first be reached between Pierce County and the consulting parties.

Under no conditions are Pierce County staff, the project proponent, or other project personnel to make the location or contents of inadvertent cultural resource finds public, unless specifically authorized to do so in the treatment plan.

Specific Procedures for the Inadvertent Discovery of Human Remains

Inadvertent finds of what appear to be human remains introduce cultural concerns and legal requirements that initiate a different response than cultural resources. Human remains must be treated with utmost respect. The following language is to be followed to the letter:

Inadvertent Discovery of Human Skeletal Remains on Non-Federal and Non-Tribal Land in the State of Washington (RCWs 68.50.645, 27.44.055, and 68.60.055)

Any human skeletal remains, regardless of ethnic origin, must always be treated with dignity and respect. If the project occurs on federal or Tribal lands (e.g., National Forest or Park, military reservation, Tribal Trust land) the provisions of the Native American Graves Protection and Repatriation Act of 1990 apply, and the responsible federal agency will follow its provisions. Note that Pierce County roadways that cross federal lands may be on an easement and are not owned by the County.

If the project occurs on non-federal lands, Pierce County will comply with applicable state and federal laws, and the following protocol:

STEP 1: STOP WORK. If ground disturbing activities encounter human skeletal remains during construction, then all activity will cease that may cause further disturbance to those remains.

STEP 2: SECURE AREA. The area of the find will be secured and protected from further disturbance until the State provides notice to proceed.

STEP 3: DUTY TO NOTIFY. The finding of human skeletal remains will be reported to the Pierce County Medical Examiner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed.

1. The county Medical Examiner will assume jurisdiction over the human skeletal remains and determine whether those remains are forensic or non-forensic.

2. If the county Medical Examiner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains.

3. The DAHP will notify any appropriate cemeteries and all affected tribes of the find.

4. The State Physical Anthropologist will determine whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Under no conditions are Pierce County staff, the project proponent, or other project personnel to make the location or contents of inadvertent human remains finds public, unless specifically authorized to do so in the burial treatment plan.

Non-Compliance

Compliance with all applicable laws pertaining to Archaeological Resources (RCW 27.53, 27.44 and WAC 25-48) and with human remains (RCW 68.50) is required. Failure to comply with these requirements can result in misdemeanors, possible civil penalties, and constitute a class C felony.

Contacts

PIERCE COUNTY

Archaeologist	
Dr. Adam N. Rorabaugh	253-370-9749
Medical Examiner	
Karen Cline-Parhamovich, DO	253-798-6494
Pierce County Sherriff's Office	253-798-4721
Pierce County Planning & Public Works Department	253-798-7037

TRIBAL CONTACTS

Muckleshoot Indian Tribe

Laura Murphy, Cultural Resources	253-876-3272

Nisqually Indian Tribe

Brad Beach, Tribal Historic Preservation Officer	360-528-1084
Annette Bullchild, Tribal Historic Preservation Officer	360-456 5221 x1106

Puyallup Tribe of Indians

Brandon Reynon, Tribal Historic Preservation Officer	253-573-7986
Jennifer Keating, Assistant Tribal Historic Preservation Officer	253-549-5397

Squaxin Island Tribe

Rhonda Foster, Tribal Historic Preservation Officer	253-573-7986
Shaun Dinubilo, Cultural Resources	360-432-3998

DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION

Dr. Allyson Brooks, State Historic Preservation Officer	360-480-6922
Stephanie Jolivette, Local Government Archaeologist	360-628-2755
Dr. Guy Tasa, State Physical Anthropologist	360-790-1633

ATTACHMENT A. DEFINITIONS

Archaeological Features are physical alterations in the natural environment such as pits or house foundations.

Archaeological materials are the physical remains of human cultural behavior, including artifacts and features left on the landscape.

Artifacts are the physical objects of a culture, including tools with evidence of intentional modification (such as flaked stone blades) as well as those objects such as fire-altered rock that reflect human activity.

Burial Statutes include the 2008 Washington State legislation that established current practices for inadvertent burial treatment through additions and amendments to the code, including 27.44 RCW (Indian Graves and Records, as amended), 27.53 (Archaeological Sites and Resources, as amended), as well as chapters 27.34, 43.334, 68.60, and 68.60 RCW.

Consulting Parties are those which have a legal right to comment on determinations of significance and NRHP eligibility, project effects on cultural resources, and human remains. This may vary according to projects, but typically includes DAHP and Tribes whose Ceded Lands and/or Usual and Accustomed areas include the project area.

Medical Examiner refers to the office of the local county medical examiner and is responsible for confirming that the remains are human and determining whether they are forensic (dead less than 50 years, and a law enforcement matter) or non-forensic (more than 50 years, and subject to burial statutes).

Cultural Deposits are layers or features of sediment containing cultural materials.

Cultural Resources include archaeological resources and historic sites.

Ground Disturbance or ground disturbing activities are any activities that result in the movement of earth, soils, or sediments, or the change in the existing soil or sediment cover (both vegetative and non-vegetative), or the existing topography. Ground disturbing activities include, but are not limited to clearing, grading, filling, and excavation. Compaction that is associated with the stabilization of structures, temporary or permanent equipment, temporary or permanent road construction, staging, and on-site transit shall be considered ground disturbing activities.

Historic Sites are locations 50 years old or older, where native or non-Native events and activities have taken place since the arrival of Euroamericans, and which are considered by DAHP to be historic site types.

Human Remains are any physical remains that are known to be human or could be human but have not yet been positively identified.

In Situ in place or in original location.

Physical anthropologist in this case refers to the professional physical anthropologist employed at DAHP, who determines whether human remains are Native American (if possible) and is the individual responsible for handling human remains.

Project proponent Pierce County staff, land owners, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by Pierce County or occurring on unincorporated Pierce County land.

ATTACHMENT B. EXAMPLE CULTURAL MATERIALS

Cultural material that may be protected by law could include but is not limited to:

A. Buried layers of black soil with layers of shell, burned rocks, charcoal, and fish and mammal bones (Figure 1).
B. Non-natural sediment or stone deposits that may be related to activity areas of people. This can include historic deposits such as roads, railroad tracks, decking, or industrial deposits like slag.
C. Bones and small fragments of bone.
D. Stone, bone, shell, horn, or antler tools that may include projectile points (arrowhead, stone chips), scrapers, cutting tools, wood working wedges or adzes, and grinding stones (Figures 2 and 3).
E. Stone tools or stone flakes (Figures 2 and 3).
F. Buried cobbles that may indicate a hearth feature (Figure 4).
G. Ceramic pieces, metal pieces, nails, tools, tin cans, bottles, or agricultural equipment that looks older than 50 years (Figures 5 and 6). These could include equipment, fencing, canals, spillways, chutes, derelict sawmills, or farming tools.
H. Perennially damp areas may have preservation conditions that allow for remnants of wood and other plant fibers; in these locations there may be remains including fragments of basketry, weaving, wood tools, or carved pieces; and human remains.
I. Old munitions casings. Always assume these are live and never touch or move.
J. Modified or stripped trees, often cedar or aspen, or other modified natural features, such as rock images.

The above list does not cover every possible cultural resource. When in doubt, assume the material is a cultural resource.

Figure 1: Shell bearing site

Figure 2: Example of stone tools

Figure 3: Example stone flake

Figure 4: Example hearth (oven) feature

Figure 5: Example historic artifacts

Figure 6: Example historic bottles

FISH EXCLUSION – PROTOCOL AND STANDARDS

Washington State Department of Transportation

Introduction

The Washington State Department of Transportation (WSDOT) requires the following protocol and standards for fish exclusion, capture, handling, and relocation (hereafter referred to as "fish exclusion protocol (FEP)" or "fish moving") to reduce the risk of potential injury to fish during construction.

This protocol generally meets Endangered Species Act (ESA) Section 7 consultation and Hydraulic Project Approval (HPA) requirements, but specific consultation or permit conditions take precedence over any project-specific components that conflict with these best practices.

When to Use this Guidance

This guidance is applicable for work proposed in fish-bearing waters. Work should be conducted in isolation from flowing water, if practicable. **Work shall be allowed in water if:** (1) this FEP is implemented, (2) placement or removal of material (wood or rock, etc.) is small in quantity, (3) installation of best management practices (BMPs) (turbidity curtain, etc.) is performed under site conditions where the potential to affect fish is minimized[1], and/or (4) work is conducted under a declared emergency, under emergency conditions, or when flow conditions preclude safe implementation of this FEP.

Directing Biologist

The FEP shall be planned and supervised by a WSDOT biologist or qualified biologist under contract with WSDOT (hereafter referred to as the Directing Biologist). The Directing Biologist must possess the required knowledge, training, and experience for safe and effective implementation of the FEP (**Appendix A**).

The Directing Biologist shall work with maintenance, construction, and/or environmental staff to plan and manage the FEP. This plan should consider the size and channel characteristics of the area to be isolated, dewatering method (diversion with bypass flume or culvert, washed gravel bags, sheet pile, cofferdam, etc.), and most effective manner by which to move fish.

Assisting Staff

All assisting staff shall have the required training, knowledge, skills, and ability to safely and effectively, move fish (**Appendix A**).

Fish Exclusion - Considerations

The Directing Biologist shall implement the FEP in consideration of the following: (1) habitat connectivity and fish habitat requirements, (2) duration and extent of planned in-water work, (3) anticipated flow and temperature conditions during in-water work, and (4) risk of fish exposure to turbidity or other water quality and site conditions during construction.

[1] WSDOT shall make this determination after consulting with regulatory agencies with jurisdiction, including the Washington State Department of Fish and Wildlife (WDFW), U.S. Fish and Wildlife Service (USFWS), and/or NOAA-National Marine Fisheries Service (NMFS). In some locations the Tribes will have jurisdiction. This exception is not applicable to in-water excavation or work that may increase turbidity beyond the immediate work area for more than 15 minutes.

When the work area to be isolated is small, depth is shallow, and/or conditions are conducive to fish capture, it may be possible to isolate the work area and move fish prior to dewatering or flow diversion.

When the area to be isolated is large, water is deeper, flow volume and/or velocity is higher, and/or conditions are not conducive to fish capture, it may be necessary to commence with dewatering or flow diversion concurrent with fish moving. WSDOT should have oversight and final approval in this situation. The Directing Biologist shall use best professional judgment in implementing the FEP in a manner that minimizes exposure of fish to potential stress or injury.

If the area to be isolated includes only a portion of the wetted channel width (e.g., in large and/or deep rivers), or if a bypass flume or culvert will effectively maintain fish passage during construction, it may be suitable to move fish out of the in-water work area (IWA).

However, if the IWA includes the entire wetted channel width, and it is unlikely that fish passage can be maintained during construction, the Directing Biologist must **decide whether to move fish upstream and/or downstream** of the IWA, depending on available habitat conditions and species captured.

If a large number of fish is to be moved, it may be appropriate to relocate fish both upstream and downstream of the IWA to avoid concentrating fish in areas where their habitat needs may not be met. Where habitat connectivity or quality is poor, the Directing Biologist should determine whether relocated fish will have access to suitable habitat for the duration of planned in-water work. If such habitat is not present in the vicinity, it may be appropriate to relocate fish a greater distance upstream and/or downstream (even thousands of feet or miles). When a distant relocation is deemed necessary, WSDOT shall provide notice in advance to agencies with jurisdiction.

Block Nets

The Directing Biologist shall select block nets that are appropriate for site conditions and fish species present. It may be necessary to contact other WSDOT regions or offices for access to nets, equipment and/or materials. A suitable block net is composed of **3/32-inch knotless stretched nylon**. WDFW may authorize different mesh size depending on site conditions. A vinyl apron or skirt to facilitate securing nests to the channel bottom is recommended.

Block nets must be **secured to both banks and the channel bottom** to prevent failure due to debris accumulation, high flow, and/or flanking. Supplemental block net support may be required (e.g., hardware cloth, affixed metal fence posts, batter T-posts, etc.). Block nets should be **installed at an angle to the direction of flow** (i.e., 45-degree angle if practicable and not directly perpendicular to flow) to reduce the risk of impinging fish. Anchor bags, filled with clean, washed pea gravel, can be used to support nets that may remain in place for more than two weeks or high flow events are expected. Any use or manipulation of native substrates or other materials on site should be incidental and shall not measurably affect the channel bed or bank baseline condition. In most instances, block nets will require pea-gravel bags placed approximately 12-inches downstream to sufficiently reduce velocity and backwater the block net to prevent impingement on the net face.

The Directing Biologist shall **determine appropriate locations for block nets** based on site characteristics and in consideration of the type and extent of planned in-water work. Locations with lower flow volume and/or velocity, uniformity of depth, and good accessibility are preferred. Sites with heavy vegetation, large cobble or boulders, undercut banks, and deep pools should be avoided due to the difficulty of securing and/or maintaining nets. Sites with a narrow channel cross-section (constriction) should be avoided if foreseeable flow conditions might increase likelihood of fish impingement or overwhelm or dislodge the nets.

Except when planning to herd fish upstream, an **upstream block net** (UBN) shall be placed first. With the UBN in place, a second block net can be used as a seine to herd fish downstream, starting at the UBN. When the IWA includes a culvert, deep pools, undercut banks, or other cover attractive to fish (thick overhanging vegetation, rootwads, logjams, etc.) it may be appropriate to isolate these areas, or several areas, of the IWA rather than attempting to herd fish from the entirety of the IWA in a single downstream pass. Try to avoid herding fish into these areas of the IWA.

Fish capture and removal will be most successful if fish are strategically concentrated in areas where they can more easily be seined and netted. Care shall be taken not to herd fish toward areas where they are exposed to sources of stress. If unavoidable, do not allow fish to be concentrated in such areas for more than 30 minutes.

A **downstream block net** (DBN) is typically required to prevent downstream fish from entering the work area.

When gradual dewatering or flow diversion is staged concurrently with fish moving, it may be appropriate to delay installation of the DBN until fish have first been allowed sufficient time to move downstream by their own choosing (volitional movement). Gradual dewatering can be an effective method to reduce the risk of fish stress or injury. Encouragement of volitional fish movement out of the work area is particularly important where the IWA is large and may hold many fish. However, when the IWA includes a culvert, deep pools, undercut banks, or other cover attractive to fish, fish may not move downstream. In this case, the Directing Biologist should use best professional judgment in determining how to best move fish.

Block nets shall remain in place until work is complete and conditions are suitable for the reintroduction of fish.[2] Block nets require frequent inspection and debris removal. Inspection may be conducted by the WSDOT Environmental Compliance Inspector or contractors that have been provided on-site training. They shall immediately notify the Directing Biologist if any impinged, injured or deceased fish are observed or net repair/adjustment is necessary. An individual trained in fish handling shall be assigned the responsibility of safely relocating any impinged fish and repairing nets.

Net inspection frequency shall be in accordance with Standard Specification 8.31.3(5). They shall, at a minimum, be inspected at least three times daily or as requested by the Directing Biologist. An inspection shall be completed at the start, middle and end of the workday. On non-working days, an inspection shall be performed between 6:00 am and 8:00 am, 11:00 am and 1:00 pm and 4:00 pm and 6:00 pm. Nets may need to be checked more frequently for the first 24 hours after a significant rainfall, change in flow volume or velocity, or significant windstorm that can result in leaf drop. If fish are impinged on the net or weather and/or flow conditions change significantly, the Directing Biologist shall adjust the frequency of net inspections to minimize risk to fish.

Pumps: If dewatering and/or flow diversion requires the use of pumps, this work shall comply with the HPA issued by the Washington Department of Fish and Wildlife (WDFW) as well as any Terms and Conditions issued by the USFWS and/or NMFS in a Biological Opinion. Commitments may also appear in ESA minimization measures or the project description.

Pump intakes shall be screened to prevent fish from entering the intake. Screens shall comply with Washington State law (RCW 77.57.010 and 77.57.070), guidelines provided by the NMFS,[3] and the HPA. If pumps are to be used for a longer period of time to divert flow around the IWA, the

[2] If a FEP is implemented for installing a cofferdam BMP, AND construction is isolated from suitable fish habitat by the cofferdam, AND construction is scheduled for a long period of time (weeks, months), it may be appropriate to remove block nets and allow fish to re-enter suitable habitat from which they were moved.

[3] National Marine Fisheries Service. 2011. Anadromous Salmonid Passage Facility Design. Chapter 11: Fish Screen and Bypass Facilities. NMFS Northwest Region, July 2011, 140 p.

dewatering plan shall address contingencies for extremes in flow and/or weather. The plan shall include ready access to a larger, or additional, backup pump with appropriately-screened intake. Pumps must be monitored outside of active construction hours/days. There must be sufficient fuel safely stored onsite.

Once the Directing Biologist confirms that (1) the work area is isolated and all fish have been excluded, (2) there is no risk of entraining fish, and (3) a contingency plan is in place (including a routine schedule for inspection), then pumps may be operated **without a screened intake**. Note that block nets do not meet screening criteria.

Moving Fish

Methods for the safe relocation of fish are described below. At most locations, a combination of methods may be necessary.

In order to avoid and minimize the risk of injury to fish, **an attempt to seine and/or net fish should always precede the use of an electrofisher**. Via visual observation techniques, including snorkeling, surveying with polarized glasses, or using Plexiglas-bottomed buckets, the effectiveness of seining/netting can be determined.

If fish moving has not been addressed during ESA consultation and fish listed under the ESA may be present, the Directing Biologist must stop work and reinitiate Section 7 consultation with the Services in advance of in-water work. Work conducted under a declared emergency, or emergency conditions, shall follow established ESA notification protocol.

When fish listed under the ESA may be present, the Directing Biologist shall insure that fish moving adheres, at a minimum, to the following guidelines:

(1) Only dip nets and seines composed of knotless (non-abrasive) material shall be used.

(2) Electrofishing equipment shall be used only after less-injurious methods have removed most, if not all, fish over 300 mm, by completing a minimum of three passes with seins and/or nets.

(3) The success of fish moving shall be confirmed prior to dewatering or other work within the IWA.

(4) Fish listed under the ESA shall not be held in containers for more than 10 minutes unless containers are dark-colored, lidded, and fitted with a portable aerator.

(5) A plan for achieving efficient and rapid return of fish to suitable habitat will be developed before fish moving.

Minnow Traps

Baited Minnow Traps are typically used before seining. They shall be inspected at least four times daily to remove captured fish and thereby minimize predation in the trap. Traps should be checked more frequently if temperatures exceed 15 degrees C (59 F).

Traps may be left in the IWA overnight. However, predation in the trap may present an unacceptable risk because large sculpin and other predators are typically more active at night. The Directing Biologist shall consider the risk of predation when determining whether to utilize traps at night.

Seining

Seining is the preferred method for fish capture. Other methods shall be used when seining is not

possible or is proven ineffective. Seines, once pursed, should remain in the water while fish are removed with dip nets. Seines with a bag are advantageous because they minimize handling stress. They are also preferred when obstructions inhibit access to water or when seine deployment/retrieval is difficult.

In general, seining is more effective if fish, especially juvenile fish, are moved away ("flushed") from under cover. Flush efficiency can be increased by conducting seining during dawn or dusk, in conjunction with snorkeling. In flowing waters, especially where flow volume and/or velocity is higher, seines that employ a heavy lead line and variable mesh size are preferred. Small mesh sizes are more effective across the full spectrum of fish sizes (and age classes), but they also increase resistance and can make seine deployment/retrieval more difficult in flowing waters. Seines with a small-diameter mesh size in the bag (or body), and a larger, less resistant, mesh size in the wings, may be more effective and efficient.

Dip Nets

Dip Nets shall be used in conjunction with seining. This method is particularly effective during gradual dewatering or flow diversion. To minimize stress and risk of injury to fish, dewatering or flow diversion should proceed at a measured pace (within constraints), to encourage the volitional downstream movement of fish, and reduce the risk of stranding. Work shall not proceed unless there are sufficient staff and materials on site to properly relocate fish. Generally, this will require a minimum of two staff (three, if electrofishing).

Once netted, fish shall remain in water until transferred to a bucket, cooler, or holding tank. Dip nets which retain a volume of water (sanctuary nets) are preferred. However, sanctuary nets may be ineffective where flow volume or velocity is higher due to increased resistance. Where water depth is shallow and/or fish are concentrated in very small receding pools or coarse substrate, a small aquarium net may be a more effective option.

Connecting Rod Snake

A Connecting Rod Snake (CRS) can be used to flush fish out of culverts. Like other cover attractive to fish, culverts (especially long culverts), can present a challenge in moving fish. A first step in implementing the FEP should be to place block nets immediately upstream and/or downstream of culvert to minimize the number of fish that might seek cover within the culvert. Fish should then be herded into areas where they can be easily seined and netted. Once fish have been relocated, the block net downstream of the culvert should be removed so that fish inside the culvert can volitionally move downstream – or be flushed with the CRS.

Electrofishing

Electrofishing shall be performed only when other methods to move fish have proven impracticable or ineffective at removing all fish. Larger fish (adult and sub-adult fish with longer spine lengths) are more susceptible to electrofishing injury than smaller fish. The Directing Biologist shall confirm that other fish-moving methods have been attempted before using an electrofisher. An electrofisher should not be used in water where visibility less than 0.5 meter.

The following performance measures shall apply to the use of an electrofisher:

(1) Upon request, the WSDOT shall allow the Services, WDFW, and in some cases the Tribes to observe fish capture and removal operations. Work conducted under a declared emergency, or emergency conditions, shall follow established ESA notification protocols.

(2) **Electrofishing shall only be conducted when a Directing Biologist is present**, possessing the required training and experience (Appendix A).

(3) The Directing Biologist shall ensure that electrofishing is conducted using the **minimum voltage, pulse width, and rate settings necessary** to elicit galvanotaxis. Water conductivity shall be measured prior to work to determine appropriate settings. Electrofishing methods and equipment shall comply with guidelines outlined by the NMFS[4] and USFWS[5] if bull trout may be present.

(4) The **initial and maximum settings** listed in **Table 1** shall serve as guidelines when electrofishing in waters that may support ESA-listed fish. Only DC or pulsed DC current shall be used. Many modern electrofishers are equipped with a setup, or initialization, function. The Directing Biologist shall have the discretion to use this function to identify proper initial settings.

Electrofishing shall begin with initial settings. If fish do not exhibit a response, the settings shall be gradually increased until galvanotaxis is achieved. The lowest effective settings shall be used to minimize risks to both personnel and fish. **The Directing Biologist shall ensure the safety of all staff** and provide necessary safety equipment and materials (insulated waders and gloves, first aid/CPR kit, safety plan with emergency contacts and phone numbers, etc.). Only individuals that are trained and familiar with the use of electrofishing equipment should provide direct assistance during work.

Table 1. Guidelines for initial and maximum settings for backpack electrofishing[6]

	Initial Settings	Conductivity (µS/cm)	Maximum Settings
Voltage	100 V	≤ 300	800 V
		>300	400 V
Pulse Width	500µs	-----	5 ms
Pulse Rate	15 Hz	-----	60 Hz (>40Hz may injure more fish)

(5) **Electrofishing shall not be conducted** where spawning adults or redds with incubating eggs may be exposed to the electrical current. As a general rule, waters that support anadromous salmon should not be electrofished from **October 15 to May 15**, and non-anadromous waters (resident fish only) from **November 1 to May 15**. If located within waters that may support bull trout, especially waters that support spawning and rearing, seasonal limitations on the use of electrofishing equipment may be more restrictive. If a more restrictive work window is identified during ESA consultation, that window shall apply.

(6) **An individual shall be stationed at the DBN** during electrofishing to recover stunned fish in the event they are flushed downstream and impinged against the net.

[4] National Marine Fisheries Service. 2000. Guidelines for electrofishing waters containing salmonids listed under the Endangered Species Act.

[5] U.S Fish and Wildlife Service. 2012 Recommended Fish Exclusion, Capture, Handling, and Electroshocking Protocols and Standards

[6] Adapted from NMFS Backpack Electrofishing Guidelines, June 2000, and WDFW Electrofishing Guidelines for Stream Typing, May 2001.

(7) The operator of the electrofisher shall use caution to **prevent fish from coming into direct contact with the anode**. Under most conditions, the zone of potential fish injury extends approximately 0.5 meter from the anode. Netting shall not be attached to the anode as this practice presents an increased risk of direct contact and injury. Extra care shall be taken near in-water structures or undercut banks, in shallow waters, or where fish densities are high. Under these conditions fish are more likely to come into close or direct contact with the anode and/or voltage gradients may be intensified. When electrofishing areas near cover, fish that avoid capture may be repeatedly exposed to the electrical current. Repeated or prolonged exposure to electrical current presents a higher risk of injury. As such, the electrofisher settings should be adjusted to accommodate changing conditions in the field.

(8) **Once galvanotaxis is observed**, the IWA shall be worked systematically. The number of passes shall be kept to a minimum, but, dependent upon the numbers of fish and site characteristics, shall be at the discretion of the Directing Biologist. Electrofishing shall not be conducted unless there are sufficient staff and materials on site. Fish shall be immediately removed from the electrical field to avoid repeat exposure. **Fish shall not be held in dip nets while electrofishing is in progress** (i.e., while continuing to capture additional fish). When flow velocity or turbulence is higher (e.g., within riffles), it may be difficult to see and net fish. In this scenario, fish may evade capture, resulting in repeated exposure, and/or may become impinged on the DBN. A "frame net," or small portable block net, approximately three feet in width, can be effective under these conditions when immediately downstream of the anode.

(9) **The condition of captured fish shall be carefully observed and documented**. Dark bands on the body and/or extended recovery times are signs of stress or injury. When such signs are noted, settings for the electrofishing unit may require adjustment. The Directing Biologist should also consider modifications to the way electrofishing is conducted. If adjustments do not lessen the frequency (or severity) of observed stress, the Directing Biologist shall have the authority to postpone work. Each captured fish shall be capable of remaining upright and actively swimming prior to release. If necessary the fish should be revived in aerated holding tanks.

(10) **Electrofishing shall not be conducted** when aquatic visibility is less than0.5 meter, water conductivity exceeds 350 μS/cm, or when water temperature exceeds 18°C (64 F) or is less than 4°C (39 F).

Fish Handling, Holding and Release

(1) Fish moving shall be conducted such that **handling is minimized**.

(2) Fish shall **remain in water** during seining/netting, handling, and transfer for release.

(3) The Directing Biologist shall **document** fish species, number, condition at release, and release location. Fish tissue shall not be sampled, or fish anesthetized, unless allowed under the WSDOT Section 10 scientific collection permit.

(4) Individuals handling fish shall ensure that their **hands are clean** and free of substances potentially harmful to fish, including, but not limited to, sunscreen, lotion, and insect repellent.

(5) Water quality shall be maintained in buckets, coolers, or holding tanks that are used to hold and transfer captured fish. Clean water from the natal stream shall be used. Aerators shall be used, as necessary, to provide well-oxygenated water. Holding containers are to be **monitored frequently**, shaded where possible, and work adjusted appropriately, to minimize fish stress. If fish are held for more than a few minutes prior to release, the Directing Biologist should consider using **dark-colored, lidded containers** only. Fish shall not be held in containers for more than 10

minutes, unless those containers are dark-colored, lidded, and fitted with a portable aerator.

(6) Captured fish shall be held in **low densities** to avoid overcrowding. Large fish shall be separated from smaller fish to **prevent predation**. Water-to-water fish transfer shall be implemented, whenever possible.

(7) **Release sites** shall be determined by the Directing Biologist in consideration of site characteristics (flow, temperature, available refuge and cover, etc.) as well as the class of fish captured (out-migrating smolt, kelt, pre-spawn migrating adult, etc.). More than one site may be selected to provide for varying needs and to separate prey-sized fish from larger fish.

(8) Any **ESA-listed fish incidentally killed** shall be preserved and delivered to the appropriate authority, upon request. Photos are recommended to facilitate later identification if the specimen is lost or deteriorates.

(9) If the limits on take of ESA-listed species are exceeded, or if **incidental take** is approaching and may exceed specified limits, the Directing Biologist shall postpone work and notify the federal agency (or agencies) with jurisdiction. If dewatering or flow diversion is incomplete and still in-progress, WSDOT shall take remedial actions directed at maintaining sufficient quantity and quality of flow to reduce the potential for fish stress and/or injury. If conditions contributing to fish stress and/or injury may worsen before the federal agency with jurisdiction can be contacted, WSDOT should attempt to safely move fish to a suitable location near the capture site.

Reintroduction of Flow and Fish to the IWA

If fish moving involves placement of block nets, the Directing Biologist shall ensure that the nets remain in place until work is complete and conditions are suitable for the reintroduction of fish.

Flow shall be gradually reintroduced to the IWA to prevent channel bed or bank instability, excessive scour, or elevated turbidity and sedimentation. The Directing Biologist shall ensure that no fish are stranded during reintroduction of flow. If conditions causing, or contributing to, fish stress and/or injury are observed, WSDOT shall take remedial action, including, but not limited to, a more gradual reintroduction of flow.

Temporary structures and materials (block nets, posts and anchors, bypass flume or culvert, gravel bags, sheet pile or similar cofferdam, etc.) shall be removed at the completion of work. Block net removal is to be overseen by the Directing Biologist.

Documentation

(1) Work area isolation and fish moving shall be documented in a logbook with the following information: project location, date, methods, personnel, water temperature, conductivity, visibility, electrofishing equipment settings, and other comments.

(2) All fish handled shall be documented: number of each species, condition at release, and location of release. Photograph individuals that are not confidently identified.

(3) If fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), the Directing Biologist shall immediate notify WSDOT management, who in turn, shall notify the WDFW as required by the HPA. Notification shall consist of a phone call or voice mail message directed to the Area Habitat Biologist.

(4) Any **ESA-listed species incidentally killed** shall be documented and the appropriate authority

(USFWS and/or NMFS) notified within two working days. If the Directing Biologist is a consultant, he/she shall immediately notify WSDOT, who will, in turn, notify the Services.

Initial notification shall consist of a phone call or voice mail message, directed to the nearest USFWS Law Enforcement Office, the Washington Fish and Wildlife Office at (360) 753-9440, the NMFS Office of Law Enforcement at (800) 853-1964, and the Washington State Habitat Office at (360) 753-9530.

Any **dead specimens** shall be kept whole and preserved on ice or frozen until WSDOT receives a response and further directions from the appropriate authority. If WSDOT receives no response within five working days, the Directing Biologist shall have the discretion to dispose of specimens. Initial notification shall be followed by a second notification in writing. All notifications shall provide, at a minimum, the following: date, time, WSDOT point of contact (the Directing Biologist and/or supervisor), project name (with USFWS and/or NMFS tracking number, if available), precise location of incidentally killed, injured and/or unrecovered fish, number of specimens and species, cause of death or unrecoverable injury, and measures taken to address the cause of mortality. If the limit of authorized incidental take is exceeded, the written notification shall also include an explanation of the circumstances causing or contributing to take.

(5) The final condition of the IWA, including temporary bypass, shall be documented in qualitative terms, including any obvious signs of channel bed or bank instability resulting from work. WSDOT shall document any remedial actions taken to correct channel instability as well as the final condition of the IWA.

Safety

Implementing the FEP must comply with WSDOT safety requirements. In certain circumstances, it may be appropriate to conduct work without an IWA (not move fish) to ensure safety. In-water work at night is generally not permissible. If the Directing Biologist determines that night work is required, it must be pre-approved by WSDOT management, including the safety officer, as well as regulatory agencies with jurisdiction.

Equipment Sanitation

To minimize the risk of spreading invasive species, aquatic parasites, and/or disease, the Directing Biologist shall ensure that all equipment and materials are cleaned and dried per protocol[7] before using them at another aquatic area. It is recommended having two or more outfits for different locations on consecutive days. Once equipment is fully dried, it should remain dry for at least 48 hours before use. Felt-soled shoes are prohibited.

[7] WDFW Invasive Species Management Protocols, Version 4, September 2022

APPENDIX A - TRAINING REQUIREMENTS

Directing Biologist

1. Completion of a two-day electrofishing class.

2. Training in fish ecology and identification.

3. 100 hours of electrofishing experience in the Pacific Northwest (PNW), at least 20 hours of which should have been in the last 5 years in the PNW.

4. Possession of a current CPR certification.

5. Possession of a current first aid certification.

6. Demonstrated understanding of aquatic invasive species and the appropriate decontamination methods.

7. Demonstrated ability to interpret contract plan sheets/specification, contactor schedule and plans prepared by the contractor.

8. Ability to move fish per the most current version of the "WSDOT Fish Exclusion Protocols and Standards"

9. Must develop and deliver on site field training that includes the following elements:

(a) Safety plan.

(b) Fish exclusion plan.

(c) Role and responsibility of each participant. Assisting staff may include WSDOT and consulting biologists, and non-biologists (contractors) assigned limited responsibilities. The directing biologist will provide constant supervision when assigning responsibilities to contractors.

(d) Fish identification and species expected.

(e) Fish handling techniques.

(f) Seine, net, and electrofisher techniques (and electrofisher settings).

(g) Basic terminology (galvanotaxis, narcosis, and tetany).

(h) How electrofishing attracts fish.

(i) How to recognize signs of fish stress or injury.

(j) Sorting fish by size.

(k) Proper fish holding in buckets to ensure water quality and address predation

(l) Hand cleanliness and gear sanitation protocol.

(m) Review of common mistakes.

(n) Discuss personal floatation devices, if required.

Trained Biologists

People without a class or 100 hours – "trained" is a good classification for people that have worked under a directing bio and could operate an electrofisher under direct supervision (have to have 40 hours in USFWS protocol). In other words, people who have the experience but maybe not the time but will get the experience/time to qualify as a directing bio because they are under the direct supervision of the directing bio.

Assisting Staff

1. Must possess training, knowledge, skills and ability to ensure proper handling of fish and safety of staff conducting work (see Directing Biologist responsibility #9 above).
2. Possession of a current first aid certification and current CPR certification (this should be a standard for all assisting staff and is typically included in conjunction with first aid certification).

WAGE RATES

-IMPORTANT-

PREVAILING WAGE RATE INFORMATION

The Washington State Department of Labor & Industries (L & I) has directed that Pierce County may provide current Prevailing Wage Rates for this project in the following format:

1. Please access the L & I website at: ***https://secure.lni.wa.gov/wagelookup/***

2. Select the Prevailing Wages and Benefit Plan information for the project **bid date.**

3. Select the County where the work will be performed. If you are working in a County other than Pierce County, use the wages for the County you are physically working in for this project.

4. A copy of the applicable Prevailing Wages for this contract are available in the Pierce County Contract Compliance Office. Please call (253) 798-7172 for this information. A hard copy of these wages will be provided upon request.

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

   J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).

All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus $2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).

U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

   The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

   When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

   When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

   D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.

H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

J. All hours worked on holidays shall be paid at double the hourly rate of wage.

K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.

L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar ($2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

Overtime Codes Continued

11. M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.

Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars ($2.00) per hour.

N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.

Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.

O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Q. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.

R On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.

S. The first ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.

All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. T. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

U. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

If, due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a Special Shift may be worked, Monday through Friday, at the straight-time rate. The starting time of work for the Special Shift will be arranged to fit such conditions of work. Such Special Shift shall consist of eight (8) hours of work for eight (8) hours of pay or ten (10) hours of work for ten(10) hours of pay on a four-ten workday schedule.

V. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

W. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 6 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and Holidays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

Holiday Codes Continued

7. X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

Holiday Codes Continued

15. N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

P. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do "pioneer" work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

Note Codes Continued

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

   Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

   Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

   W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

   X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

   When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

   Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

   Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

   Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

   Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

Note Codes Continued

9. F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

Employees may be required to perform any combination of work within the Diving team/crew, (with the exception of dive Supervisor) provided they are paid at the highest rate at which he/she has worked for the shift.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

M. Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $1.50 per hour above their classification rate.

Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

	ITEM DESCRIPTION	YES	NO
8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting.		X
22.	Vault Risers - For use with Valve Vaults and Utilities Vaults.		X
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

	ITEM DESCRIPTION	YES	NO
27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials To be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has Annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33.	Monument Case and Cover See Std. Plan.		X

	ITEM DESCRIPTION	YES	NO
34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36.	Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel Structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	X	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41.	Precast Concrete Sloped Mountable Curb (Single and Dual Faced) See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
42.	Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and luminum sheeting. **NOTE:** *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed.	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		X
44.	Guardrail components	X	X
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46.	Asphalt	Covered by WAC 296-127-018	
47.	Fiber fabrics		X
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		X
50.	Girder pads (elastomeric bearing)	X	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

ITEM DESCRIPTION	YES	NO
53. Fencing materials		X
54. Guide Posts		X
55. Traffic Buttons		X
56. Epoxy		X
57. Cribbing		X
58. Water distribution materials		X
59. Steel "H" piles		X
60. Steel pipe for concrete pile casings, standard		X
Steel pipe for concrete pile casings, custom	X	
61. Steel pile tips, standard		X
62. Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW 39.12.010
(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries.
The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.
When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

OTHER FORMS

USED BY

PIERCE COUNTY

AFTER AWARD

CONTRACT BOND

Bond Number _____

PIERCE COUNTY PLANNING & PUBLIC WORKS CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, That we, ____(CONTRACTOR'S NAME)___, as Principal, and the _____, a corporation organized and existing under and by virtue of the laws of the State of _____, as Surety, are held and firmly bound and obligated unto PIERCE COUNTY in the full and just sum of _____ AND ___/100 DOLLARS ($_____) lawful money of the United States, for the payment of which sum well and truly to be made, we do bind ourselves, our and each of our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

This bond is executed in pursuance of Chapter 39.08, Revised Code of Washington. THAT CONDITIONS OF THIS OBLIGATION ARE SUCH, That WHEREAS, the Principal entered into a certain contract with: PIERCE COUNTY dated the _____ day of _____, 20___, for improvement to the Foothills Trail by the replacement of the Pierce County Parks bridge #PRT27195-E with a 200-foot long, two span, precast concrete girder bridge. The work also includes the clearing, grubbing, grading, replanting, and construction of a mitigation channel connecting the unnamed stream to a wetland in the area adjacent to the bridge. The work also includes traffic control, erosion control,, and other work in accordance with and as described in the attached Plans and Specifications, the Standard Specifications published by the Washington State Department of Transportation and the American Public Works Association (APWA) and amendments thereto, all of which are incorporated herein by this reference. Any mutually agreed upon changes to the scope of work contemplated by this contract shall be made in accordance with the contract documents. This bond shall cover all approved change orders as if they were in the original contract. Similarly, the bond shall cover payment of all taxes incurred on said contract under title 50 and 51 Revised Code of Washington (RCW) and all taxes imposed on the Principle under Title 82 RCW.

NOW, THEREFORE, if the Principal shall faithfully perform all the provisions of such contract and pay all laborers, mechanics and subcontractors and materialmen, and all persons who shall supply such person or persons, or subcontractors, with provisions and supplies for the carrying on of such work, and shall pay all taxes pursuant to Title 50, and 51, and 82 RCW, and shall in all respects, faithfully perform said contract according to law, then this obligation is void; otherwise to remain in full force and effect.

Provided, however, that the conditions of this obligation shall not apply to any money loaned or advanced to the Principal or to any subcontractor or other person in the performance of any such work.

Signed and sealed this _____ day of _____, 20___.

_____
Principal

Witness:

_____ By:_____

Countersigned:

_____ By:_____
Attorney-in-Fact

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CONTRACT

THIS AGREEMENT, made and entered into this _____ day of _____, 20__, between the COUNTY OF PIERCE, State of Washington, hereinafter called the County, and (CONTRACTOR'S NAME), Contractor License Number: _____, hereinafter called the Contractor.

Contract Total: [Enter Total Contract Amount after Award]

Prepared by Pierce County according to the terms of such contract documents which documents are incorporated herein by reference. The contract documents shall include, but shall not be limited to, the accepted bid, Special Provisions, Drawings, Addenda, Bond, Advertisement for Bids, and this Contract. Contractor has previously reviewed and agreed to all contract documents other than this Contract and agrees that the Owner maintains the official copy of the complete contract documents.

WITNESSETH:

That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the parties hereto covenant and agree as follows:

I. The Contractor shall provide for improvement to the Foothills Trail by the replacement of the Pierce County Parks bridge #PRT27195-E with a 200-foot long, two span, precast concrete girder bridge. The work also includes the clearing, grubbing, grading, replanting, and construction of a mitigation channel connecting the unnamed stream to a wetland in the area adjacent to the bridge. The work also includes traffic control, erosion control, and other work in accordance with and as described in the Plans and Specifications, the Standard Specifications published by the Washington State Department of Transportation and the American Public Works Association (APWA) and amendments thereto, all of which are incorporated herein by this reference. Any mutually agreed upon changes to the scope of work contemplated by this contract shall be made in accordance with the contract documents.

The Contractor shall provide and bear the expense of all equipment, work and labor, of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work provided for in these Contract Documents except those items mentioned therein to be furnished by the County.

II. The County hereby promises and agrees with the Contractor to employ, and does employ the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same in accordance with the attached plans and specifications and the terms and conditions herein contained and hereby contracts to pay for the same according to the attached specifications and the schedule of unit or itemized prices at the time and in the manner and upon the conditions provided for in this contract.

III. The Contractor for himself, and for his heirs, executors, administrators, successors, assigns, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

IV. The Contractor agrees to defend, indemnify and save harmless the County, its appointed and elected officers and employees, from and against all loss or expense, including but not limited to judgments, settlements, attorney's fees and costs by reason of any and all claims and demands upon the County, its elected or appointed officials or employees for damages because of personal or bodily injury, including death at any time resulting therefrom, sustained by any person or persons, and for damages to property including loss of use thereof, whether such injury to persons or damage to property is due to the negligence of the Contractor, his/her Subcontractors, its successor or assigns, or its or their agent, servants, or employees, the County, its appointed or elected officers, employees or their agents, except only such injury or damage as shall have been occasioned by the sole negligence of the County, its appointed or elected officials or employees.

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The preceding paragraph is valid and enforceable only to the extent of the Contractor's negligence where the damages arise out of services or work in connection with or collateral to, a contract or agreement relative to construction, alteration, repair, addition to, subtraction from, improvement to, or maintenance of, any building, highway, road, railroad, excavation, or other structure, project, development, or improvement attached to real estate, including moving and demolition in connection therewith, a contract or agreement for architectural, landscape architectural, engineering, or land surveying services, or a motor carrier transportation contract and where the damages are caused by or result from the concurrent negligence of (i) the County or its agents or employees, and (ii) the Contractor or the Contractor's agents or employees.

With respect to the performance of this Agreement and as to claims against the County, its officers, agents and employees, the Contractor expressly waives its immunity under Title 51 of the Revised Code of Washington, the Industrial Insurance Act, for injuries to its employees and agrees that the obligations to indemnify, defend and hold harmless provided in this Agreement extend to any claim brought by or on behalf of any employee of the Contractor. This waiver is mutually negotiated by the parties to this Agreement.

V. It is further provided that no liability shall attach to the County by reason of entering into this contract, except as expressly provided herein.

VI. If the contractor is a corporation, there shall be attached to the contract a certified copy of the section of the corporate bylaws, or other authorization by the corporation, which permits the signer of the contract to execute the contract on behalf of the corporation. The corporate secretary shall attest to the signature of the person signing on behalf of the corporation.

IN WITNESS WHEREOF, the Contractor has executed this instrument, on the day and year first below written and the Executive of the County acting as its Chief Executive Officer, or his designee, has caused this instrument to be executed by and in the name of the said County and the Pierce County Public Works Department the day and year first above written.

Executed by the Contractor _____, 20___.

_____

_____

_____

Contractor

COUNTY OF PIERCE
STATE OF WASHINGTON
COUNTY EXECUTIVE (If Over $250,000)

By _____

Dated: _____, 20___

COUNTY OF PIERCE
STATE OF WASHINGTON
PUBLIC WORKS DIRECTOR

By _____

Dated: _____, 20___

Approved as to form only:

_____
Deputy Prosecuting Attorney

_____
Finance

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Pierce County
Contract Compliance Office

CERTIFICATION OF NONSEGREGATED FACILITIES

The contractor certifies that no segregated facilities are maintained and will not be maintained during the execution of this contract at any of contractor's establishments.

The contractor further certifies that none of the contractor's employees are permitted to perform their services at any location under the contractor's control during the life of this contract where segregated facilities are maintained. The contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained.

The contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color or national origin, because of habit, local custom, or otherwise.

The contractor agrees that identical certifications from proposed contractors will be obtained prior to the award of any subcontracts. Contractor will retain a copy of any subcontractor's certification and will send original to Contract Compliance Division.

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_____ _____
Signature Date

_____
Name and Title

_____
Name of Company/Firm

_____
Name of Project and CRP#

Washington State Department of Transportation

Local Programs
Request to Sublet Work

(Program Certification - Check all that apply)

☐ Disadvantaged Business (DBE) ☐ Federal Small Business (FSBE)

Prime Contractor	Statewide Vendor Number	State Contract Number
Project Title		Request Number
Verified that subcontractor does not have federal purchasing exclusions using www.SAM.gov.		

Approval is Requested to Sublet the Following Described Work to:

☐ Lower Tier Subcontractor ☐ Subcontractor Lower Tier Subcontractor/Subcontractor Name	Unified Business Identifier (UBI)	Statewide Vendor Number or Federal Employer I.D. Number
Address		Telephone Number
City / State / Zip Code		Estimated Starting Date
If Lower Tier Subcontractor, Name of Hiring Subcontractor	Fed ID or Vendor # of Hiring Subcontractor	Request to Sublet # of Hiring Subcontractor

Item No.	Partial or Complete	Item Description	Work Description (if partial)	Amount
			Total Sublet Amount	$ 0.00

I understand and will ensure that the subcontractor will comply fully with the plans and specifications under which this work is being performed.	Prime Contractor Representative and Title	Date

Department of Transportation Use Only

Percent of Total Contract This Request _____ % Previous Requests _____ % Sublet to Date _____ %	☐ Program Certification Verification ☐ Debarred/Registration Verification (LNI) Comments:
Project Engineer or Designee ☐ Approved	Date

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Washington State Department of Transportation

Request to Sublet Work Supplemental Sheet

Item No.	Partial or Complete	Item Description	Work Description (if partial)	Amount

Washington State Department of Transportation

Instructions

Program Certification: Check all the boxes that apply and that can be verified through OMWBE and/or WEBS

Prime Contractor: Enter the business name of the Prime Contractor for this project.

Statewide Vendor Number: Enter the Prime Contractor's Statewide Vendor Number.

State Contract Number: Enter the Contract number assigned to the project.

Project Title: Enter the name of the project

Request Number: Enter the sequential number of the request.

Lower Tier Subcontractor or Subcontractor boxes*: Click the box to indicate if the request is for a subcontractor or a lower tier subcontractor.

Lower Tier Subcontractor/Subcontractor name: Enter the business name of the subcontractor or lower tier subcontractor.

Unified Business Identifier (UBI): Enter the UBI number for the subcontractor or lower tier subcontractor.

Federal Employer I.D. Number: Enter the Federal Employer ID Number for the subcontractor or lower tier subcontractor.

Address: Enter the address for the subcontractor or lower tier subcontractor, including city, state and zip code.

Telephone Number: Enter the telephone number for the subcontractor or lower tier subcontractor.

Estimated Starting Date: Enter the anticipated date when the subcontractor or lower tier subcontractor will be on-site to perform work.

If Lower Tier Subcontractor, Name of Hiring Subcontractor: If the lower tier subcontractor box was marked above, enter the business name of the subcontractor that hired your company.

Fed ID of Hiring Subcontractor: If the lower tier subcontractor box was marked above, enter the Federal Employer ID Number for the subcontractor that hired the lower tier.

Request to Sublet # of Hiring Subcontractor: If the lower tier subcontractor box was marked above, enter the Request to Sublet number for the subcontractor that hired the lower tier.

Item No: Enter the bid item number(s) that will be sublet. This number is shown in the first column of original contract proposal and in the first column of the summary of quantities found in the original contract plans.

Partial or Complete: Choose partial from the drop down list if your company will only be performing a portion of the work associated with the bid item. Choose complete if the company will be performing all of the work associated with the bid item.

Item Description: Enter the bid item name corresponding with the Bid Item No previously entered on the form. This information is located in the second column of the original contract proposal and in the seventh column (titled ITEM) of the summary of quantities found in the original contract plans.

Work Description (if partial): Provide a brief description of the type of work being performed on the project.

Amount: Enter the dollar amount equivalent to the work the subcontractor is expected to perform.

Prime Contractor Signature and Date: The Prime Contractor signs the document using an electronic signature (can be typed or a copy of their signature applied to the document) and enters the date.

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The United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination Assurances

DOT Order No. 1050.2A

The Pierce County (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through Washington State Department of Transportation (WSDOT), is subject to and will comply with the following:

Statutory/Regulatory 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);
- 49 C.F.R. Part 21 (entitled Non-discrimination In Federally-Assisted Programs Of The Department Of Transportation-Effectuation Of Title VI Of The Civil Rights Act Of 1964);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

> *"No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, "for which the Recipient receives Federal financial assistance from DOT, including the Washington State Department of Transportation.*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted program:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23(b) and 21.23(e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard

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to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.

2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Federal-Aid Highway Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

> "The Pierce County, 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."

3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.

4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.

5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.

6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.

7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:

   a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
   b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

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a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
b. the period during which the Recipient retains ownership or possession of the property.

9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.

10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, Pierce County also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the Washington State Department of Transportation access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by the Washington State Department of Transportation. You must keep records, reports, and submit the material for review upon request to Washington State Department of Transportation, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

Pierce County gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the Federal Highway Administration. This ASSURANCE is binding on Washington State Department of Transportation, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the Federal-Aid Highway Program. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

Pierce County
_____
(***Name of Recipient***)

by _____
(***Signature of Authorized Official***)

DATED August 20, 2025

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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, Washington State Department of Transportation, 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 Washington State Department of Transportation 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 Washington State Department of Transportation, 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 Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Washington State Department of Transportation 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,

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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 Washington State Department of Transportation 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.

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APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the Pierce County will accept title to the lands and maintain the project constructed thereon in accordance with Title 23, United States Code, the Regulations for the Administration of Washington State Department of Transportation, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the (***Title of Recipient***) all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto Pierce County and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the Pierce County, its successors and assigns.

The Pierce County, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the Pierce County will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

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APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the Pierce County pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

    1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, Pierce County will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the Pierce County will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the Pierce County and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

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APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by Pierce County pursuant to the provisions of Assurance 7(b):

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, Pierce County will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, Pierce County will there upon revert to and vest in and become the absolute property of Pierce County and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

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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 § 471, Section 47123), 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 Non-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).

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SUMMARY OF GEOTECHNICAL CONDITIONS AND SOIL BORING LOGS

October 30, 2025
Kleinfelder Project No.: 25002340.001A

Pierce County Planning & Public Works | Office of the County Engineer
2702 South 42nd Street
Tacoma, WA 98409

Attn: Ben Norton, P.E. Bridge Engineering Supervisor

Subject: **Geotechnical Engineering Report**
P-111399 Ski Park Bridge #PRT27195-E Replacement
3 Miles East of Orting, Washington
On-Call Contract SC-111275

Dear Mr. Norton,

Kleinfelder is pleased to present this report summarizing our geotechnical study for the Ski Park Bridge #PRT27195-E Replacement project near Orting, Washington as shown in the Site Vicinity Map, Figure 1. The conclusions and recommendations presented in this report are subject to the limitations presented in Section 6.

We appreciate the opportunity to provide geotechnical engineering services to you on this project. If you have any questions regarding this report or if we can be of further service, please do not hesitate to contact Marcus Byers at 425.301.0106.

Respectfully submitted,

KLEINFELDER,

Abhigya Paudyal, EIT(TX)
Geotechnical Engineer

Marcus B. Byers, PE, P.Eng
Principal Geotechnical Engineer
Senior Project Manager

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Geotechnical Engineering Report
P-111399 Ski Park Bridge #PRT27195-E Replacement
3 Miles East of Orting, Washington
On-Call Contract SC-111275
Kleinfelder Project No. 25002430.001A

October 30, 2025

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.

A Report Prepared for:

Ben Norton, P.E.
Bridge Engineering Supervisor
Pierce County Planning & Public Works | Office of the County Engineer
2702 South 42nd Street
Tacoma, WA 98409

Geotechnical Engineering Report
P-111399 Ski Park Bridge #PRT27195-E Replacement
3 Miles East of Orting, Washington
On-Call Contract SC-111275

Abhigya Paudyal, EIT(TX)
Geotechnical Engineer

MARCUS BENNETT BYERS
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October 30, 2025
Kleinfelder Project No: 25002340.001A

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EXECUTIVE SUMMARY

This report presents the results of Kleinfelder's geotechnical engineering study for the proposed Ski Park Bridge #PRT27195-E Replacement project near Orting, Washington. The purpose of our study was to review existing soil and groundwater data for the site provided to us by Pierce County (County) and develop geotechnical recommendations for design and construction of the project.

We understand the County is planning to replace the Ski Park Bridge, which is a part of the Foothills Trail between Orting and South Prairie. The Foothills Trail follows a historical railroad alignment, and the existing bridge was constructed in 1904 as a railroad trestle that traverses wetlands. The timber piles and timber structural elements are decaying, and County engineers are recommending a replacement. As currently planned, the replacement bridge will consist of two 100-foot long prestressed concrete girders. The girders will have a clear span of 93 feet, 10 inches with 98 feet between bearings. Abutments will be located on either side of the wetlands and there will be one intermediate pier. The preliminary foundation layout consists of a single 4- to 5-foot diameter drilled shaft per pier/abutment.

Kleinfelder evaluated the subsurface conditions at the proposed alignment by reviewing existing geotechnical data provided to us by the County. This includes two borings drilled to approximately 50 feet, five portable penetrometers tests up to 15.6 feet in depth, and two auger probes up to 11 feet in depth. Approximate exploration locations are shown on the attached Figure 3. Boring logs are presented in Appendix A and the laboratory test results are presented in Appendix B. Kleinfelder completed additional subsurface investigation consisting of Cone Penetration Testing (CPT) in the vicinity of the proposed construction access and staging areas. A report summarizing the results of the CPT testing is included in Appendix C.

The minimum required shaft lengths presented herein are considered confirmation dependent for the center pier, where no boring was advanced, and for the abutments should foundation depths exceed about 40 feet. Typically, deep foundation explorations should extend at least to the foundation depth plus an addition 2D, where D is the diameter of the foundation element. Refer to Section 3.3 for additional discussion on recommendations for confirming soil conditions.

Key geotechnical considerations are summarized below:

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- The site generally consists of very soft silt and clay with some peat and organics to a depth of about 25 feet at the abutment locations. Soils generally transition to medium dense to very dense sand and gravel below 25 feet. Groundwater is anticipated to be shallow and generally fluctuate consistent with water level in the adjacent creek. The near surface clays are not suitable for supporting the anticipated foundation loads with shallow spread footings.

- Based on discussions with the County, we understand the preferred deep foundation option is drilled shafts. We concur with the suitability of drilled shafts for supporting the planned bridge and have developed design and construction recommendations accordingly, refer to Section 3.

- Based on the email received from Brandon Good of the Pierce County and Public Works on 07/30/2025, our understanding is that the approximate axial capacities needed are 385 kips at each abutment and 670 kips at the center pier.

- Bearing pressure recommendations for construction equipment are based on the Preliminary Bridge Layout (Figure 2), which shows locations for staging and access to the bridge location. We understand that temporary fill will be placed as part of developing the construction access between the Foothills Trail and South Prairie Carbon River Road East. We developed bearing pressure recommendations based on results of CPTs in these locations. These bearing pressure recommendations are confirmation dependent and should be evaluated at the time of construction. Furthermore, it should be noted that settlement of the soft clays and peat soils should be anticipated, even when loads do not exceed the recommended bearing pressures.

- In our opinion, seismic Site Class D/E is appropriate based on AASHTO, 2024. Our analyses indicate that liquefaction induced ground surface settlements are estimated to be 6 to 8 inches. We have accounted for potential loss of strength and downdrag loads in our foundation analyses and recommendations.

The findings, conclusions, and recommendations presented in this executive summary should not be relied upon without consulting the associated geotechnical report for more information. The conclusions and recommendations presented in this report are subject to the Limitations presented in Section 6.

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1 INTRODUCTION

1.1 GENERAL

This report presents the results of Kleinfelder's geotechnical engineering study for the Ski Park Bridge #PRT27195-E Replacement project near Orting, Washington. The purpose of our study was to review existing soil and groundwater data for the site provided to us by Pierce County (County) and develop geotechnical recommendations for design and construction of the project. We performed our scope of services in accordance with our proposal titled, "Proposal for Geotechnical Engineering Services P-111399 Ski Park Bridge #PRT27195-E Replacement, 3 Miles East of Orting, Washington, On-Call Contract SC-111275" dated November 14, 2024. Supplemental Cone Penetration Testing to evaluate soils in the vicinity of the anticipated construction staging and access areas was performed in accordance with our proposal titled, "Proposal for Supplemental Geotechnical Engineering Services, P-111399 Ski Park Bridge #PRT27195-E Replacement, 3 Miles East of Orting, Washington, On-Call Contract SC-111275" dated June 6, 2025.

1.2 PROJECT DESCRIPTION

We understand the County is planning to replace the Ski Park Bridge, which is a part of the Foothills Trail between Orting and South Prairie. The Foothills Trail follows a historical railroad alignment, and the existing bridge was constructed in 1904 as a railroad trestle that traverses wetlands. The timber piles and timber structural elements are decaying and County engineers are recommending a replacement. As currently planned, the replacement bridge will consist of two 100-foot long prestressed concrete girders. The girders will have a clear span of 93 feet, 10 inches with 98 feet between bearings. Abutments will be located on either side of the wetlands and there will be one intermediate pier. The preliminary foundation layout consists of a single 4- to 5-foot diameter drilled shaft per pier/abutment.

1.3 SCOPE OF SERVICES

The purpose of our geotechnical engineering study was to evaluate existing geotechnical data provided by the County and develop geotechnical design and construction recommendations for the proposed project. The following paragraphs present a description of our services.

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1.3.1 Task 1: Data Review and Site Reconnaissance

This task included familiarization and review of the existing data provided by the County as referenced in Section 2.3. In addition, a Kleinfelder geotechnical engineer visited the site to perform a surficial reconnaissance and review the documented locations of prior explorations. The purpose of the visit was to observe general site topography, vegetation, and infer site geology, as well as consider site access as it relates to foundation construction. After the site visit, Kleinfelder sent an email to the County to confirm our understanding of the proposed structure and inform our geotechnical analysis and design approach.

1.3.2 Task 2: Analyses and Geotechnical Report

Based on the results of our site reconnaissance and data review, including boring logs and laboratory testing data, we completed engineering analyses and prepared this geotechnical report that presents the following:

- A description of the proposed project;
- A site plan drawn to scale showing the approximate exploration locations (provided by County);
- Logs of the prior explorations (provided by County);
- Results of Cone Penetration Testing performed for the construction staging and access area;
- Results of prior laboratory testing (provided by County);
- The geologic setting of the site, impact of the site geologic conditions and potential hazards to the project, as well as means to mitigate such hazards;
- Generalized ground bearing pressure recommendations based on equipment type and loading information provided to Kleinfelder by the County, and considerations for construction equipment access and girder picking/placement;
- A summary of subsurface soil and groundwater conditions documented in the existing data and CPTs;
- Earthwork recommendations including site and subgrade preparation, structural fill, and wet weather earthwork; and,

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- Deep foundation design recommendations for drilled piers in accordance with current WSDOT BDM and AASHTO design guidelines, including vertical capacity, L-pile parameters, group effects, seismic design considerations, and construction recommendations.

1.3.3 Task 3: Supplemental Subsurface Exploration for Staging and Access Areas

We subcontracted ConeTec of Seattle, Washington, to advance five Cone Penetration Tests (CPTs) at locations in the vicinity of the proposed construction staging and access areas, between the bridge and South Prairie Carbon River Road East. The data collected from the CPTs was used to evaluate bearing pressure recommendations for the staging and access areas, and is summarized in Section 4.5 "Construction Access Considerations and Planning" of this report. Appendix C presents a summary report prepared by ConeTec.

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2 SITE CONDITIONS

2.1 GENERAL SITE DESCRIPTION

Bridge PRT27195-E is located approximately 3 miles east of Orting. The Foothills Trail trends northeast-southwest within a 200-foot strip between SR-162 and South Prairie Carbon River Road East. The bridge is approximately 192 feet in length, with 14 bents, with varying span lengths of 13-16 feet. The site is located about 250 feet east of South Prairie Creek and ¾ mile north of the Carbon River. A human-made recreational lake, Ski Park, parallels the trail approximately 100 feet to the east. A site-specific survey was not available for this study. Refer to the Vicinity Map, Figure 1. The area surrounding the existing bridge was observed to be vegetated with a mixture of grasses, low bushes, and small trees. Areas of standing water were observed along the length of the bridge and flowing water was observed in a channel near the south end of the bridge.

2.2 GEOLOGIC SETTING

Our understanding of the geologic setting at the site is based on the following sources: Surficial geology of the Orting quadrangle, Washington, published by U.S. Department of the Interior U.S. Geological Survey (Crandell, 1964). The mapped surficial geology at the site includes Quaternary Alluvium (Qa) from the late Holocene period, which is described as unconsolidated or semi consolidated alluvial clay, silt, sand, gravel, and (or) cobble deposits, including highly organic wetland deposits overlying silt-dominant estuarine deposits.

2.3 PRIOR GEOTECHNICAL STUDIES

We reviewed the following prior report prepared for the bridge replacement:

- “Geotechnical Memorandum - Bridge PRT27195-E, Project #P-111399, Project Name: Ski Park Bridge, Foothills Trail, 3.4 miles E/O Orting” prepared by Henry Gertje, PE dated January 11, 2022. (See Appendix D)
- According to this memorandum, the shallow site soils were observed to be very soft with high organic content, underlain by medium to stiff, slightly over-consolidated inorganic clayey silt.

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- Both of the boring logs in this report, presented in Appendix A, indicate that the groundwater level is approximately 5 feet below the ground surface.

2.4 SOIL CONDITIONS

Based on the conditions documented in the referenced prior geotechnical report, subsurface conditions encountered during the previous field exploration program are generally consistent with the referenced geologic map, as well as soils inferred from the CPTs. The soils are described in the general order encountered in the explorations as follows:

- Asphalt and Fill:
  B-1 and B-2 encountered about 4 inches of asphalt and about 5 to 7½ feet of silty sand with gravel fill. The asphalt comprises the current trail surfacing and the underlying fill is interpreted as being placed during construction of the former railroad embankment and abutment fills.

- Very Soft to Stiff Silt/Clay:
  Soils underlying the fill generally consist of soft to stiff silts and lean clays ranging from approximately 11 to 18 feet in thickness. N-values in these soils range approximately from 0 to 15 blows per foot (bpf).
- Medium Dense to Very Dense Sands and Gravels:
  This layer was encountered below the clay in all borings and generally consists of dense to very dense sands and gravels with varying amounts of silt/clays. The top of this layer is encountered at depths ranging from 16 to 23 feet and extends to the full depths explored. N-values range from approximately 40 to 50+ bpf.

More detailed descriptions are presented on the boring logs in Appendix A, and CPT logs in Appendix C.

2.5 GROUNDWATER CONDITIONS

Groundwater is anticipated to be shallow, essentially at the ground surface much of the year within the low-lying area that the bridge crosses; this corresponds to about 5 feet below the ground surface at the abutment locations. The groundwater level will generally fluctuate to coincide with the water level in the adjacent wetlands and creek and is anticipated to be lowest in the dry season, though it may still be at or within a few feet of the ground surface.

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3 GEOTECHNICAL DESIGN RECOMMENDATIONS

3.1 SEISMIC DESIGN CONSIDERATIONS

3.1.1 Seismic Design Parameters

AASHTO LRFD Bridge Design Specifications 10th Edition, (2024) was used to evaluate the site class for seismic design parameters. According to Table 3.10.3.1-1, Site Class D/E, loose sand or medium stiff clay, is appropriate. The seismic hazard evaluation level for designing the bridge is assumed to be in accordance with Safety Evaluation Earthquake (SEE). According to Washington Bridge Design Manual (WSDOT BDM, 2023), the Design Spectrum for Safety Evaluation Earthquake (SEE) shall be taken as a spectrum based on 7% probability of exceedance in 75 years. (i.e. 1000- year return period). The risk-targeted design response spectra for the 2023 editions of AASHTO bridge design specifications was obtained from NSHMP Static Data Service (https://earthquake.usgs.gov/ws/designmaps/aashto-2023/) and is provided below.

Table 1
SEE event Seismic Design Parameters

Period (s)	Spectral Acceleration (g)
0	0.486
0.010	0.487
0.020	0.493
0.030	0.502
0.050	0.544
0.075	0.677
0.100	0.841
0.150	1.010
0.200	1.110
0.250	1.130
0.300	1.150
0.400	1.130
0.500	1.040
0.750	0.814
1.000	0.660
1.500	0.468
2.000	0.360
3.000	0.232

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Period (s)	Spectral Acceleration (g)
4.000	0.168
5.000	0.131
7.500	0.077
10.000	0.059

Note: Site latitude: 47.10569, longitude: -122.14742.

3.1.2 Geologic and Seismic Hazards

Based on the relatively flat topography at the site and surrounding areas, slope failure and landslide hazards are considered low. Based on the Washington Department of Natural Resources Geology Portal, the site has a moderate to high liquefaction susceptibility.

According to the USGS interactive Quaternary faults database, the Tacoma fault is in closest proximity to the site and its nearest trace is located at a radial distance of over 15 miles from the site; therefore, the risk of fault rupture at the site is low.

3.1.3 Liquefaction Settlement and Downdrag

We performed liquefaction analyses to assess liquefaction triggering and the resulting liquefaction induced vertical settlements. We evaluated liquefaction susceptibility and liquefaction reconsolidation settlements with SPT data using methodologies proposed by Youd et al. (2001), Seed et al (2003), Idriss & Boulanger (2008), Tokimatsu and Seed (1987), and Cetin et al. (2009). For purposes of the analyses, the groundwater table was assumed at 5 feet below ground surface during the design earthquake event. Our analysis indicate that potential liquefiable layers were not encountered at the South Abutment of the existing bridge. However, on the North Abutment, a potentially liquefiable layer exists between depths of approximately 32 and 40 feet below the ground surface. Under the design level event, this could result in approximately 6 to 8 inches of ground surface settlement. Settlement of the liquefied soil will result in settlement of the overlying non-liquefied soils. As these soils settle, they will impart a downward load on the shaft called a drag load (or downdrag load).

3.2 DRILLED SHAFT FOUNDATIONS

3.2.1 Axial Capacity

Drilled shaft axial capacities were developed for the South Abutment using Boring B-1 (Soil Profile 1) and the North Abutment using Boring B-2 (Soil Profile 2). Based on the soil conditions encountered in the

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boring, drilled shafts are expected to develop axial capacity below 23 feet at the South Abutment and below 16 feet at the North Abutment. Axial capacity plots based on Boring B-1 (Soil Profile 1) and Boring B-2 (Soil Profile 2) are presented in Appendix E. Service Limit, Strength Limit, and Extreme Limit states for 4-, 5-, 6-foot-diameter shafts are plotted for each soil profile. The capacity plots assume a single shaft and include a 20% reduction for the Strength Limit to account for lack of redundancy per AASHTO LRFD (2024) Article 10.5.5.2.4.

The capacity plots extend to a depth of 100 feet even though both Borings B-1 and B-2 were only advanced to a depth of 50.3 and 51.5 feet, respectively. The soil conditions are assumed to remain constant below the maximum depth explored. This assumption was made to allow for evaluation of shaft lengths greater than 50 feet. If final design shaft lengths and diameters are such that the shaft tips extend within two shaft diameters of the maximum depth explored (about 50 feet), we recommend confirmation of the soil conditions by means of additional exploration prior to construction; refer to Section 3.3 for additional discussion.

A downdrag load associated with the liquefaction induced settlement on the North Abutment of the bridge should be included in the Extreme Limit evaluation for the drilled shaft axial capacity. The downdrag load is shown on the plots in Appendix E.

We understand the estimated Strength I axial compressive foundation loads are 385 kips at the abutments and 670 kips at the center pier. Based on these loads and the axial capacity plots, Strength Limit appears to be controlling the minimum required shaft length for axial capacity at the South Abutment and the Extreme Limit appears to be controlling the minimum required shaft length for axial capacity at the North Abutment. Table 2 presents minimum estimated shaft lengths for 4-, 5- and 6-foot-diameter shafts based on Strength Limit capacity for the South Abutment. Table 3 presents minimum estimated shaft lengths for 4-, 5- and 6-foot-diameter shafts based on Extreme Limit capacity for the North Abutment.

Tables 2 and 3 also present the minimum estimated shaft lengths based on loads estimated at the center pier. Since no borings were advanced at the proposed center pier location, the shaft capacities were estimated for the center pier loads using both South and North Abutment soil profiles. We understand the County is planning to utilize the most conservative soil profile (requiring the deepest shaft) for design of the center pier drilled shaft. An exploration at the center pier location prior to construction is recommended to evaluate actual soil conditions.

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Table 2
Minimum Shaft Lengths for South Abutment (Soil Profile 1, Based on Boring B-1)

Shaft Diameter (ft)	Axial Load (kips)	Minimum Drilled Shaft Length - based on Strength Limit Capacity[1] for Axial Load (ft)
4	385 (South pier)	33[(2)]
5		33[(2)]
6		33[(2)]
4	670 (Center pier)	55
5		38
6		33[(2)]

Note:
1. Resistance Factor = 0.55 for Side Friction and Resistance Factor = 0.5 for Tip Resistance (AASHTO Table 10.5.5.2.4-1). Additional 20% reduction for single shaft applied to values.
2. Recommend minimum 33 feet of length to give 10 feet of embedment depth to underlying bearing layer.

Table 3
Minimum Shaft Lengths for North Abutment (Soil Profile 2, Based on Boring B-2)

Shaft Diameters (ft)	Axial Load (kips)	Downdrag Load (kips)[(4)]	Minimum Drilled Shaft Length - based on Extreme Limit Capacity[1] for Axial Load plus Downdrag Load (ft)
4	385 (North pier)	366	50[(2)]
5		456	50[(2)]
6		568	50[(2)]
4	670 (Center pier)	366	57
5		456	50[(2)]
6		568	50[(2)]

Note:
1. Resistance Factor = 1 for Side Friction and Tip Resistance (AASHTO 10.5.5.3.3).
2. Recommend minimum 50 feet of length to give 10 feet of embedment depth below liquefiable layer.

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As presented in Tables 2 and 3, the loads associated with the center pier result in shaft lengths greater than 50 feet for single shafts of 4-foot diameter. The use of two shafts would eliminate the 20% capacity reduction for non-redundancy and shafts with a minimum center-to-center spacing of at least three diameters would require no group effect capacity reduction.

Table 4 presents minimum shaft lengths for one row of two 4-foot diameter shafts spaced 3 diameters center-to-center (i.e. 12-foot center-to-center spacing) supporting center pier loads. We have provided three scenarios for two shaft groups to fulfill the axial demand of 866 kips at the center pier. The first scenario considers 50-foot-long shafts assuming a North abutment soil profile at the center pier with downdrag load taken into consideration. The second scenario assumes the bridge superstructure and substructure can be designed to undergo the settlement induced due to liquefaction (6 to 8 inches). This scenario is based on Strength Limit capacity and does not consider downdrag load. The third scenario considers 35-foot-long shafts assuming a South abutment soil profile at the center pier; no downdrag loads are considered since liquefaction is not anticipated in the South abutment profile. Other shaft group configurations can be evaluated using the group reduction factors given in Table 10.8.3.6.3-1 in AASHTO 2024.

Table 4
Minimum Shaft Lengths for a Two-Shaft Group at the Center Pier Supporting 670 kips

Scenario	Shaft Diameter (ft)	Abutment	Downdrag Load (kips)	Minimum Drilled Shaft Length (ft)
1	4	North (Soil Profile 2, using boring B-2)	366	50[(1)] (based on Extreme Limit Capacity for Axial Load plus Downdrag Load)
2	4	North (Soil Profile 2, using boring B-2)	---	26[(2)] (based on Strength Limit Capacity for Axial Load)
3	4	South (Soil Profile 1, using boring B-1)	---	33[(3)] (based on Strength Limit Capacity for Axial Load)

Notes:

1. Two-shaft group is anticipated to have a maximum settlement of one inch including downdrag loads. Recommend minimum 50 feet of length to give 10 feet of embedment depth to below liquefiable layer.
2. The structure (super and sub structure) is assumed to handle liquefaction induced settlement on the order of 6 to 8 inches based on free field liquefaction analyses if the tip is placed above 280 feet elevation. Recommend minimum 26 feet of length to give 10 feet of embedment depth to underlying static bearing layer.
3. Recommend minimum 33 feet of length to give 10 feet of embedment depth to underlying static bearing layer.

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3.2.2 Lateral Resistance

We understand lateral analysis of the drilled shafts will be performed using the computer software LPILE (Ensoft 2022), which uses P-Y curves to model soil stiffness and evaluate lateral response of drilled shafts. Recommended LPILE parameters for the soil profiles are presented in Tables 5 and 6. Group interaction effects should be accounted for using the p-multipliers specified in Table 10.7.2.4-1 of AASHTO 2024. For the 3-diameter center-to-center spacing assumed above, a p-multiplier of 0.8 will be applied to the lateral resistance calculated for a single shaft. The minimum spacing for p-multipliers given in Table 10.7.2.4-1 of AASHTO 2024 is 3-diameters. If space limitations prevent 3 diameter center-to-center shaft spacing, WSDOT Geotechnical Design Manual Chapter 8.12.2.3 provides guidance on p-multipliers to use for spacings as close as 2 diameters.

Table 5
Recommended LPILE Parameters for South Abutment (Soil Profile 1, Based on Boring B-1)

Top of Layer Depth / Elevation [1] (ft)	LPILE Soil Type	Total / Submerged Unit Weight [2] (pcf)	Φ' [3] (degrees)	Su [4] (psf)	k [5] (pci) dry / submerged	ε_{50} [6]
0 / 308	Sand (Reese)	120 / ---	30	---	25 / ---	---
5 / 303	Soft Clay (Matlock)	100 / 42.6	---	250	---	0.020
23 / 285	Sand (Reese)	130 / 67.6	36	---	225 / 125	---

Notes:

1. Depth and elevation values based on information contained within boring log Boring B-1.
2. Total unit weight is used for soils above groundwater table and submerged unit weight is used for soils below groundwater table. Groundwater table assumed at a depth of 5 feet or elevation 303 feet based on Boring B-1.
3. Friction angle for use in LPILE analyses.
4. Undrained shear strength for use in LPILE analyses calculated using empirical relationships consistent with WSDOT GDM Section 6-4.2.5 Residual Strength Parameters (WSDOT, 2022).
5. "k" value for use in LPILE analyses from Tables 3.6 and 3.7 in LPILE v2022 Technical Manual (Ensoft 2022).
6. "ε_{50}" based on soft clay value from Table 3.2 in LPILE v2022 Technical Manual (Ensoft 2022).
7. Soils at this locations were not found to be susceptible to liquefaction. Therefore, the static soil parameters provided in the table above also apply to seismic analyses.

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Table 6
Recommended LPILE Parameters for North Abutment (Soil Profile 2, Based on Boring B-2)

Top of Layer Depth / Elevation [1] (ft)	LPILE Soil Type	Total / Submerged Unit Weight [2] (pcf)	Φ' [3] (degrees)	Su [4] (psf)	k [5] (pci) dry / submerged	ε_{50} [6]
0 / 308	Sand (Reese)	120 / ---	30	---	25 / ---	---
5 / 303	Soft Clay (Matlock)	100 / 42.6	---	250/250	---	0.020 / 0.020
16 / 292	Sand (Reese)	130 / 67.6	36	---	225 / 125	---
30 / 278	Sand (Reese)	120 / 62.4	30	--- / 450	90 / 60	--- / 0.005
37 / 271	Sand (Reese)	130 / 62.4	36	---	225 / 125	---

Notes:

1. Depth and elevation values based on information contained within boring log Boring B-2.
2. Total unit weight is used for soils above groundwater table and submerged unit weight is used for soils below groundwater table. Groundwater table assumed at a depth of 5 feet or elevation 303 feet based on Boring B-1.
3. Friction angle for use in LPILE analyses.
4. Undrained shear strength for use in LPILE analyses. Use Su value for static conditions and Sur (undrained residual shear strength) value for seismic conditions.
5. "k" value for use in LPILE analyses from Tables 3.6 and 3.7 in LPILE v2022 Technical Manual (Ensoft 2022).
6. "ε_{50}" based on soft clay value from Table 3.2 in LPILE v2022 Technical Manual (Ensoft 2022) and corresponding to 50% of the maximum principal stress difference.
7. Soils at this location were found to be susceptible to liquefaction from depths of 30 to 37 feet. Therefore, use the undrained residual shear strength (Sur) and Soft Clay (Matlock) soil model for seismic analyses in this layer.

3.3 CONFIRMATION OF SOIL CONDITIONS

The minimum required shaft lengths presented herein are considered confirmation dependent for the center pier, where no boring was advanced, and for the abutments should foundation depths exceed about 40 feet. Typically, deep foundation explorations should extend at least to the foundation depth plus an addition 2D, where D is the diameter of the foundation element. We have developed recommendations for three options to confirm soil conditions as discussed below.

The Geologic Map on the Washington Geologic Information Portal (www.dnr.wa.gov/geologyportal) indicates that the project site is underlain by Qgd – Pleistocene continental glacial drift covering the uplands surrounding the site and Qa – Quaternary alluvium at the site. The information portal was primarily used for desk study purpose to review seismic hazards such as liquefaction susceptibility and

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confirm geology information. They show slightly different geologic conditions than what is described in Section 2.2, however, the subsurface soil descriptions are similar.

Based on SPT N-values and soil descriptions shown on the boring logs, it appears the boreholes extend through the alluvial deposits and into underlying glacially over-ridden soils at about 23 feet below ground surface in boring B-1 and between 16 and 37 feet in boring B-2. It is likely that extending the drilled shafts beyond the depth drilled in boreholes will continue to encounter very dense glacial over-ridden soils and the capacity assumptions for depths below 50 feet are reasonable.

3.3.1 Confirmation of Soil Conditions at Time of Shaft Excavation

Confirmation during construction would be accomplished through geotechnical special inspection of the soil excavated from the shaft; we understand this is the County's preferred confirmation method. Based on soil descriptions in the boring logs, gravel soils are anticipated to be excavated from bottom of shaft. It should be reasonable to differentiate between suitable glacially over-ridden soils and unsuitable alluvial deposits. If the assumed soil conditions are not encountered at the design depth, the shaft excavation can be deepened; however, the rebar cage may not be long enough. A longer cage then needs to be prepared, or it may be feasible to have an additional segment tied and ready to splice (or couple) to the cage. Alternatively, the cages can be fabricated with extra length and cut off if the added length is not required.

3.3.2 Confirmation of Soil Conditions Prior to Shaft Excavation

Confirmation prior to shaft excavation would be accomplished by advancing geotechnical borings to a minimum depth of the planned shaft length plus two shaft diameters, one at each abutment, with access based on using the existing trail for drill rig access. Access to the center pier location to drill a geotechnical boring adjacent to the existing bridge could be completed after the access roads are constructed by the contractor and prior to excavation of the shaft(s) at the at center pier location. This would allow for required shaft length for center pier to be determined prior to excavation of the shaft and reduce uncertainty in required shaft and cage length.

3.3.3 Confirmation of Soil Conditions Prior to Construction

For each abutment, confirmation prior to construction would be accomplished in the same manner as confirmation prior to shaft excavation, with drill rig access using the existing trail. Access to the center pier location to drill a geotechnical boring adjacent to the existing bridge is challenging (or not feasible)

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because of the existing vegetation and wetland conditions. We understand the existing bridge cannot support the required drill rig, so it is not feasible to drill through the existing bridge deck.

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4 CONSTRUCTION RECOMMENDATIONS

4.1 EARTHWORK

4.1.1 General

Earthwork should be performed in accordance with applicable codes, safety regulations and other local state, or federal specifications, and the recommendations included in this report. Kleinfelder should be retained to provide observation and test services throughout the earthwork phases of construction, particularly as subsurface conditions become exposed after stripping and during excavation so that assumed conditions can be confirmed in the field.

4.1.2 Excavation

Excavation of the near surface soils, including existing fills and soft fine-grained soils, can generally be completed using conventional earthmoving equipment such as backhoes and tracked excavators. Based on depth below ground surface, the dense to very dense gravels are not anticipated to be encountered in excavations advanced with backhoes or tracked excavators for the proposed project. However, if encountered, the dense to very dense gravels will be difficult to excavate with small equipment and will likely require trackhoes and/or use of narrow buckets with ripping teeth. Cobbles and boulders may be present in the gravels and the contractor should be prepared to remove them. Refer to Section 4.5 for construction access considerations.

4.1.3 Subgrade Preparation for Fills

Site grading is expected to include demolition and removal of the existing bridge and minor amounts of pavements associated with the trail and abutments, followed by restoration of the trail grade when the abutments are completed. Debris generated by demolition operations including concrete and asphalt rubble, steel, and wood, etc., should be separated and disposed of off-site. Where structural fills are required to restore grade, the exposed subgrade should be sufficiently stripped of all organic, soft/loose, or otherwise unsuitable materials before proceeding with fill placement. In general, we anticipate that new fills will only be placed within the footprint of the existing abutment fills, which comprise the historical railroad embankment. Therefore, extensive soft soil conditions are not anticipated.

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Subgrade preparation should be observed and evaluated by a Kleinfelder representative. Prior to placing fill, the upper 12 inches of subgrade soil in areas to be filled should be moisture-conditioned to within 2 percent of optimum moisture content and compacted to a minimum of 95 percent of the modified proctor maximum dry density as determined by AASHTO T180. Any areas that are identified as being soft or yielding during preparation should be over-excavated to a firm and unyielding subgrade or to the depth determined by the geotechnical engineer.

It should be noted that construction traffic over the exposed subgrade soils may result in pumping and instability of the subgrade, particularly under wet weather conditions. The contractor should consider the use of lightweight tracked equipment and a traffic routing plan to minimize disturbance of the subgrade soils, as necessary. Where instability occurs, the subgrade should be protected from traffic, scarified, dried and re-compacted, or over-excavated and stabilized as recommended above. Once subgrades are approved, it is the contractor's responsibility to protect and maintain them.

4.1.4 Wet Weather Earthwork

The earthwork contractor should have the necessary equipment and experience working with moisture sensitive fine-grained soils in wet conditions. The contractors bidding on this project should be informed of these conditions. If these soils become wet and unstable conditions occur, Kleinfelder should be contacted to observe the conditions. Mitigation of these conditions may require over-excavation and replacement with suitable structural fill, protection of the subgrade by construction of gravel access roads, or other methods.

We recommend the following practices during wet weather or when the subgrade is wet:

- The contractor should take measures to protect the exposed subgrade and limit construction traffic. When possible, construction equipment should not operate directly on wet subgrade. Low ground pressure equipment or small equipment should be used.
- Care should be taken to cover all exposed surfaces with imported granular fill as soon as possible after exposure.
- Site grades should be maintained to prevent ponding and capture runoff before it can erode or damage subgrade. All runoff should be collected and disposed of properly.
- Earthen berms or other methods should be used to prevent runoff from draining into excavations.

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- Earthwork should be performed in as limited an area as practical to minimize potential for soil saturation.
- All stockpiles should be covered or smooth drum roller to shed water when not actively being worked or dried.
- Subgrade should be rolled with a smooth drum roller and graded to minimize standing water during wet weather and at the end of each shift if wet weather is forecast.
- During dry periods the soil should be scarified or tilled to promote drying.
- Following wet weather, surficial soils should be allow to dry to the greatest extent practical before traversing with construction equipment or handling.

4.1.5 Permanent Cut and Fill Slopes

Permanent cut or fill slopes in native and fill soils should be no steeper than 3:1 (horizontal to vertical) to maintain long-term stability and to provide ease of maintenance. Steeper slopes are susceptible to erosion, will be difficult to maintain, and could experience problems with instability. It is recommended that permanent slopes be vegetated or otherwise protected, as soon as practical, in order to minimize the potential for erosion.

4.2 FILL MATERIAL AND COMPACTION REQUIREMENTS

4.2.1 General

All material placed below the planned trail and embankment should be considered structural fill. A representative of Kleinfelder should be on site to evaluate the subgrade soils and observe stabilization and compaction as recommended in Section 4.1.3 prior to structural fill placement. We recommend that backfill at the abutments consist of material conforming to the requirements of Section 9-03.14(1) Gravel Borrow or Section 9-03.9(3) Crushed Surfacing of the WSDOT Standard Specifications. All structural fills should be moisture conditioned, placed in maximum 8-inch loose lifts, and compacted to a minimum of 95 percent of the modified proctor maximum dry density per AASHTO T180. Structural fill should be compacted utilizing suitable compaction equipment to meet the density requirements specified. Areas were rollers and hoe-packs cannot fit may be compacted using a plate compactor,

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jumping jack, or similar compaction equipment, though loose lift thicknesses should be reduced to approximately 4 to 6 inches.

4.3 EXCAVATIONS AND TEMPORARY SLOPES

All excavations and slopes must comply with applicable with applicable Federal, State, and Local Occupational Safety and Health Administration (OSHA) regulations. Construction site safety is the sole responsibility of the General Contractor, who shall also be solely responsible for the means, methods, and sequencing of construction operations. Kleinfelder is providing excavation and temporary slope information solely as a service to our client for planning purposes. Under no circumstances should the information be interpreted to suggest that Kleinfelder is assuming responsibility for construction site safety or the Contractor's activities. Such responsibility is not being implied and should not be inferred.

For planning purposes, un-shored excavations less than 10 feet deep should be inclined no steeper than 1½ horizontal to 1 vertical. If seepage or perched groundwater conditions are observed, slopes should be dewatered and/or laid back to a shallower inclination and/or shoring or buttressing of the slopes may be required. Temporary excavations and slopes should be protected from the elements by covering with plastic sheeting or some other similar impermeable material. Sheeting sections should overlap by at least 12 inches and be tightly secured with sandbags, tires, staking, or other means to prevent wind from exposing the soils under the sheeting.

Heavy construction equipment, building materials, excavated soil, and vehicular traffic should not be allowed near the top of any excavation. Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, support systems such as shoring, bracing, or underpinning may be required to provide structural stability and to protect personnel working within the excavation. Earth retention, bracing, or underpinning required for the project (if any) should be designed by a professional engineer registered in the State of Washington.

4.4 DRILLED SHAFT CONSTRUCTION

Performance of drilled shaft foundations are heavily dependent on construction methods and procedures. Drilled shaft foundations should be constructed only by qualified contractors experienced in this type of construction, and under strict construction monitoring and quality control. The drilled shaft contractor should carefully review this report in its entirety, including boring logs and perform their own assessment of potential construction difficulties.

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The drilled shafts will be constructed through soft fine-grained soils into underlying granular (sandy) soils with gravel and potentially cobbles and boulders below groundwater. Caving of unsupported shaft excavations will need to be prevented in the alluvium. Polymer slurry (i.e., wet method of construction) or a combination of temporary casing and polymer slurry will likely be required to stabilize the sides of shaft excavations. Special care is needed to maintain sufficient drilling fluid head at all times (particularly during auger withdrawal) to preclude caving of an uncased shaft excavation or heave of the excavation bottom. Should permanent casings be considered, Kleinfelder should be contacted to modify axial resistance recommendations.

Since groundwater will be encountered above the drilled shaft tip elevation, the bottoms of the drilled shaft excavations must be adequately cleaned of loose or disturbed materials using a drilling bucket or an approved alternative method. PVC inspection tubes should be installed in each drilled shaft in accordance with WSDOT standards to permit crosshole sonic logging (CSL) of the drilled shafts. The reinforcing cage should be placed carefully in the hole in a manner such that the sidewalls are not disturbed.

Concrete should be placed in newly excavated drilled shafts as soon as practical. The drilled shaft excavation should not be allowed to remain open for an excessive amount of time to prevent degradation of polymer slurry. Concrete must be capable of flowing between the reinforcing bars to come in contact with the soil and avoid arching during extraction of casing, if utilized.

Maintenance of the full design cross-section for the entire shaft length is a concern when temporary casing is extracted. Sometimes the suction created by pulling the casing allows soil intrusion into the shaft resulting in reduced shaft cross-section. Care should be taken to ensure that the reinforcing cage remain in its design location during casing removal and concreting. If the casing is to be removed, the casing should be extracted slowly, and the minimum concrete head maintained in order to prevent soil caving and “necking” of the shaft as the concrete is placed.

In general, drilling conditions will increase in difficulty with depth. Difficult drilling conditions and casing advancement resistance may be encountered in very dense granular deposits. The contractor should be fully aware of the existence of dense cobbles and potential boulders and evaluate its constructability within these materials.

Although artesian water pressure conditions were not noted during the geotechnical investigation, these conditions are possible in deep gravel layers.

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The following construction considerations apply for installation of drilled shafts:

- Groundwater seepage should be expected during installation of drilled shafts. Temporary casing may be required during the construction of drilled shafts to prevent sloughing or caving of granular soils. Installation of casing should be done in such a way that disturbance of surrounding soils is minimized. Groundwater is expected to be encountered during excavation of many of the drilled shafts. The contractor should be prepared to deal with groundwater seepage and potential caving during drilling, particularly within the sand and gravel soils encountered in the boreholes below the groundwater level.

- The contractor should be prepared to treat and dispose of water that is pumped out of the shafts as concrete is placed.

- Temporary casing should be withdrawn simultaneously as the concrete is placed in the drill hole. Care should be taken to ensure no reduction in shaft cross sectional area or displacement of structural steel elements occurs.

- The contractor should be prepared to use wet construction methods to prevent soils from heaving at the base of the shaft excavation. This typically involves maintaining a fluid head inside the shaft. In addition, the concrete placed into the shaft excavation will require tremie pipe methods. The contractor should also be ready to conduct nondestructive testing of shafts using Cross-Hole Sonic Logging (CSL) for all drilled shafts constructed with “wet” methods.

- Upon completion of drilling, remove loose material at the base of the drilled shaft before drilled shaft installation. Reinforcement and concrete should not be placed until the drilled shafts augured holes have been inspected by a qualified geotechnical engineering representative. Concrete should be poured immediately following inspection; shafts should not be left open for an extended amount of time.

- The contractor should be prepared to remove cobbles and boulders during drilled shaft construction.

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4.5 CONSTRUCTION ACCESS CONSIDERATIONS AND PLANNING

4.5.1 General

Based on review of the Preliminary Bridge Layout (Figure 2), we understand that construction access is planned from three locations off South Prairie Carbon River Road East, and one location near the intersection of Pioneer Way East (SR 162) and Prairie Carbon River Road East. No access will be available directly from Pioneer Way East (SR162). Use of the existing trail will be limited to avoid damage to the trail surface. Heavy equipment, such as crawler cranes, should utilize the planned temporary access from South Prairie Carbon River Road East that is immediately adjacent to the bridge alignment. We have assumed that two cranes planned for setting girders will access the site along an approximately 275-foot-long temporary access from South Prairie Carbon River Road East. The access route will be prepared from the road to just east of the bridge alignment, as well as along the east side of the bridge alignment to each abutment location.

We have developed recommendations for preparing the temporary construction accesses as well as generalized ground bearing pressure recommendations based on equipment type and loading information provided by the County. The soil and groundwater conditions in the access areas are based on five CPTs completed on July 27, 2025. It should be noted that soil samples are not collected as part of the CPT process. The soil types are inferred from correlations and are reported as a "Soil Behavior Type" (SBT). The subsurface conditions interpreted from the CPTs are described in the general order encountered as follows:

- Sand:
  Approximately 2 to 5 feet of loose to medium dense sand-like material was interpreted in the CPTs extending from the ground surface.

- Very Soft Fine-Grained and Organic Soil:
  Soils underlying the surficial soils generally consist of very soft clays, silt mixtures, organic soils, and sensitive fine-grained soils ranging from approximately 7 to 17 feet in thickness.

- Sand Mixtures and Very Stiff Fine-Grained Soil:
  At the bottom of the CPTs, approximately 1 to 3 feet medium dense sands and very stiff fine-grained soils were encountered prior to refusal.

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- Groundwater:
  A pore pressure dissipation test was completed in each of the five CPT locations. Based on the results of the tests, groundwater is estimated at 4.4 to 9.9 feet below ground surface.

A report summarizing CPT results is included in Appendix C.

The loading assumptions described herein should be verified by the contractor and they should be required to submit an access plan detailing the equipment and corresponding total weight / loads, as well as their plan for providing dunnage / wood blocking / steel plates to limit ground contact bearing pressures. The recommendations presented herein do not apply to scenarios where girders or other heavy objects are picked since the total loads that will require support, how these loads will be distributed below the cranes, and the exact locations of the cranes for the picks are unknown.

4.5.2 Crane Loads, Dunnage and Access Preparation

We have prepared preliminary recommendations for the constructing staging and access roads / working platforms as requested by the County for the purpose of supporting preliminary project planning. The contractor should evaluate actual loads and load distributions on the working platforms for their planned lifting scenarios, and develop their own construction requirements for working platforms accordingly. The information presented in the following sections is based on the understanding and assumptions outlined below.

We understand that two 100-ton crawler cranes will be used to set the bridge girders; one located at the center pier and one at the abutment corresponding to each girder pick. We have used data sheet specifications on a Liebherr LTR-1100 crane for preparing initial recommendations including the following:

- Total weight with counterweight, central ballast and 3-sheave hook block: 227,100 lbs
- Length of tracks contacting ground surface: 17 feet 7 inches
- Total width of both tracks from outside edge to outside edge: 25 feet 7 inches

The contractor should be required to provide dunnage in the form of timber mats, blocking and/or steel plates to ensure distribution of the crane weight below both tracks at all times. The minimum area of load distribution provided at any time should be 26 feet wide by 18 feet long so that the maximum ground bearing pressure is 700 pounds per square foot. This assumption should not be used for picking scenarios since they will result in a load concentration along different portions of the tracks, higher total

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loads, and the load will not necessarily be evenly distributed below the timber mats, blocking or steel plates.

Preparation of the access areas should be performed as follows:

- Prepare the access with sufficient width and length such that construction traffic will remain at least five feet from the edge of the prepared area at all times.
- Cut existing brush down to approximately 6 inches above ground surface. Bushes with stems larger than about 1 inch in diameter should be cut flush with the ground surface. Do not remove vegetative mat or root balls.
- Place a Geotextile for Soil Stabilization conforming to the requirements of Section 9-33 of the WSDOT Standard Specifications (refer to Table 3) over the area being prepared.
- Overlap all seams by at least 2 feet and roll out with as little wrinkling as practical.
- Cover the geotextile with at least 18 inches of Permeable Ballast conforming to the requirements of Section 9-03.9(2) of the WSDOT Standard Specifications.
- Spread the material with a dozer or other light-ground pressure equipment maintaining a minimum thickness of 12 inches of ballast between the equipment and the geotextile.
- If localized low-lying areas are present, place additional ballast to create a smooth, level pad.
- Compact the ballast by several passes of rubber-tired equipment or a static drum roller; use of heavy equipment or vibratory methods should only be used if evaluated and determined that they will not cause disturbance of underlying soils.
- Smooth the top of the ballast to provide even load distribution from the dunnage (timber mats, blocking and/or steel plates); heavy equipment such as cranes should only be allowed to operate on the ballast when dunnage is in place and the maximum ground bearing pressure below the dunnage is 700 psf.

Depending on the conditions encountered during construction and the crane loads, thicker sections of CSBC and/or use of reinforcing geogrids may be necessary. Requirements for the crane pads to be used during pick operations can be developed based on site conditions at the pick locations evaluated during construction and after and actual loads are known.

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It should also be noted that loading of the underlying soils, particularly where peat soils are present, will cause some settlement. The settlement will likely be non-uniform and it may be necessary to perform some releveling during construction. Pad levelness and the corresponding crane levelness should be monitored continuously throughout construction.

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5 ADDITIONAL SERVICES

5.1 PLANS AND SPECIFICATIONS REVIEW

It is recommended that Kleinfelder perform a review of geotechnical related portions of the project plans and specifications before they are finalized to see that geotechnical recommendations have been properly interpreted and implemented during design. If Kleinfelder is not accorded the opportunity of performing this review, we can assume no responsibility for misinterpretation of these recommendations.

5.2 CONSTRUCTION OBSERVATION AND TESTING

The construction process is an integral design component with respect to the geotechnical aspects of a project. Because we sample only a limited portion of the soils affecting the performance of the proposed structure, unanticipated or changed conditions can be encountered during grading. Proper geotechnical observation and during construction are imperative to allow the geotechnical testing engineer the opportunity to verify assumptions made during the design process. Therefore, Kleinfelder should be retained during the construction of the project to observe compliance with the design concepts and geotechnical recommendations, and to recommend design changes in the event that subsurface conditions or methods of construction differ from this report. Kleinfelder's services are typically needed at the following stages of construction/grading:

- During preparation of construction access roads;
- During construction of drilled shafts foundations including excavation, rebar installation, and concrete placement;
- During structural fill placement and compaction; and,
- Assisting with reviewing geotechnically-related submittals and RFIs.

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6 LIMITATIONS

This geotechnical study has been prepared for the exclusive use of Pierce County Planning & Public Works and their agents for specific application to the proposed Ski Park Bridge replacement in Orting, Washington. The findings, conclusions and recommendations presented in this report were prepared in accordance with accepted geotechnical engineering practices. No other warranty, express or implied, is made.

The scope of services was limited to a background data review and the field exploration described in Section 1. It should be recognized that definition and evaluation of subsurface conditions are difficult. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. The conclusions of this assessment are based on our field exploration and laboratory testing programs, and engineering analyses.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. Although risk can never be eliminated, more detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service, which provide information for their purposes at acceptable levels of risk. The client and key members of the design team should discuss the issues covered in this report with Kleinfelder, so that the issues are understood and applied in a manner consistent with the owner's budget, tolerance of risk and expectations for future performance and maintenance.

Recommendations contained in this report are based on our field observations and subsurface explorations, limited laboratory tests, and our present knowledge of the proposed construction. It is likely that soil or groundwater conditions vary between or beyond the points explored. If soil or groundwater conditions are encountered during construction that differ from those described herein, the client is responsible for ensuring that Kleinfelder is notified immediately so that we may reevaluate the recommendations of this report. If the scope of the proposed construction, including the estimated Traffic Index or locations of the improvements, changes from that described in this report, the conclusions and recommendations contained in this report are not considered valid until the changes are reviewed, and the conclusions of this report are modified or approved in writing, by Kleinfelder.

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The scope of services for this subsurface exploration and geotechnical report did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous substances in the soil, surface water, or groundwater at this site.

Kleinfelder cannot be responsible for interpretation by others of this report, or the conditions encountered in the field. Kleinfelder must be retained so that all geotechnical aspects of construction will be monitored on a full-time basis by a representative from Kleinfelder, including site preparation, preparation of foundations, and placement of engineered fill and trench backfill. These services provide Kleinfelder the opportunity to observe the actual soil and groundwater conditions encountered during construction and to evaluate the applicability of the recommendations presented in this report to the site conditions. If Kleinfelder is not retained to provide these services, we will cease to be the engineer of record for this project and will assume no responsibility for any potential claim during or after construction on this project. If changed site conditions affect the recommendations presented herein, Kleinfelder must also be retained to perform a supplemental evaluation and to issue a revision to our original report.

This report, and any future addenda or reports regarding this site, may be made available to bidders to supply them with only the data contained in the report regarding subsurface conditions and laboratory test results at the point and time noted. Bidders may not rely on interpretations, opinion, recommendations, or conclusions contained in the report. Because of the limited nature of any subsurface study, the contractor may encounter conditions during construction which differ from those presented in this report. In such event, the contractor should promptly notify the owner so that Kleinfelder's geotechnical engineer can be contacted to confirm those conditions. We recommend the contractor describe the nature and extent of the differing conditions in writing and that the construction contract include provisions for dealing with differing conditions. Contingency funds should be reserved for potential problems during earthwork and foundation construction.

This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance, but in no event later than one year from the date of the report. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Any party, other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of this report and the nature of the new project, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party and the

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client agrees to defend, indemnify, and hold harmless Kleinfelder from any claims or liability associated with such unauthorized use or non-compliance.

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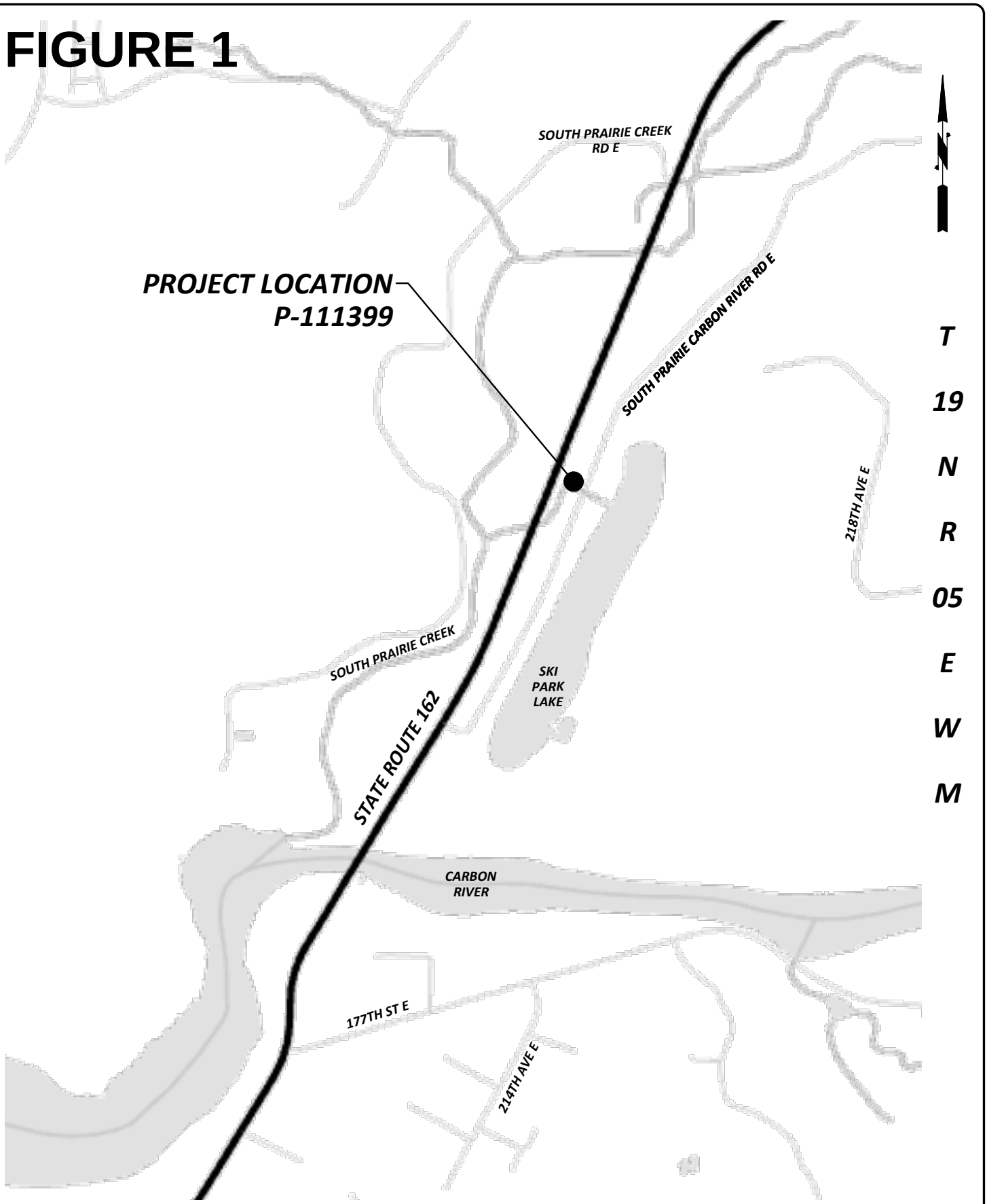
FIGURES

FIGURE 1



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SKI PARK BRIDGE #PRT27195-E
3 MILES E/O ORTING

VICINITY MAP

P-111399

Drawing: P:\P-111399-BRPRT27195E-SKIPARKBRIDGEREPLACEMENT\BRIDGE\DRAWINGS\MISCELLANEOUS\P-111399_VICINITYMAP.DWG Layout Tab: 8.5X11PORTRAIT
Xrefs:
Date: 10/30/2024 Time: 12:58:17 PM Plotted by: BGOOD

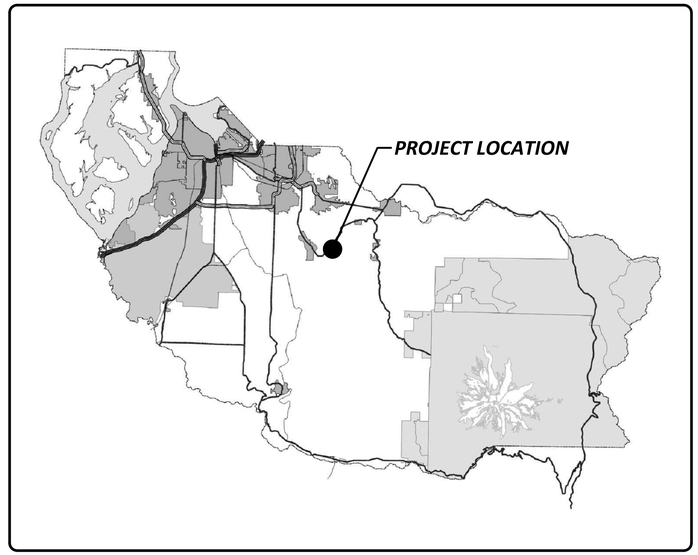
FIGURE 2

SKI PARK BRIDGE #PRT27195-E REPLACEMENT

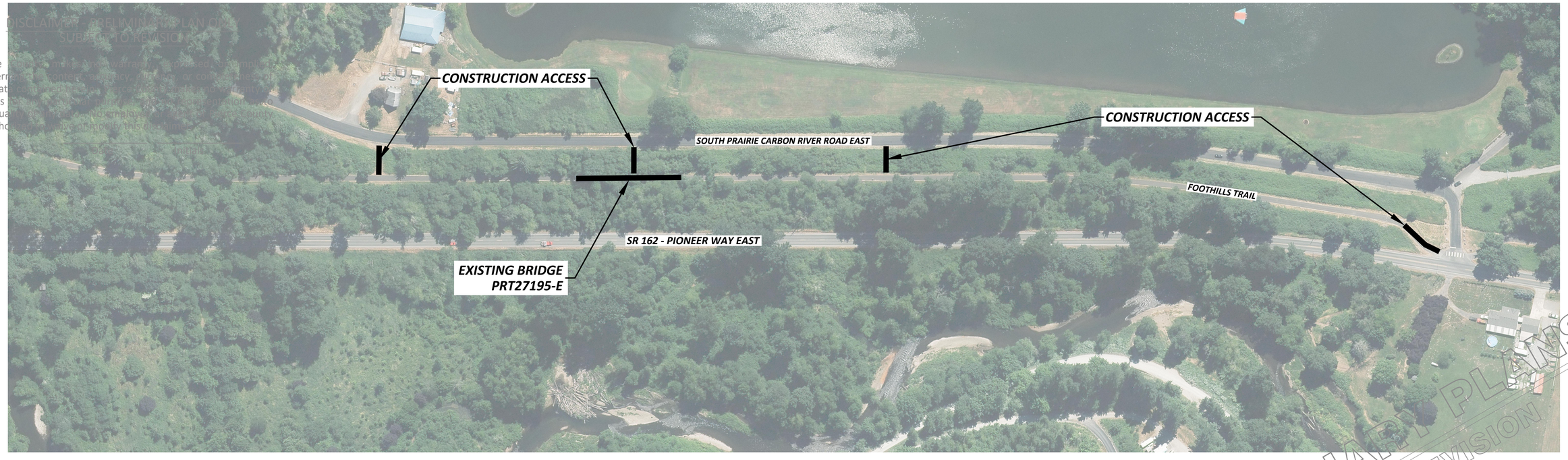
FOOTHILLS TRAIL

P-111399

PRELIMINARY PROJECT PLANS



LOCATION MAP



PROJECT PLAN VIEW

DISCLAIMER - PRELIMINARY PLAN ONLY
SUBJECT TO REVISION
Pierce
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DRAWN BY:	B. GOOD
DESIGNED BY:	B. NORTON, P.E.
CHECKED BY:	B. NORTON, P.E.
REVIEWED BY:	G. AMUNDSEN, P.E.

NO.	DATE	REVISION	BY	APPROVED

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KRAIG W. SHANER STATE OF WASHINGTON 29453 REGISTERED PROFESSIONAL ENGINEER

Office of the County Engineer

APPROVED BY:

MELISSA C. McFADDEN, P.E. DATE

KRAIG W. SHANER, P.E.
FIELD ENGINEERING SECTION MANAGER

SKI PARK BRIDGE #PRT27195-E REPLACEMENT
FOOTHILLS TRAIL - FORESTED DRAINAGE
PRELIMINARY BRIDGE LAYOUT
P-111399

SHEET 1 OF 2

PRELIMINARY PLANS
SUBJECT TO REVISION

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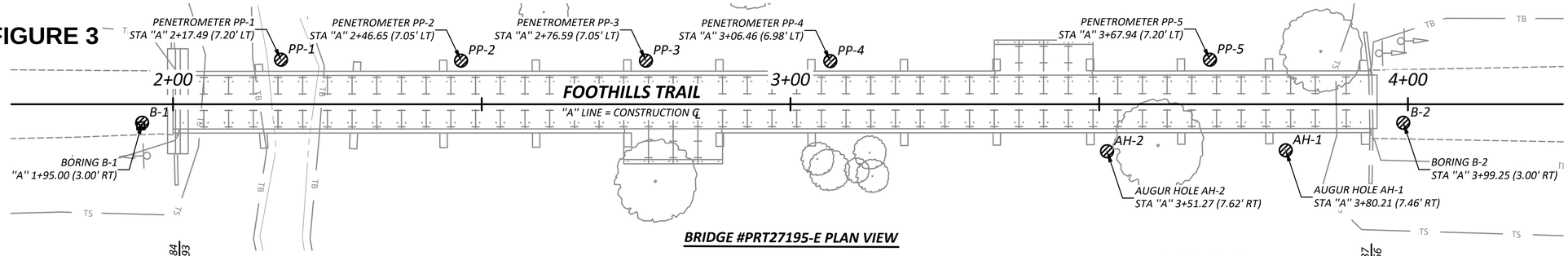
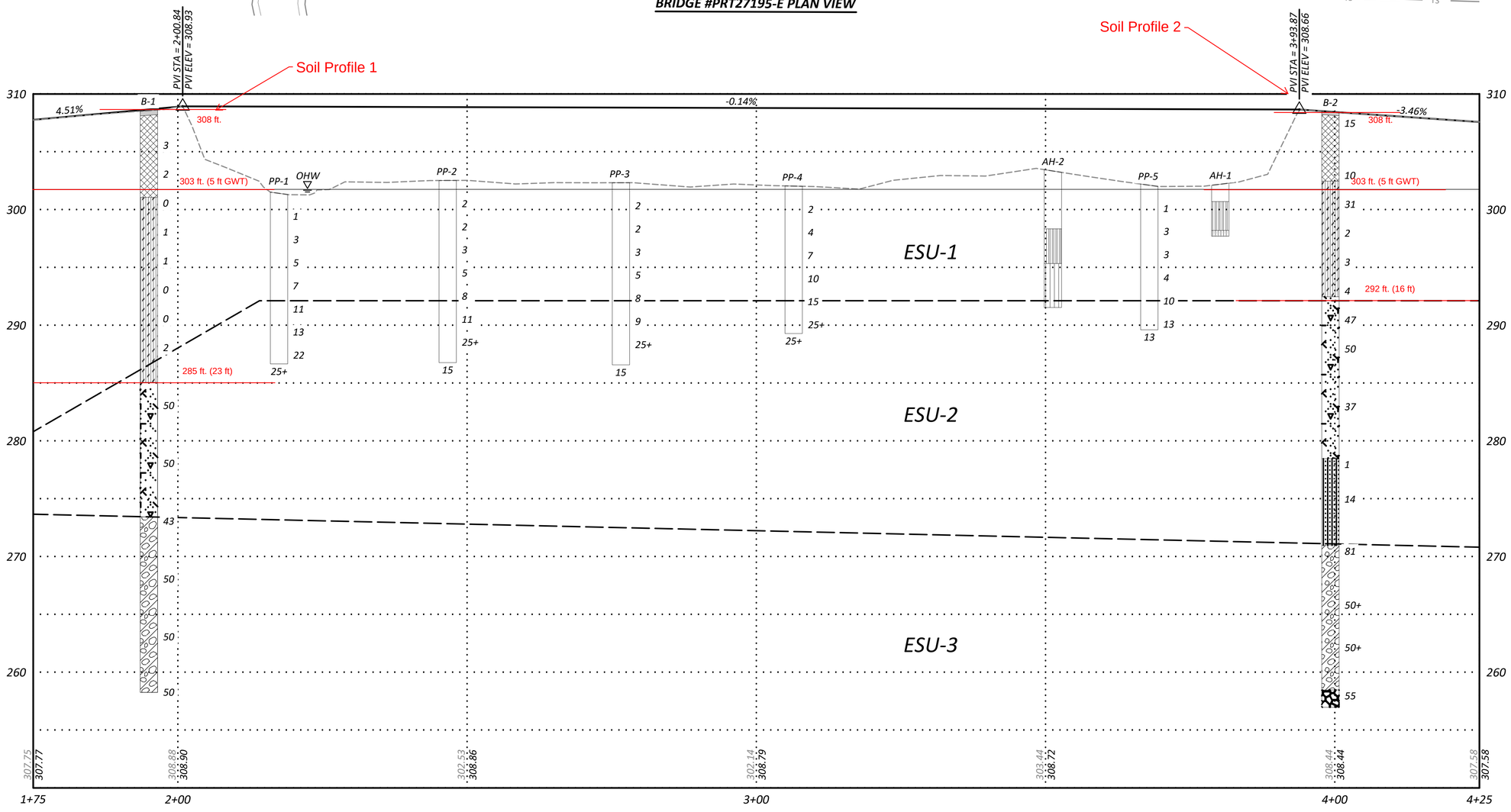
FIGURE 3



BRIDGE #PRT27195-E PLAN VIEW



BRIDGE #PRT27195-E SUBSURFACE PROFILE VIEW

10 0 10 20
SCALE IN FEET

LEGEND

XX# BORING/TESTING LOCATION

GENERAL NOTES:

1. ESU = ENGINEERING SOIL UNIT
2. SUBSURFACE STRATIGRAPHY IS DELINEATED ACCORDING TO GEOTECHNICAL ENGINEERING PROPERTIES.
3. SEE REPORT FOR GEOLOGICAL INTERPRETATION AND ASSIGNED ENGINEERING PROPERTIES.

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SKI PARK BRIDGE #PRT27195-E
3 MILES E/O ORTING
GEOTECHNICAL SUBSURFACE SOILS PROFILE
P-111399

SHEET 1 OF 1

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APPENDIX A

EXPLORATION LOGS

LOG OF BORING
No. B-1

PROJECT: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting **CRP NO.:** P-111399
LOCATION: 5ft. south of south bridge abutment **ELEVATION:** 308' CVweb
STATION: **OFFSET:** 3ft from CL **LOGGED BY:** Henry Gertje
DRILLER: Holt Drilling - Abraham Causland **DATE:** 8/22/2023
DRILL RIG: Mobile B-57 track mount

DEPTH TO WATER - INITIAL ▽ 5' **AFTER 24 HOURS:** ▽ **CAVING>** C 45'

Depth (feet)	Blow count	N Value	Color	%200	Description	Graphic	Sample No.	Recovery
0					asphalt 0.4'			
					0.4			
	4	3	dk gry		fill, tricone to 2.5'		S1	0.3
	1				m gravel			
	2	2	▽ brn/gry		washed out, no sample		S2	0.3
	5				mf gravel w/ mottled white paste, waxy,			
	1				odorless, soluable. Fill to 7.5'.			
8	1	0	med gry				S3	0.0
	0				7.5			
	0				silt, trace gravel and organics, moist, soft,			
	0	1			low plasticity		S4	0.0
	1				driller notes peat in mud return. no sample			
	0	1	gry	79	silt with sand		S5	1.4
	1				plastic silt, fibrous organics, soft, wet			
	0							
16	0	0	gry				S6	0.4
	1							
	0	0	gry	92	silt/clay, trace gravel, wet, plastic, soft		S7	1.5
	0							
	0	2	gry	29	cf sand, plastic silt, some mf gravel, wet,		S8	1.5
	0				plastic			
	0							
24	0				23.5			
	2				some resistance. rotor to 25'			
	0	50	gry brn		mottled cf sand, some clayey silt, little mf		S9	0.9
	12				gravel, plastic, wet, compact			
	50/5"							
					Increasing resistance to rotor drill. very			
	3	50	gry		hard		S10	0.3
32	3				cf sand, some cf angular gravel and clayey			
	50				silt, coarse gravel in sampler tip			
	18	43	gry brn		mottled dark gray and rust brown, cf gravel		S11	0.6
	21				and sand, little clayey silt, wet, dense			
	22							
40								
	45	50	gry brn				S12	0.8
	50/4"							
	10	50	C gry brn				S-13	0.2
	50/4"							
48								
	50/3"	50	gry brn				S-14	0.0
					Boring terminated at 50.3 ft.			

TEST RESULTS
Plastic Limit ⊢—⊣ Liquid Limit
Water Content - ●
Penetration - ▨
25 50 75 100 125

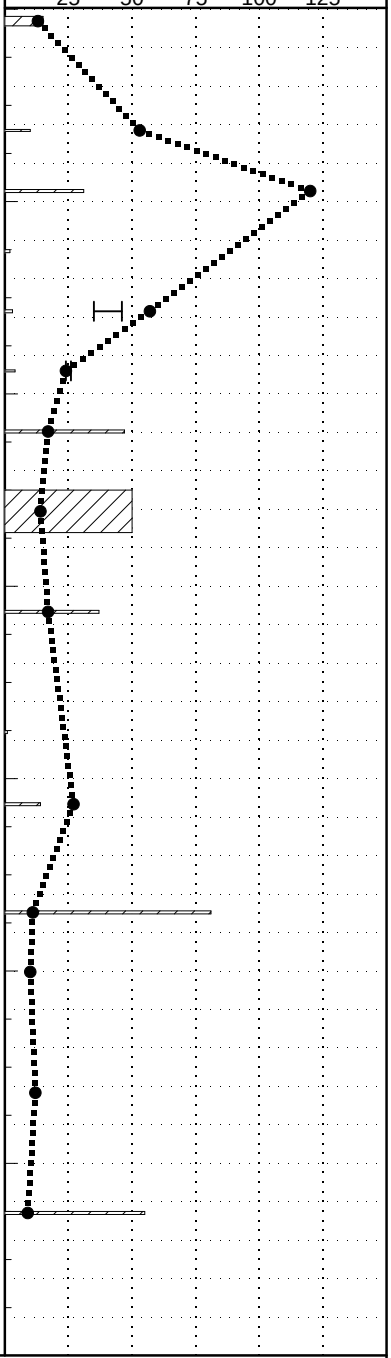
LOG OF BORING
No. B-2

PROJECT: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting **CRP NO.:** P-111399
LOCATION: 5ft. north of north bridge abutment **ELEVATION:** 304' CVweb
STATION: **OFFSET:** 3ft from CL **LOGGED BY:** Henry Gertje
DRILLER: Holt Drilling - Abraham Causland **DATE:** 8/23/2023
DRILL RIG: Mobile B-57 track mount

DEPTH TO WATER - INITIAL ▽ 5' **AFTER 24 HOURS:** ▽ **CAVING>** C 10', 20'

Depth (feet)	Blow count	N Value	Color	%200	Description	Graphic	Sample No.	Recovery
0								
	6 6 9	15	gray		asphalt		S1	0.6
					0.3 cf sand and mf gravel cobbly drilling to 5 ft.			
	12 5 5	10	brn/gry		Fill		S2	0.8
8	1 1 1	31	gry/brn	53	6.0 silt and clay with organics wood in sampler tip		S3	1.2
	30 1 1	2	C		caving of hole. no recovery		S4	0.0
	1 1 2	3	dk.gry	55	silt and clay, little cf sand and f gravel, wood, med stiff		S5	1.5
16	2 1 1	4	med gry	29	fine to granular transition		S6	1.4
	3 1 31	47	gry blk		16.0 silty sand with gravel		S7	0.9
	37 10 11	50	gry		some clayey silt		S8	0.9
24	40 50/4" 17	37	gry	23	dense		S9	1.0
	19 18 4	1	gry		30.0 silty sand		S10	0.5
32	1 0 3	14	dk gry	16	med dense		S11	0.7
	3 11 32	81	gry	7.5	37.5 poorly graded gravel with silt, angular to sub-rounded, dense		S12	0.8
40	45 36 38		gry	9.1	cobbly drilling to 45'		S13	0.5
	50/3" 50/6"		brn/gry		cobbly drilling to 50' driller notes fluid loss		S14	0.4
48								
	27 28 27	55	gry	5.8	50.0 well graded gravel with silt		S15	0.8
					Boring terminated at 51.5 ft.			

TEST RESULTS
Plastic Limit ⊢ Liquid Limit
Water Content - ●
Penetration - ▨
25 50 75 100 125

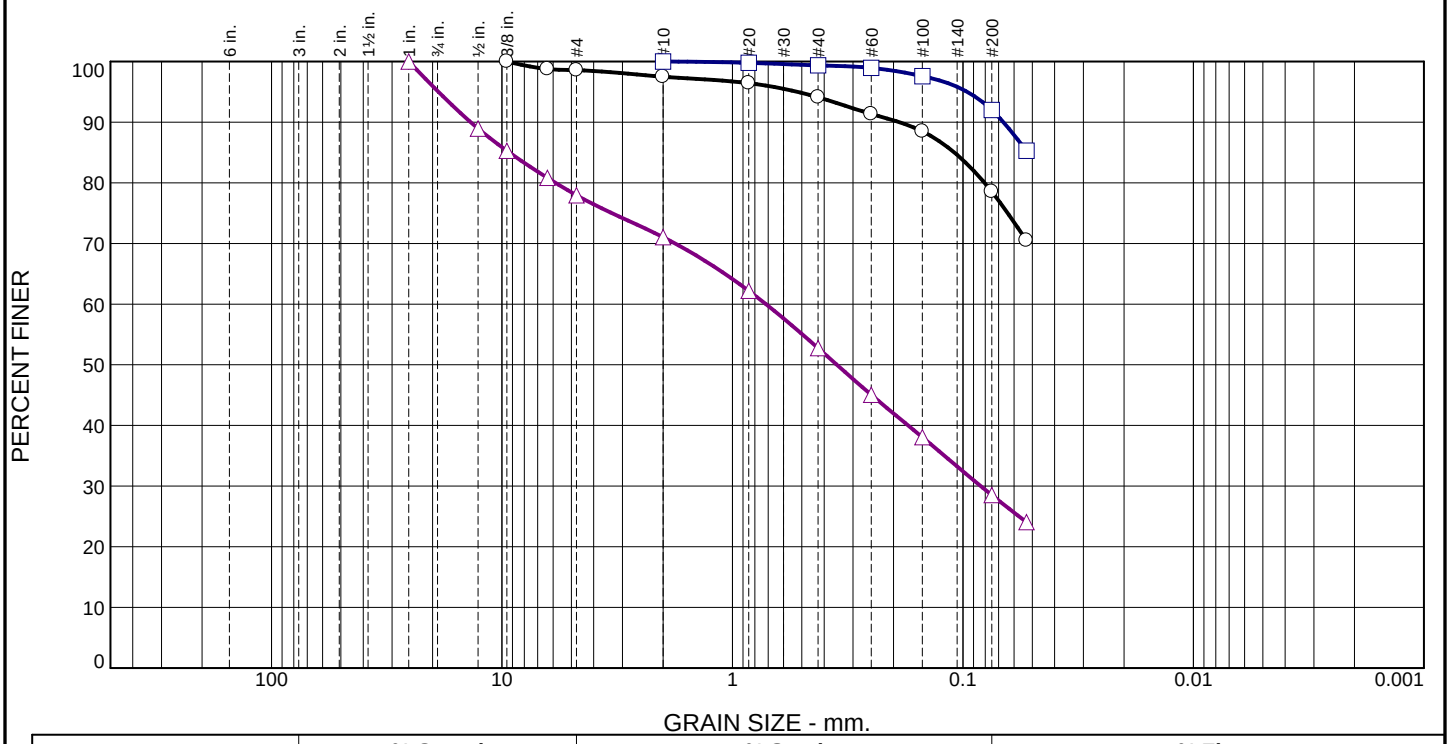


Pierce County Public Works

APPENDIX B

GEOTECHNICAL LABORATORY TESTING

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	2	3	15	79	
□	0	0	0	0	1	7	92	
△	0	5	17	7	18	24	29	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	42	30	0.1090							
□	40	25								
△	29	21	9.2973	0.7155	0.3523	0.0838				

Material Description	USCS	AASHTO
○ plastic silt, fibrous organics, soft, wet	ML	A-7-5(11)
□ silt/clay, trace gravel, wet, plastic, soft	CL	A-6(15)
△ cf sand, plastic silt, some mf gravel, wet, plastic	SC	A-2-4(0)

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** B-1 **Depth:** 12.5 **Sample Number:** S5

□ **Source of Sample:** B-1 **Depth:** 17.5 **Sample Number:** S7

△ **Source of Sample:** B-1 **Depth:** 20.0 **Sample Number:** S8

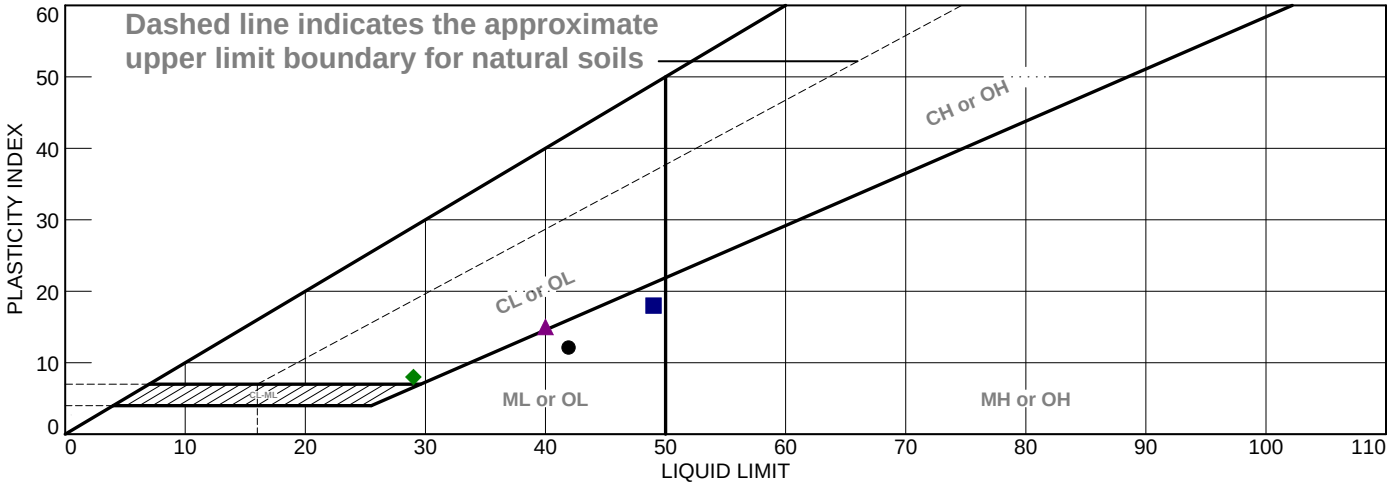
Remarks:

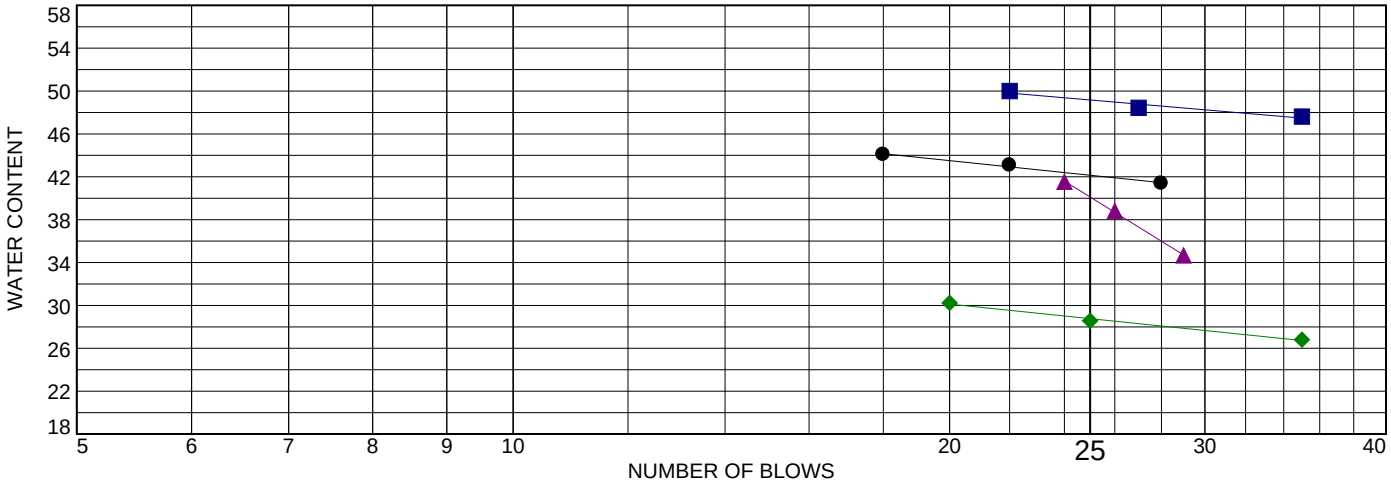
Pierce County
Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	plastic silt, fibrous organics, soft, wet	42	30	12	94	79	ML
■	same	49	31	18			
▲	silt/clay, trace gravel, wet, plastic, soft	40	25	15	99	92	CL
◆	cf sand, plastic silt, some mf gravel, wet, plastic	29	21	8	53	29	SC

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

Remarks:

●**Source of Sample:** B-1 **Depth:** 12.5 **Sample Number:** S5

■**Source of Sample:** B-1 **Depth:** 15.0 **Sample Number:** S6

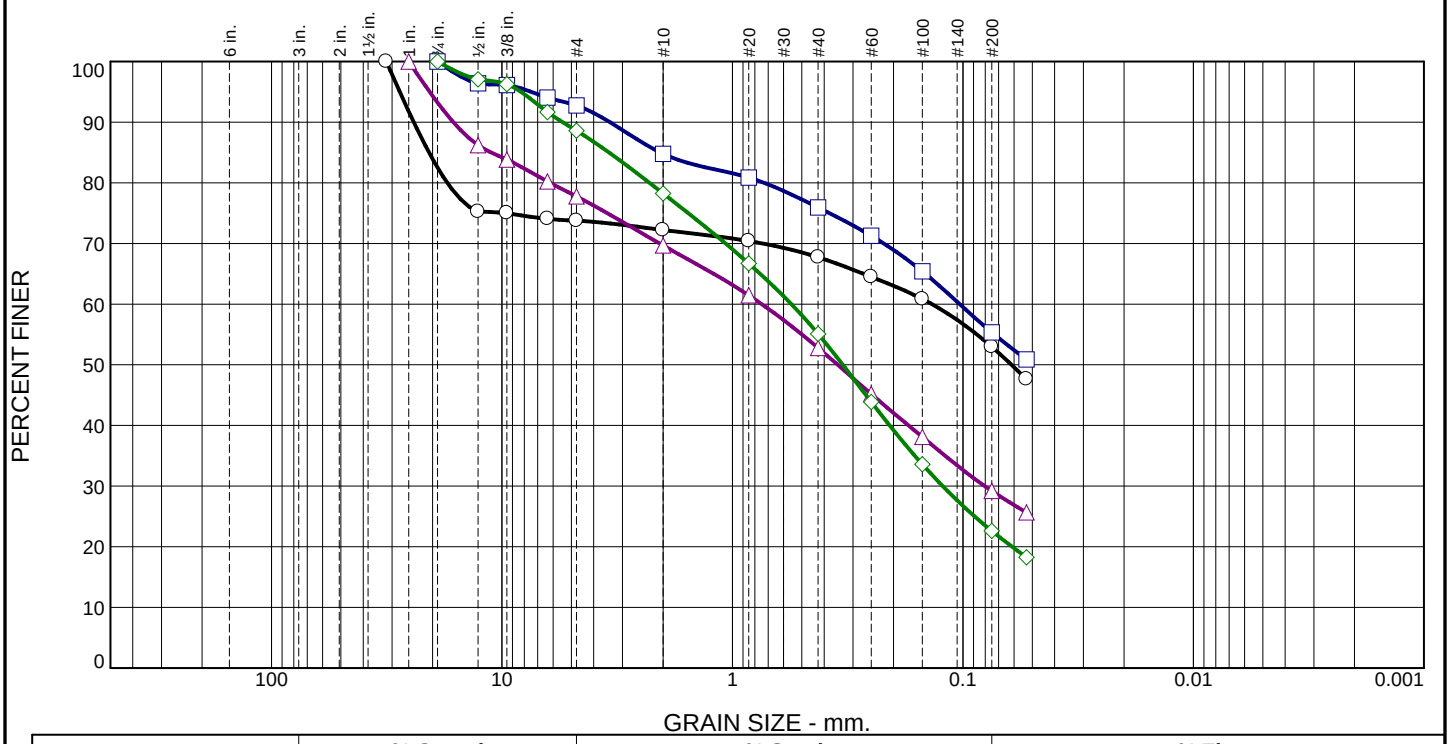
▲**Source of Sample:** B-1 **Depth:** 17.5 **Sample Number:** S7

◆**Source of Sample:** B-1 **Depth:** 20.0 **Sample Number:** S8

Pierce County
Public Works

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	17	9	2	4	15	53	
□	0	0	7	8	9	21	55	
△	0	7	15	8	17	24	29	
◇	0	0	11	11	23	32	23	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	20.7286	0.1364	0.0616					
□	46	35	2.0559	0.1033						
△	26	24	11.1487	0.7463	0.3495	0.0805				
◇			3.4312	0.5554	0.3321	0.1224				

Material Description	USCS	AASHTO
○ silt and clay with wood in sampler tip	ML	A-4(0)
□ silt and clay, little cf sand and f gravel, wood, med stiff	ML	A-7-5(5)
△ cf sand , mf gravel, silty clay, trace wood. fine to granular transition	SM	A-2-4(0)
◇ cf sand, little f gravel and silt, dense		

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** B-2 **Depth:** 7.5 **Sample Number:** S3

□ **Source of Sample:** B-2 **Depth:** 12.5 **Sample Number:** S5

△ **Source of Sample:** B-2 **Depth:** 15.0 **Sample Number:** S6

◇ **Source of Sample:** B-2 **Depth:** 25.0 **Sample Number:** S9

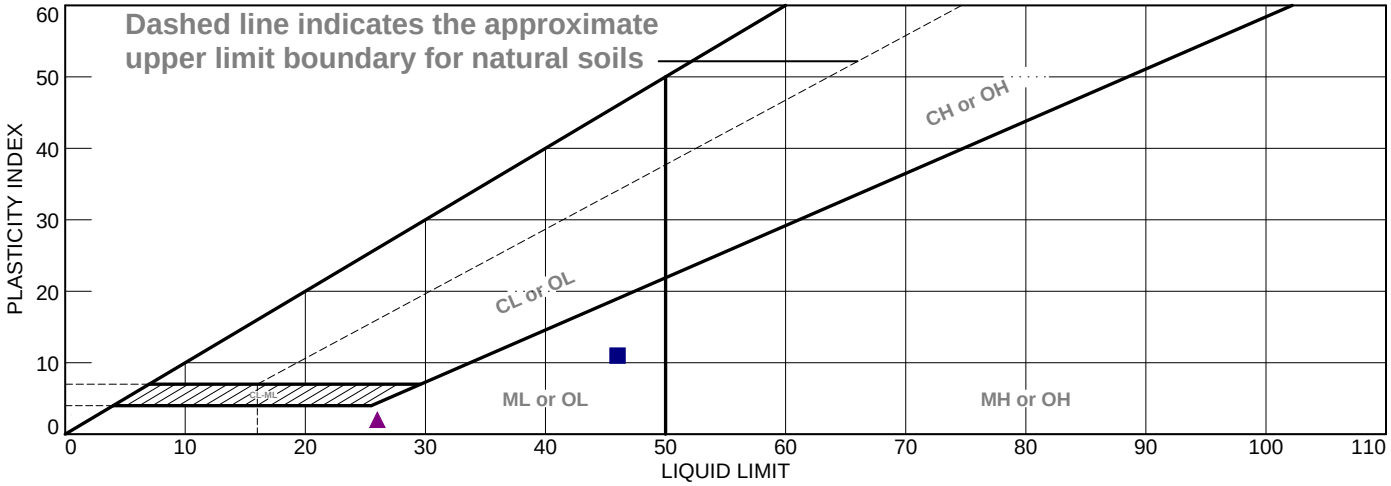
Remarks:

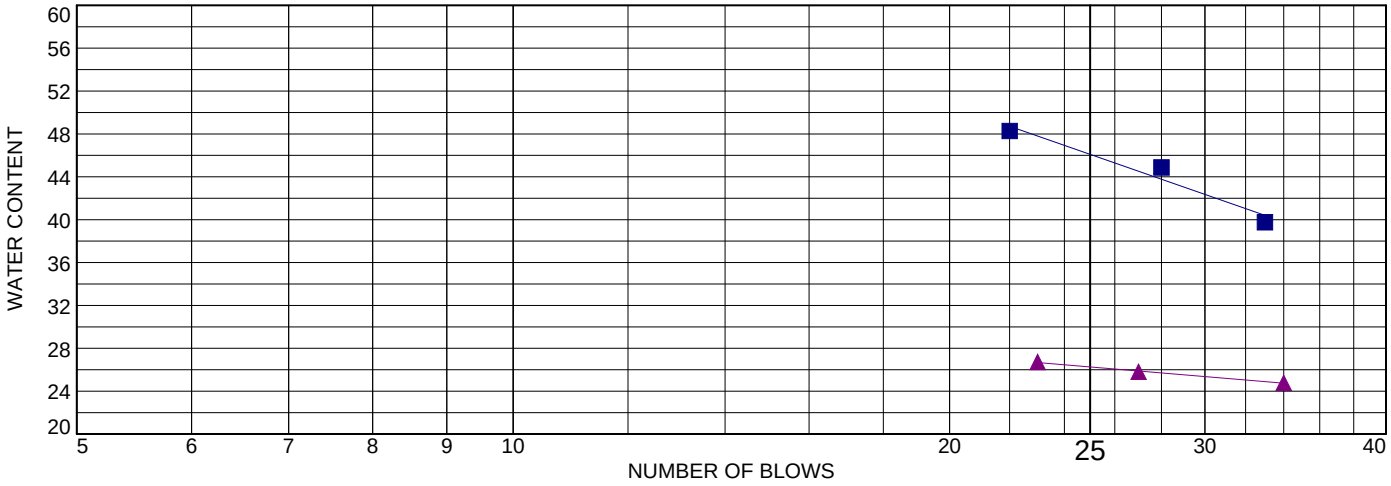
Pierce County
Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	silt and clay with wood in sampler tip	NP	NP	NP	68	53	ML
■	silt and clay, little cf sand and f gravel, wood, med stiff	46	35	11	76	55	ML
▲	cf sand , mf gravel, silty clay, trace wood. fine to granular transition	26	24	2	53	29	SM

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

●**Source of Sample:** B-2 **Depth:** 7.5 **Sample Number:** S3

■**Source of Sample:** B-2 **Depth:** 12.5 **Sample Number:** S5

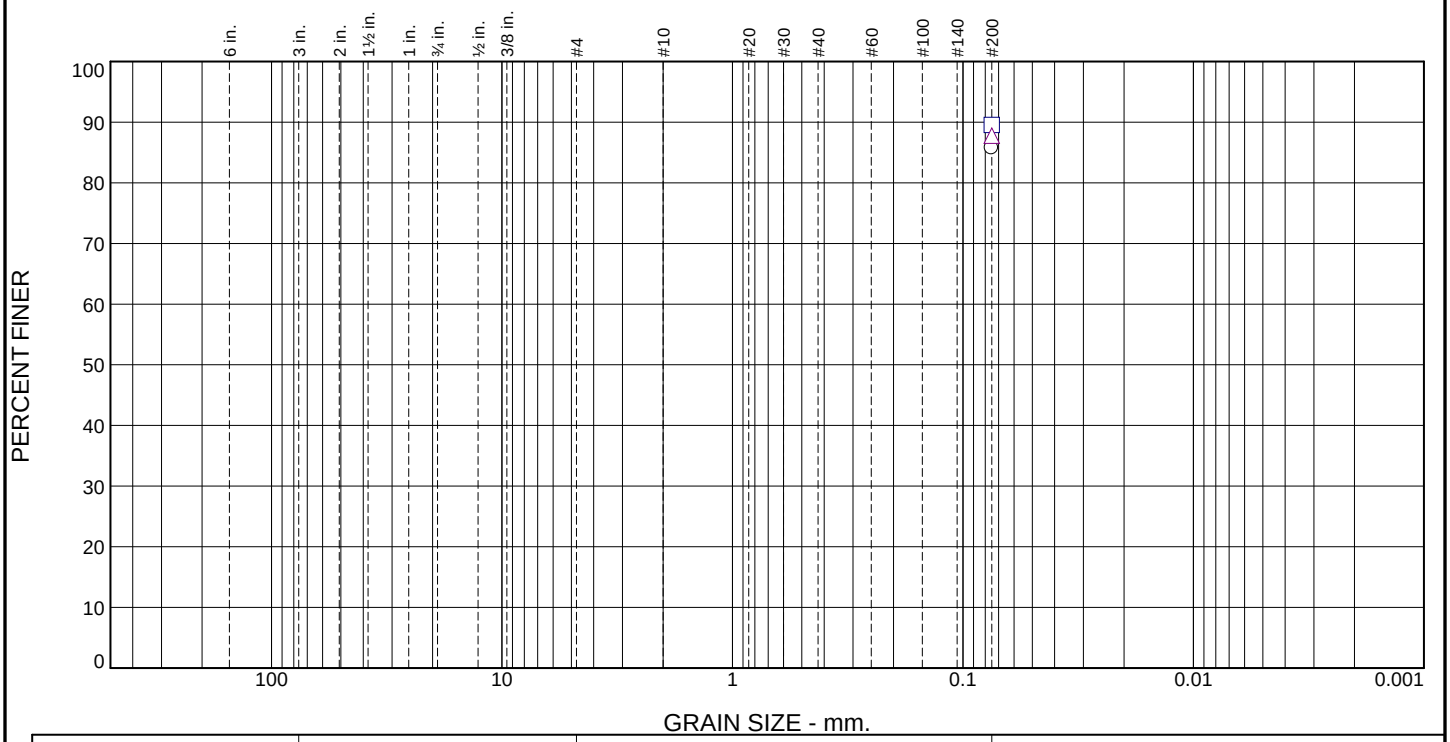
▲**Source of Sample:** B-2 **Depth:** 15.0 **Sample Number:** S6

Remarks:

Pierce County
Public Works

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							85.7	
□							89.5	
△							87.8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	64	43								
△										

	Material Description	USCS	AASHTO
○			
□	Elastic silt	MH	
△			

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-1 **Depth:** 0.5' **Sample Number:** S1

□ **Source of Sample:** AH-1 **Depth:** 1.5' **Sample Number:** S2

△ **Source of Sample:** AH-1 **Depth:** 2.0' **Sample Number:** S3

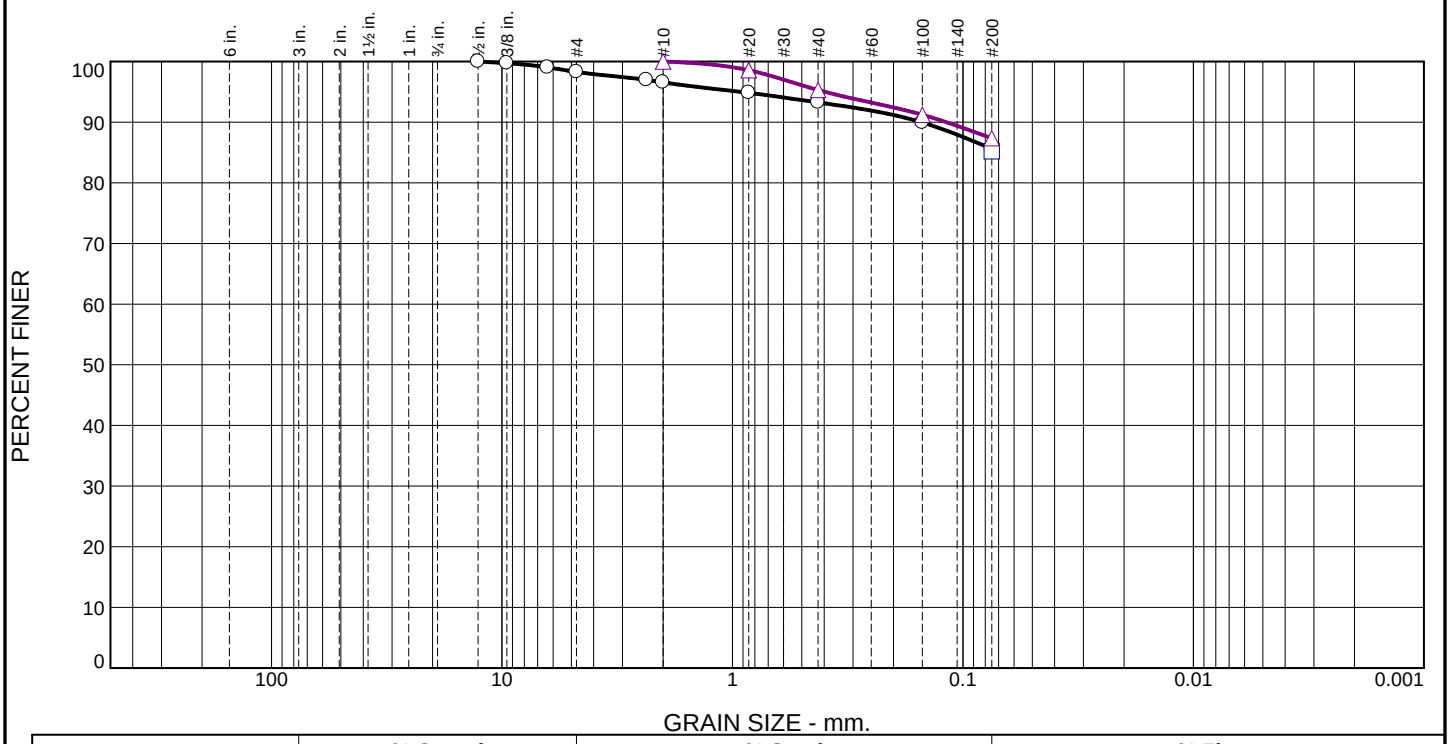
Remarks:

Pierce County Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.7	1.7	3.3	7.7	85.6	
□							85.2	
△	0.0	0.0	0.0	0.0	4.7	8.0	87.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	82	58								
△										

	Material Description	USCS	AASHTO
○			
□	elastic silt with sand	ML/SM	
△			

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-1 **Depth:** 2.5' **Sample Number:** S4

□ **Source of Sample:** AH-1 **Depth:** 4' **Sample Number:** S5

△ **Source of Sample:** AH-1 **Depth:** 4.5' **Sample Number:** S6

Remarks:

□ Most material retained above the #40 is organics.

Pierce County Public Works

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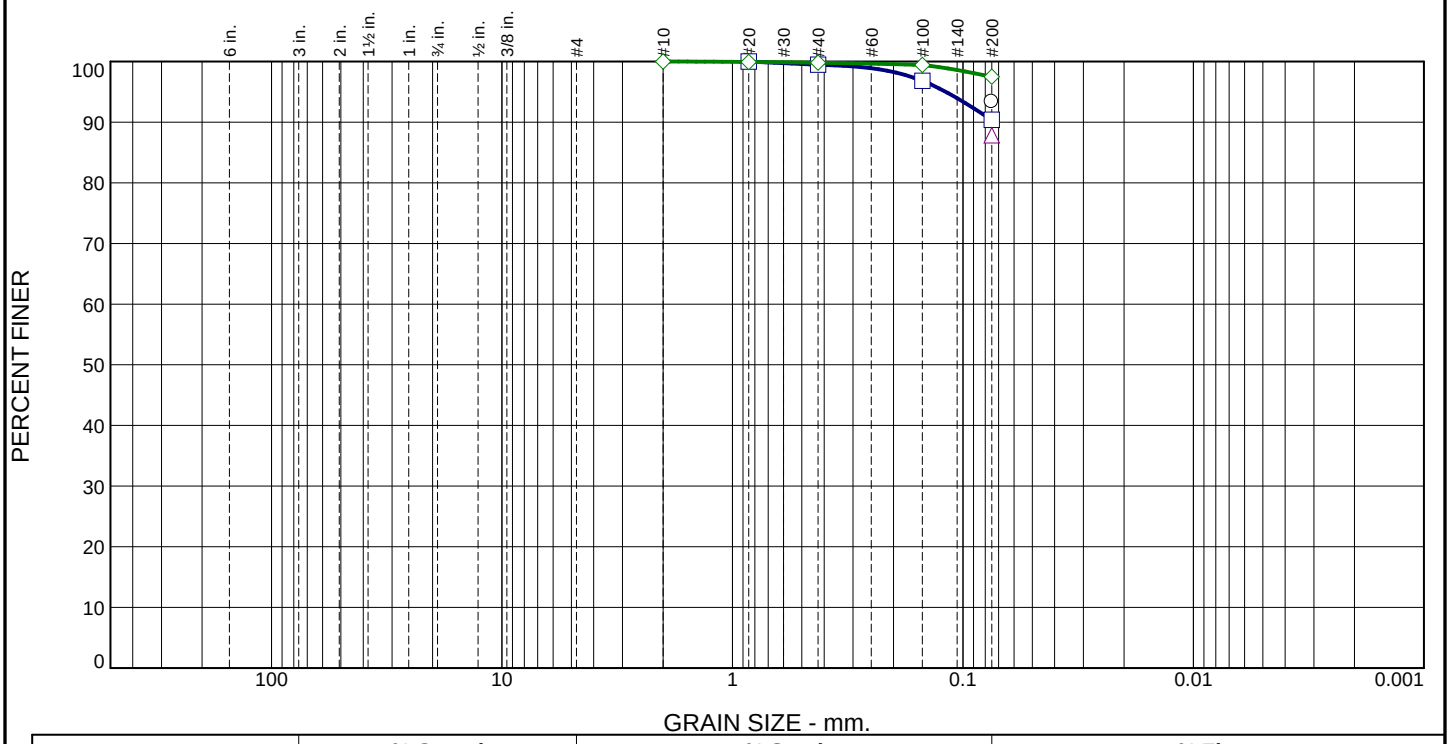
Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							93.4	
□	0.0	0.0	0.0	0.0	0.5	9.1	90.4	
△							87.8	
◇	0.0	0.0	0.0	0.0	0.2	2.3	97.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	63	45								
△										
◇	47	32								

	Material Description	USCS	AASHTO
○			
□	elastic silt	MH	A-7-5(23)
△			
◇	silt	ML/MH	A-7-5(19)

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-2 **Depth:** 4.5' **Sample Number:** S1

□ **Source of Sample:** AH-2 **Depth:** 5.0' **Sample Number:** S2

△ **Source of Sample:** AH-2 **Depth:** 6.3' **Sample Number:** S3

◇ **Source of Sample:** AH-2 **Depth:** 8.0' **Sample Number:** S4

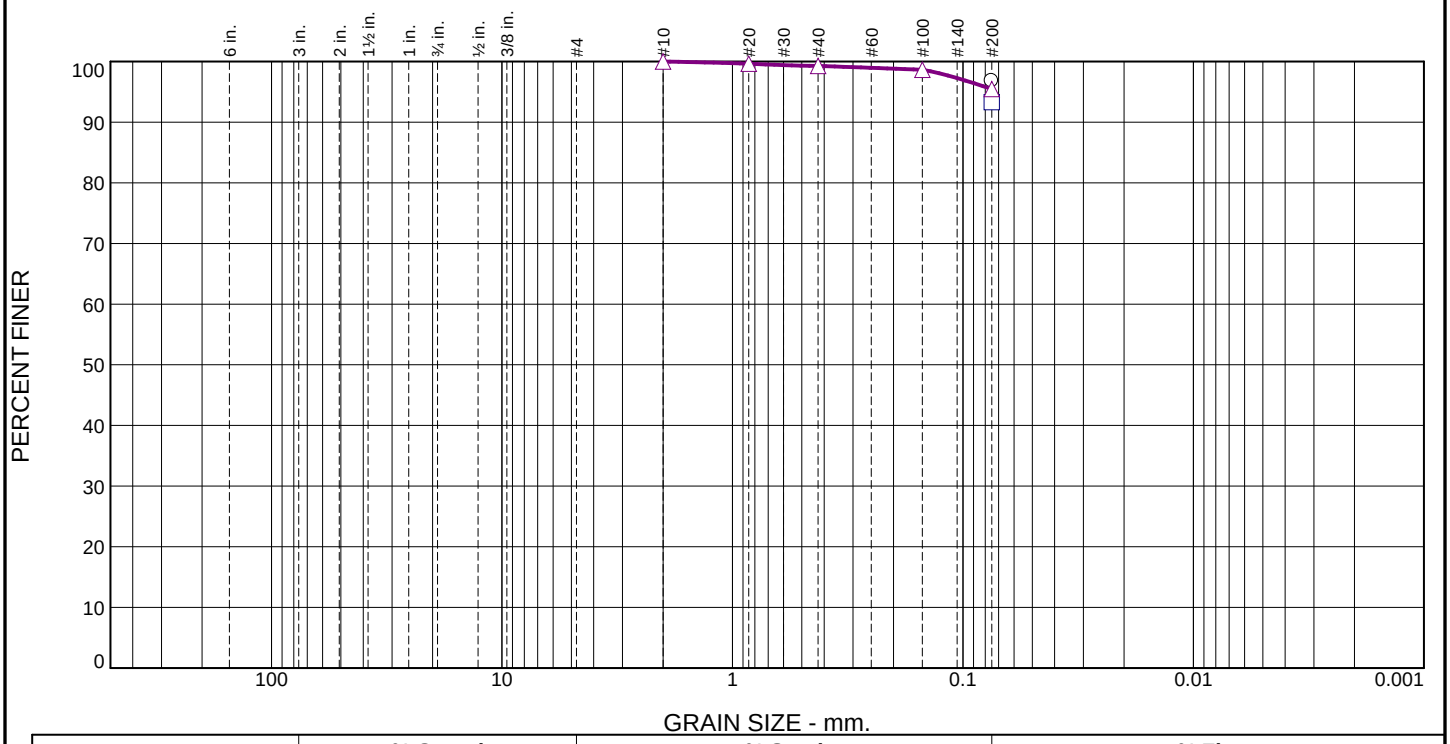
Remarks:

Pierce County
Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							96.8	
□							93.3	
△	0.0	0.0	0.0	0.0	0.7	3.8	95.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□										
△	38	30								

	Material Description	USCS	AASHTO
○			
□			
△	silt	ML	A-4(10)

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-2 **Depth:** 9.0' **Sample Number:** S5

□ **Source of Sample:** AH-2 **Depth:** 9.9' **Sample Number:** S6

△ **Source of Sample:** AH-2 **Depth:** 11.8' **Sample Number:** S7

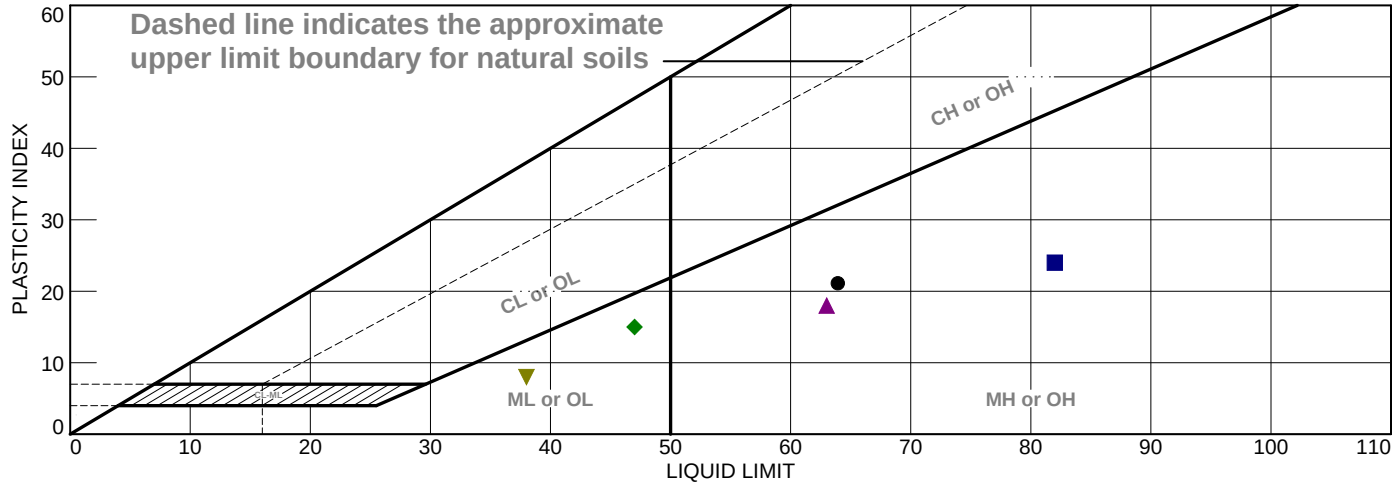
Remarks:

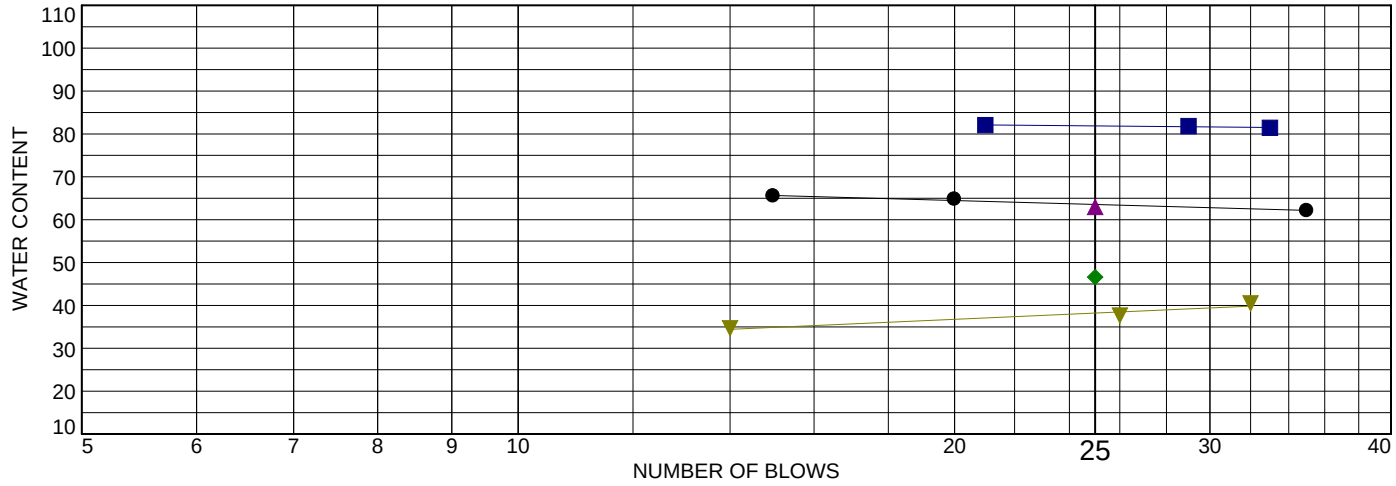
Pierce County Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Elastic silt	64	43	21		89.5	MH
■	elastic silt with sand	82	58	24		85.2	
▲	elastic silt	63	45	18	99.5	90.4	MH
◆	silt	47	32	15	99.8	97.5	ML/MH
▼	silt	38	30	8	99.3	95.5	ML

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

● **Source of Sample:** AH-1 **Depth:** 1.5' **Sample Number:** S2

■ **Source of Sample:** AH-1 **Depth:** 4' **Sample Number:** S5

▲ **Source of Sample:** AH-2 **Depth:** 5.0' **Sample Number:** S2

◆ **Source of Sample:** AH-2 **Depth:** 8.0' **Sample Number:** S4

▼ **Source of Sample:** AH-2 **Depth:** 11.8' **Sample Number:** S7

Pierce County
Public Works

Remarks:

■ Sample A-1 S-6 (not tested for LL/ PL) had an organic matter content of 14.6%

▼ Sample A-2 S-7 had an organic matter content of 4.4%

All samples NM value may be slightly higher than in-situ material due to underwater augering.

Tested By: Nick Averill **Checked By:** Nick Averill

APPENDIX C

CONETEC REPORT

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP1, Between Pier 2 & 3
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 450
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	2	8.9	••	2	VERY LOOSE	SOFT
- 1 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 5 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 6 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 2 m	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 7 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 8 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
-	10	34.2	•••••••••	9	LOOSE	STIFF
- 9 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
- 3 m 10 ft	12	41.0	•••••••••••	11	MEDIUM DENSE	STIFF
-	6	18.4	•••••	5	LOOSE	MEDIUM STIFF
-	5	15.3	••••	4	VERY LOOSE	SOFT
-	12	36.7	••••••••••	10	LOOSE	STIFF
- 11 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
-	14	42.8	••••••••••••	12	MEDIUM DENSE	STIFF
-	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
- 12 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
-	14	42.8	••••••••••••	12	MEDIUM DENSE	STIFF
-	16	49.0	•••••••••••••••	13	MEDIUM DENSE	STIFF
- 4 m 13 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF

HOLE #: PP1, Between Pier 2 & 3 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
14 ft	28	77.6	••••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
	27	74.8	••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
	38	105.3	••••••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
15 ft						
16 ft						
5 m						
17 ft						
18 ft						
19 ft						
6 m						
20 ft						
21 ft						
22 ft						
7 m 23 ft						
24 ft						
25 ft						
26 ft						
8 m						
27 ft						
28 ft						
29 ft						
9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP2, Between Pier 4 & 5
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 490
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	3	13.3	••••	3	VERY LOOSE	SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	3.9	•	1	VERY LOOSE	VERY SOFT
- 4 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 2 m	4	15.4	••••	4	VERY LOOSE	SOFT
- 7 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 9 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 m 10 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	27.5	••••••••	7	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 12 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	13	39.8	•••••••••••••	11	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 4 m 13 ft	14	42.8	••••••••••••••	12	MEDIUM DENSE	STIFF

HOLE #: PP2, Between Pier 4 & 5 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
- 14 ft	34	94.2	••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	16	44.3	••••••••••••	12	MEDIUM DENSE	STIFF
-	26	72.0	••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
- 15 ft	19	52.6	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
- 16 ft						
- 5 m						
-						
- 17 ft						
-						
-						
- 18 ft						
-						
-						
- 19 ft						
-						
- 6 m						
- 20 ft						
-						
-						
- 21 ft						
-						
-						
- 22 ft						
-						
-						
- 7 m 23 ft						
-						
-						
- 24 ft						
-						
-						
- 25 ft						
-						
-						
- 26 ft						
- 8 m						
-						
- 27 ft						
-						
-						
- 28 ft						
-						
-						
- 29 ft						
-						
- 9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP3, Between Pier 4 & 5
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	3	13.3	••••	3	VERY LOOSE	SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	3.9	•	1	VERY LOOSE	VERY SOFT
- 4 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 2 m	4	15.4	••••	4	VERY LOOSE	SOFT
- 7 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 9 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 m 10 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	27.5	••••••••	7	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 12 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	13	39.8	•••••••••••••	11	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 4 m 13 ft	14	42.8	••••••••••••••	12	MEDIUM DENSE	STIFF

HOLE #: PP3, Between Pier 4 & 5 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
- 14 ft	34	94.2	••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	16	44.3	••••••••••••	12	MEDIUM DENSE	STIFF
-	26	72.0	••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
- 15 ft	19	52.6	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
- 16 ft						
- 5 m						
-						
- 17 ft						
-						
-						
- 18 ft						
-						
-						
- 19 ft						
-						
- 6 m						
- 20 ft						
-						
-						
- 21 ft						
-						
-						
- 22 ft						
-						
-						
- 7 m 23 ft						
-						
-						
- 24 ft						
-						
-						
- 25 ft						
-						
-						
- 26 ft						
- 8 m						
-						
- 27 ft						
-						
-						
- 28 ft						
-						
-						
- 29 ft						
-						
- 9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP4, Between Pier 8 & 9
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
- 3 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 1 m	3	13.3	••••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 4 ft	4	15.4	••••	4	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 5 ft	4	15.4	••••	4	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	6	23.2	•••••••	6	LOOSE	MEDIUM STIFF
- 6 ft	7	27.0	••••••••	7	LOOSE	MEDIUM STIFF
-	7	27.0	••••••••	7	LOOSE	MEDIUM STIFF
- 2 m	8	30.9	•••••••••	8	LOOSE	MEDIUM STIFF
- 7 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 8 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	12	41.0	•••••••••••	11	MEDIUM DENSE	STIFF
-	13	44.5	••••••••••••	12	MEDIUM DENSE	STIFF
- 9 ft	16	54.7	••••••••••••••	15	MEDIUM DENSE	STIFF
-	17	58.1	•••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	16	54.7	••••••••••••••	15	MEDIUM DENSE	STIFF
-	18	55.1	••••••••••••••	15	MEDIUM DENSE	STIFF
-	23	70.4	••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	26	79.6	•••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
- 11 ft	24	73.4	••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	44	134.6	••	25+	DENSE	HARD
-	29	88.7	•••••••••••••••••••••••	25	MEDIUM DENSE	VERY STIFF
- 12 ft	30	91.8	••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	36	110.2	••••••••••••••••••••••••••••••	25+	DENSE	HARD
-	42	128.5	••••••••••••••••••••••••••••••••••	25+	DENSE	HARD
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP5, Between Pier 11 & 12
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 390
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	2	8.9	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 2 m	6	23.2	•••••••	6	LOOSE	MEDIUM STIFF
- 7 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
- 9 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 3 m 10 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	10	30.6	•••••••••	8	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••	9	LOOSE	STIFF
-	15	45.9	•••••••••••••	13	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••	10	LOOSE	STIFF
- 12 ft	16	49.0	••••••••••••••	13	MEDIUM DENSE	STIFF
-	15	45.9	•••••••••••••	13	MEDIUM DENSE	STIFF
-						
- 4 m 13 ft						

APPENDIX D

PRIOR GEOTECHNICAL REPORT

PIERCE COUNTY PLANNING AND PUBLIC WORKS
OFFICE OF THE COUNTY ENGINEER DIVISION
FIELD ENGINEERING SECTION

M E M O R A N D U M

Date: January 11, 2022

To: Ben Norton, P.E.

From: Henry Gertje, P.E.

Subject: Geotechnical Memorandum - Bridge PRT27195-E
Project #P-111399
Project Name: Ski Park Bridge
Location: Foothills Trail, 3.4 miles E/O Orting

Introduction

The County Bridge Office requested my assessment of soil conditions and possible foundation types for rehabilitating the substructure of Bridge PRT27195-E. On file bridge inspection reports characterize advanced decay of the timber pilings and substructure elements. I recommended we provide preliminary subsurface explorations via manual methods. With the initial subsurface exploration completed, this memorandum provides a(n):

- Summary of explorations made via portable penetrometer and hand auger.
- Characterization of subsurface conditions.
- Assessment of deep foundation types to support structural rehabilitation.
- Assessment of replacing the existing railroad trestle bridge with a shallow foundation structures.
- Recommendations for geotechnical explorations for final engineering design and construction.

Project Site

Bridge PRT27195-E is located approximately 3 miles east of Orting. The Foothills Trail trends northeast-southwest within a 200-foot strip between SR-162 and South Prairie Carbon River Road East. The bridge is approximately 192 feet in length, with 14 bents, with varying span lengths of 13-16 feet. The site is located about 250 feet east of South Prairie Creek and 3/4 mile north of the Carbon River. A human-made recreational lake, Ski Park, parallels the trail approximately 100 feet to the east. A site-specific survey was not available for this study. "Attachment A" provides a vicinity map.

The ground surface under the bridge and the adjoining strips between SR-162 and South Prairie Carbon River Road East is essentially level. It is densely vegetated with brush and trees including blackberry, willow, cottonwood, and alder. During our site visit on December 29, 2021, we were able to see the ground surface between the bridge and the parallel roads as there were no leaves. Shallow standing water was present under much of the bridge.

LiDAR imagery shows the site is well-centered within the ancestral floodplain of South Prairie Creek. County View (GIS) shows that the ground surface under the bridge is approximately elevation 303 feet, which is 4 to 5 feet higher than the confluence of South Prairie Creek. The area is substantially modified by embankments placed under the railroad, SR-162, South Prairie Carbon River Road and the berms surrounding Ski Park Lake. The pre-development ground surface appears to have been terraced, with gradual slopes to the south, resulting from erosion by South Prairie Creek. A drainage outfall from Ski Park Lake passes beneath South Prairie Carbon River Road East through a 3-foot diameter concrete culvert and flows beneath Bridge PRT27195-C with the main channel located in Span 2.

The Washington State Department of Natural Resources Tacoma Geological Quadrangle identifies this soil unit as loose, stratified to massively bedded fluvial silt, sand, and gravel, including estuarine deposits. Our site visit and subsurface explorations confirmed the presence of alluvium, including highly organic wetland deposits overlying silt-dominant estuarine deposits.

Data Collection

Subsurface explorations performed for this phase of explorations included portable penetrometer tests ranging to 15.6 feet in depth and two auger probes ranging to 11 feet in depth. Ground surface elevations were not taken at the testing locations. “Attachment B”, the Geotechnical Exploration Plan, provides a plan and profile of Bridge PRT27195-E with testing locations.

On October 7, 2021, five portable penetrometer tests were performed by Pierce County personnel using a Wildcat Dynamic Cone Penetrometer. This manually operated system consists of a 35-pound hammer dropped onto a 2.75 cm (1.08") diameter steel rod driving a sacrificial 3.75 cm (1.5") diameter steel cone. The rods are hollow and allow for a fluid slurry to flow to the bottom of the rods. The oversized cone and slurry prevent rod friction and assures that tip resistance is isolated during driving. As indicated in the Dynamic Cone logs, cone penetrometer blow counts per 10 cm of drive are correlated to Standard Penetration Test (ASTM 1586) blow counts.

The portable penetrometer obtains no samples, and this method is limited to about 15 feet in depth. It provides a measure of soil density, very loose to very dense in granular soils, or very soft to hard in fine grained cohesive soils.

Nearly identical density profiles were encountered in four (4) of the five (5) penetrometer tests performed. PP-4 shows a shallower and steeper transition from medium to dense than the other four probes. It should be noted that the ground surface varies across the site, and the surface elevations of the probes would be needed to improve the subsurface profile. This memorandum refers to depths at each test location.

A summary of these tests is provided in the following table. Detailed testing logs are provided in “Attachment C”.

Depth Range vs. Resistance, Portable Penetrometers

Measured Resistance *	PP-1	PP-2	PP-3	PP-4	PP-5
Very soft, N = 0-4	0-5'	0-7'	0-7'	0-5'	0-6'
Soft, N = 5-11	5'-11'	7-13'	7'-13'	5'-8'	6-11'
Medium Dense, N = 11-25	11'-15'	13-15.6'	13'-15.6"	8'-12'	11-12.5'
Dense, N = 25+				12'-12.8'	

*N-values represent correlated values of the Standard Penetrometer Test (SPT, ASTM 1586).

On December 29, 2021, two (2) manually driven auger holes were advanced alongside the bridge. Auger Hole 1 (AH-1) was advanced to 4.5 feet in depth before refusal was met. Auger Hole 2 (AH-2) was advanced to 11 feet depth and retrieved samples for laboratory testing. Laboratory tests included moisture content, gradations for particle size distribution and Plastic Limits for classification of fine grain soil plasticity.

In general, the shallow site soils are very soft with a high content of organic matter including decayed wood to a depth of 4 feet. From a depth of 4-11 feet, the soil is predominantly clayey silt ranging from soft to stiff with increasing depth. Medium dense soil was not sampled from a depth of 12-15 feet. Penetrometer 4 (PP-4), located near the middle of the bridge, encountered a more abrupt transition from very soft to dense soil at 11 feet depth. The basis for dense soil near the bottom of PP-4 is not well-defined by the probe; the shallower soil may have been modified by previously placed fill. It should be noted that auger sampling methods disturb the soil structure. It appears that the natural moisture content may not accurately reflect in-situ moisture.

Analysis

Based on manual exploration methods and available geologic information, the probes passed through very soft silt and organics, underlain by medium to stiff, slightly over-consolidated inorganic clayey silt. Soil particle sizes are likely increasing with depth near the bottom of these probes. Deeper unexplored soil is likely alluvium, which is river-deposited, stratified, and normally to slightly over consolidated sand. Soil below the maximum explored depth of 15.6 feet is likely to transition to coarser/denser material, the trend favors denser with depth. Depth to highly over-consolidated, very dense soils, including till and advance outwash with cobbles and boulders is not known.

The Pierce County Bridge Office expressed an interest in using small diameter (4-6 inch) steel pipe piles to reestablish support of the existing bridge superstructure. We observed no obstructions and a gradual transition from loose to medium dense soil above the maximum depths explored. Driven piles, or drilled shafts are feasible. However, the current maximum depth explored is not sufficient to establish the required pile capacity. Machine borings are therefore needed to confirm our current assumptions below unexplored depths.

Driven piles may advance a considerable depth before skin friction and end bearing combine to achieve the required axial capacities. Axial capacity from skin friction is expected to develop below 11 feet depth. If soil density transitions abruptly as PP-4 suggests, dense soil may begin just below 13 feet depth and skin friction would provide a minor contribution to overall axial capacity. The other four probes currently document a consistent profile below 13 feet depth,

suggesting that the transition to dense soil is more gradual. Skin friction may dominate the design of the piles or shafts and lateral bearing capacity may reduce the need for structural strength of the substructure. Lateral capacity and deep foundation constructability will be explored in more detail and addressed in the next design phase in accordance with applicable design specifications.

Conclusion and Recommendations

Initial explorations by portable penetrometer characterized the density profile along the bridge to maximum depths of 12 to 15 feet below the ground surface. Auger Hole 2 (AH-2) was advanced to 11 feet in depth, providing samples of fine-grained soil for laboratory testing. Conditions observed are moderately uniform and suitable for driven or augured small diameter piles/shafts.

Subsurface conditions are also suitable for shallow foundation options including structural earth wall supported embankment, spread footing supported/box culverts, or pin pile piers. These options would involve complete or partial removal of the existing bridge. Bridge replacement options using shallow foundations may be accomplished from the existing bridge ends, thereby reducing disturbance of adjoining ground surfaces. It is also understood that options requiring permanent ground filling may trigger permitting processes not currently within the project scope.

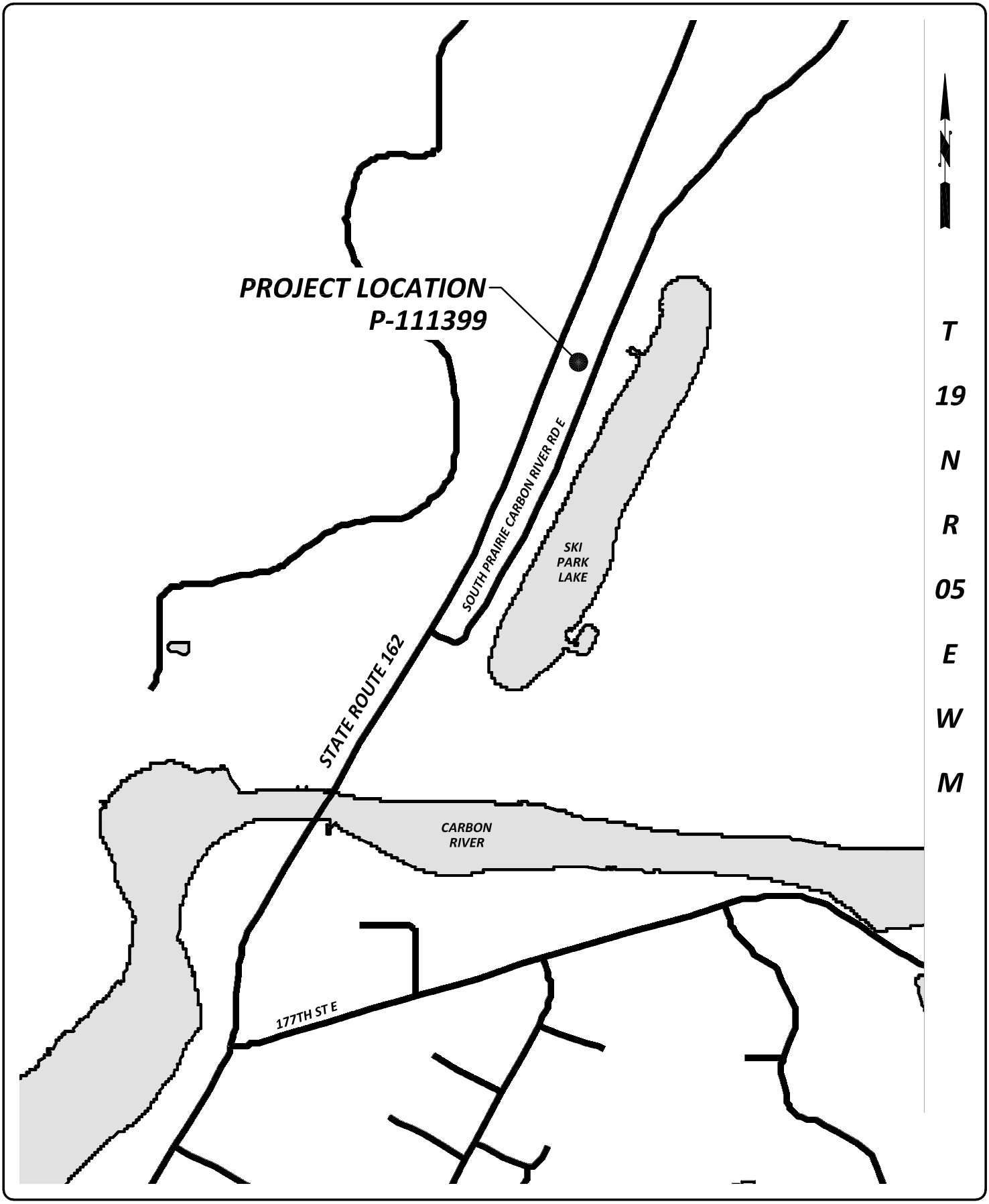
Construction access will likely extend laterally west from South Prairie Carbon River Road East to Bridge PRT27195-E. Construction of the deep foundation options would require existing vegetation to be removed along the bridge length to allow placement of temporary ground stabilization for work platforms. A pile driver or drilling machine must have access to at least one complete side of the existing structure. Additionally, casting piers, raising the superstructure and placement of cross beams would require stable work platforms or falsework at all piers.

Final design should incorporate additional subsurface data obtained by machine test boring to establish bearing elevations for deep foundations. If shallow foundation options are to be further considered, undisturbed sampling of fine-grained soil is needed for laboratory shear strength and consolidation testing. Pierce County Planning and Public Works, Office of the County Engineer is preparing a scope, budget and schedule for final design phase geotechnical explorations and engineering services as requested. It is our understanding that Parks is currently exploring environmental and permitting requirements for machine borings and construction.

HG:lgc

Attachments: A – Vicinity Map
B – Geotechnical Exploration Plan
C – Testing Logs

Attachment A



Pierce County
Planning & Public Works
Office of the County Engineer
Tacoma Mall Plaza
2702 South 42nd Street, Suite 109
Tacoma, Washington 98409
An APWA Accredited Agency

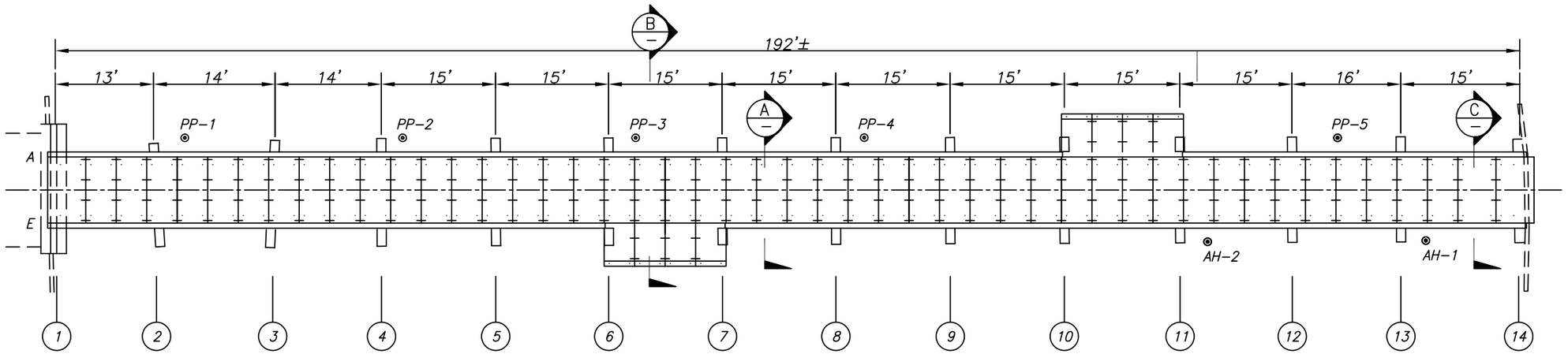
SKI PARK BRIDGE #PRT27195-C
3 MILES E/O ORTING
VICINITY MAP
P-111399

Drawing: P:\P-111399 PRT27195-E SKI PARK BRIDGE\VICINITY MAP\P-111399_VICINITYMAP.DWG Layout Tab: 8.5X11PORTRAIT
Xrefs:
Date: 01/10/2022 Time: 08:49:41 AM Plotted by: AKINGTA

Attachment B

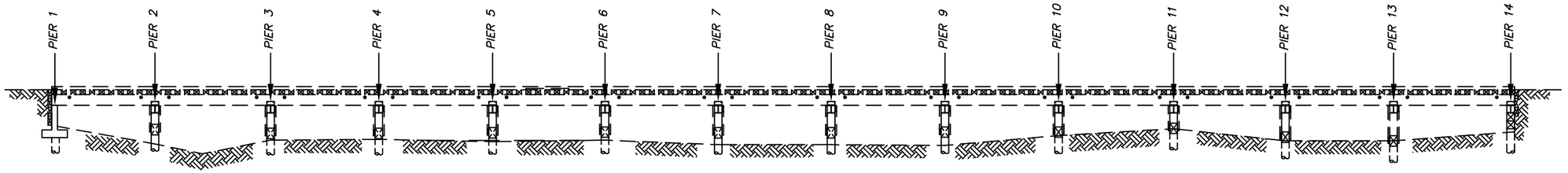
REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
10	WASH.	N.A.	1	1

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
UTILITIES UNDERGROUND LOCATION CENTER



◉ PORT-A-PEN
OR AUGUR HOLE LOCATION

PLAN VIEW



ELEVATION VIEW

PRELIMINARY PLANS
SUBJECT TO REVISION

DRAWING NO.: 27195-E_GT PLAN	BOOK NO.:
DRAWN BY: BEN	SURVEYED BY: N.A.
DESIGNED BY: N.A.	DATE SURVEYED: N.A.
CHECKED BY:	DATE PLOTTED: JAN. 2022

NO.	DATE	REVISION	BY	APPROVED

Pierce County
Department of Public Works and Utilities
Transportation Services
2702 South 42nd Street, Suite 201
Tacoma, Washington 98409-7322

Office of County Engineer
APPROVED BY:

BRIAN D. STACY, P.E.
COUNTY ENGINEER — DATE

KRAIG SHANER, P.E.
FIELD ENGINEERING MANAGER

BRIDGE PRT 27195-E
FIVE - FORESTED DRAINAGE
GEOTECHNICAL EXPLORATION PLAN
P-111399

Drawing: P:\P-111399 PRT\27195-E SKI PARK BRIDGE\DESIGN\27195-E_GT PLAN.DWG Layout Tab: LAYOUT1 (2)
Xrefs:
Date: 01/08/2022 Time: 09:51:17 AM Plotted by: BNORTOI

Attachment C

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP1, Between Pier 2 & 3
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 450
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	2	8.9	••	2	VERY LOOSE	SOFT
- 1 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 5 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 6 ft	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 2 m	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 7 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 8 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
-	10	34.2	•••••••••	9	LOOSE	STIFF
- 9 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
-	11	37.6	••••••••••	10	LOOSE	STIFF
- 3 m 10 ft	12	41.0	•••••••••••	11	MEDIUM DENSE	STIFF
-	6	18.4	•••••	5	LOOSE	MEDIUM STIFF
-	5	15.3	••••	4	VERY LOOSE	SOFT
-	12	36.7	••••••••••	10	LOOSE	STIFF
- 11 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
-	14	42.8	••••••••••••	12	MEDIUM DENSE	STIFF
-	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
- 12 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF
-	14	42.8	••••••••••••	12	MEDIUM DENSE	STIFF
-	16	49.0	•••••••••••••••	13	MEDIUM DENSE	STIFF
- 4 m 13 ft	15	45.9	••••••••••••••	13	MEDIUM DENSE	STIFF

HOLE #: PP1, Between Pier 2 & 3 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
14 ft	28	77.6	••••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
	27	74.8	••••••••••••••••••••	21	MEDIUM DENSE	VERY STIFF
	38	105.3	••••••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
15 ft						
16 ft						
5 m						
17 ft						
18 ft						
19 ft						
6 m						
20 ft						
21 ft						
22 ft						
7 m 23 ft						
24 ft						
25 ft						
26 ft						
8 m						
27 ft						
28 ft						
29 ft						
9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP2, Between Pier 4 & 5
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 490
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	3	13.3	••••	3	VERY LOOSE	SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	3.9	•	1	VERY LOOSE	VERY SOFT
- 4 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 2 m	4	15.4	••••	4	VERY LOOSE	SOFT
- 7 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 9 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 m 10 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	27.5	••••••••	7	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 12 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	13	39.8	•••••••••••••	11	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 4 m 13 ft	14	42.8	••••••••••••••	12	MEDIUM DENSE	STIFF

HOLE #: PP2, Between Pier 4 & 5 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
- 14 ft	34	94.2	••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	16	44.3	••••••••••••	12	MEDIUM DENSE	STIFF
-	26	72.0	••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
- 15 ft	19	52.6	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
- 16 ft						
- 5 m						
-						
- 17 ft						
-						
-						
- 18 ft						
-						
-						
- 19 ft						
-						
- 6 m						
- 20 ft						
-						
-						
- 21 ft						
-						
-						
- 22 ft						
-						
-						
- 7 m 23 ft						
-						
-						
- 24 ft						
-						
-						
- 25 ft						
-						
-						
- 26 ft						
- 8 m						
-						
- 27 ft						
-						
-						
- 28 ft						
-						
-						
- 29 ft						
-						
- 9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP3, Between Pier 4 & 5
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
-	3	13.3	••••	3	VERY LOOSE	SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	3.9	•	1	VERY LOOSE	VERY SOFT
- 4 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 2 m	4	15.4	••••	4	VERY LOOSE	SOFT
- 7 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 9 ft	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 3 m 10 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	27.5	••••••••	7	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 12 ft	11	33.7	•••••••••••	9	LOOSE	STIFF
-	13	39.8	•••••••••••••	11	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••••	10	LOOSE	STIFF
- 4 m 13 ft	14	42.8	••••••••••••••	12	MEDIUM DENSE	STIFF

HOLE #: PP3, Between Pier 4 & 5 **WILDCAT DYNAMIC CONE LOG**

PROJECT: Ski Park Bridge PROJECT NUMBER: P-111399

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	TESTED CONSISTENCY COHESIVE
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
-	15	41.6	••••••••••••	11	MEDIUM DENSE	STIFF
- 14 ft	34	94.2	••••••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	16	44.3	••••••••••••	12	MEDIUM DENSE	STIFF
-	26	72.0	••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
- 15 ft	19	52.6	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
-	20	55.4	•••••••••••••••	15	MEDIUM DENSE	STIFF
- 16 ft						
- 5 m						
-						
- 17 ft						
-						
-						
- 18 ft						
-						
-						
- 19 ft						
-						
- 6 m						
- 20 ft						
-						
-						
- 21 ft						
-						
-						
- 22 ft						
-						
-						
- 7 m 23 ft						
-						
-						
- 24 ft						
-						
-						
- 25 ft						
-						
-						
- 26 ft						
- 8 m						
-						
- 27 ft						
-						
-						
- 28 ft						
-						
-						
- 29 ft						
-						
- 9 m						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP4, Between Pier 8 & 9
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION:
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 2 ft	2	8.9	••	2	VERY LOOSE	SOFT
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
-	5	22.2	••••••	6	LOOSE	MEDIUM STIFF
- 3 ft	4	17.8	•••••	5	LOOSE	MEDIUM STIFF
- 1 m	3	13.3	••••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 4 ft	4	15.4	••••	4	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 5 ft	4	15.4	••••	4	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
-	6	23.2	•••••••	6	LOOSE	MEDIUM STIFF
- 6 ft	7	27.0	••••••••	7	LOOSE	MEDIUM STIFF
-	7	27.0	••••••••	7	LOOSE	MEDIUM STIFF
- 2 m	8	30.9	•••••••••	8	LOOSE	MEDIUM STIFF
- 7 ft	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
-	9	30.8	•••••••••	8	LOOSE	MEDIUM STIFF
- 8 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	12	41.0	•••••••••••	11	MEDIUM DENSE	STIFF
-	13	44.5	••••••••••••	12	MEDIUM DENSE	STIFF
- 9 ft	16	54.7	••••••••••••••	15	MEDIUM DENSE	STIFF
-	17	58.1	•••••••••••••••	16	MEDIUM DENSE	VERY STIFF
-	19	65.0	•••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	16	54.7	••••••••••••••	15	MEDIUM DENSE	STIFF
-	18	55.1	••••••••••••••	15	MEDIUM DENSE	STIFF
-	23	70.4	••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	26	79.6	•••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
- 11 ft	24	73.4	••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	44	134.6	••	25+	DENSE	HARD
-	29	88.7	•••••••••••••••••••••••	25	MEDIUM DENSE	VERY STIFF
- 12 ft	30	91.8	••••••••••••••••••••••••	25+	MEDIUM DENSE	VERY STIFF
-	36	110.2	••••••••••••••••••••••••••••••	25+	DENSE	HARD
-	42	128.5	••••••••••••••••••••••••••••••••••	25+	DENSE	HARD
- 4 m 13 ft						

WILDCAT DYNAMIC CONE LOG

Pierce County Public Works

PROJECT NUMBER: P-111399
DATE STARTED: 10-07-2021
DATE COMPLETED: 10-07-2021

HOLE #: PP5, Between Pier 11 & 12
CREW: B. Norton, N. Averill, M. Smith
PROJECT: Ski Park Bridge
ADDRESS:
LOCATION: South Prairie, WA

SURFACE ELEVATION:
WATER ON COMPLETION: Refusal at 390
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 1 ft	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
-	0	0.0		0	VERY LOOSE	VERY SOFT
- 2 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 3 ft	1	4.4	•	1	VERY LOOSE	VERY SOFT
- 1 m	2	8.9	••	2	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 4 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
-	3	11.6	•••	3	VERY LOOSE	SOFT
- 5 ft	2	7.7	••	2	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
-	4	15.4	••••	4	VERY LOOSE	SOFT
- 6 ft	3	11.6	•••	3	VERY LOOSE	SOFT
-	5	19.3	•••••	5	LOOSE	MEDIUM STIFF
- 2 m	6	23.2	•••••••	6	LOOSE	MEDIUM STIFF
- 7 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	5	17.1	•••••	4	VERY LOOSE	SOFT
-	6	20.5	••••••	5	LOOSE	MEDIUM STIFF
- 8 ft	5	17.1	•••••	4	VERY LOOSE	SOFT
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
- 9 ft	7	23.9	•••••••	6	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
-	8	27.4	••••••••	7	LOOSE	MEDIUM STIFF
- 3 m 10 ft	11	37.6	••••••••••	10	LOOSE	STIFF
-	10	30.6	•••••••••	8	LOOSE	MEDIUM STIFF
-	12	36.7	••••••••••	10	LOOSE	STIFF
-	11	33.7	•••••••••	9	LOOSE	STIFF
- 11 ft	11	33.7	•••••••••	9	LOOSE	STIFF
-	15	45.9	•••••••••••••	13	MEDIUM DENSE	STIFF
-	12	36.7	••••••••••	10	LOOSE	STIFF
- 12 ft	16	49.0	••••••••••••••	13	MEDIUM DENSE	STIFF
-	15	45.9	•••••••••••••	13	MEDIUM DENSE	STIFF
-						
- 4 m 13 ft						

LOG OF BORING
No. AH-1

PROJECT: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting **CRP NO.:** P-111399
LOCATION: South side of bridge between Bents 12 and 13 **ELEVATION:**
STATION: **OFFSET:** **LOGGED BY:** Nick Averill
DRILLER: Ben Norton, Henry Gertje **DATE:** 12/29/2021
DRILL RIG: Hand Auger

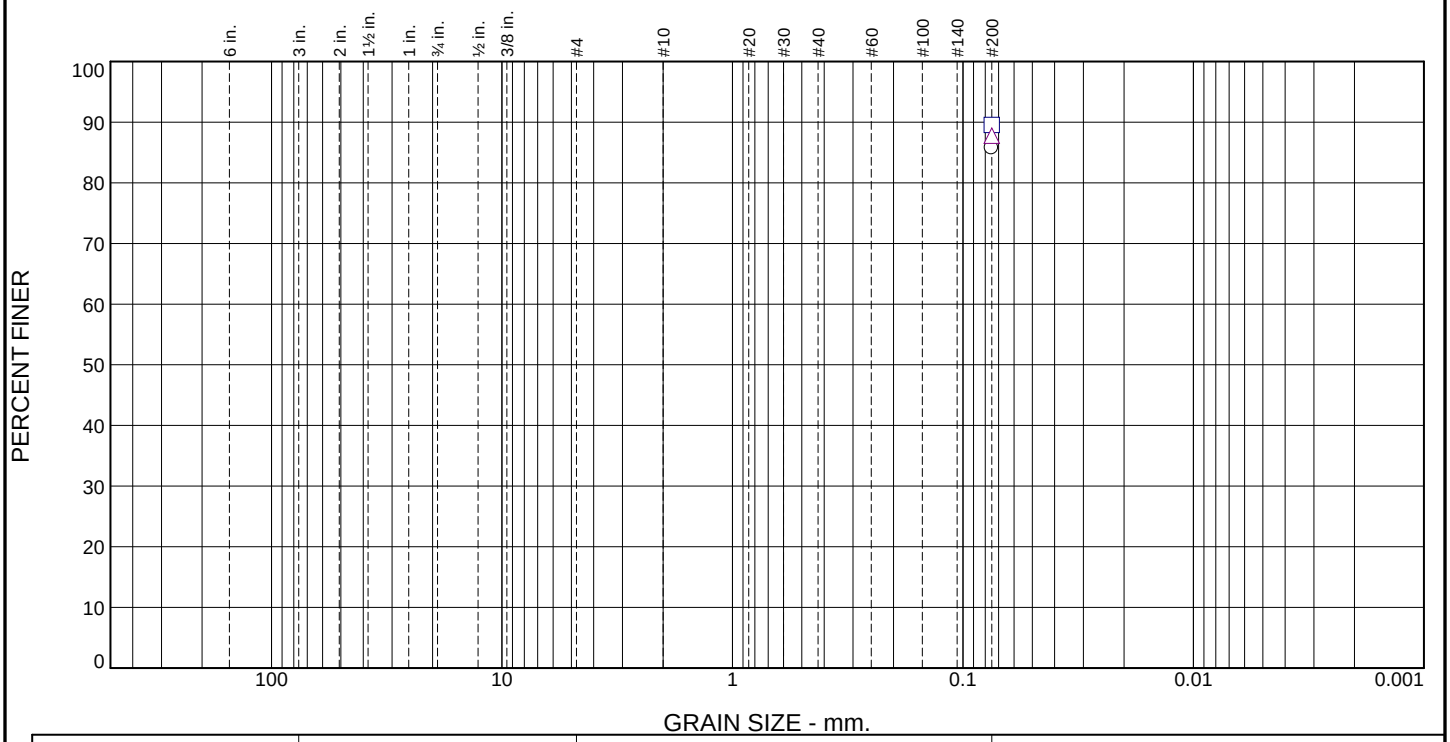
DEPTH TO WATER - INITIAL: 0' **AFTER 24 HOURS:** 0' **CAVING>** C

Depth (feet)	Blow count	N Value	Color	%200	Description	Graphic	Sample No.	Recovery
			Orn/Brn	85.7			S1	
1								
			Brown	89.5	1.5' Elastic silt		S2	
2			Brn/Gry	87.8			S3	
			Brn/Gry	85.6			S4	
3								
4			Gray	85.2	4' elastic silt with sand		S5	
			Gray	87.3	Boring terminated at 4.5 ft.		S6	
5								
6								
7								

TEST RESULTS
Plastic Limit — Liquid Limit
Water Content - ●
Penetration - ▨
25 50 75 100 125
153.7

Pierce County Public Works

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							85.7	
□							89.5	
△							87.8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	64	43								
△										

	Material Description	USCS	AASHTO
○			
□	Elastic silt	MH	
△			

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-1 **Depth:** 0.5' **Sample Number:** S1

□ **Source of Sample:** AH-1 **Depth:** 1.5' **Sample Number:** S2

△ **Source of Sample:** AH-1 **Depth:** 2.0' **Sample Number:** S3

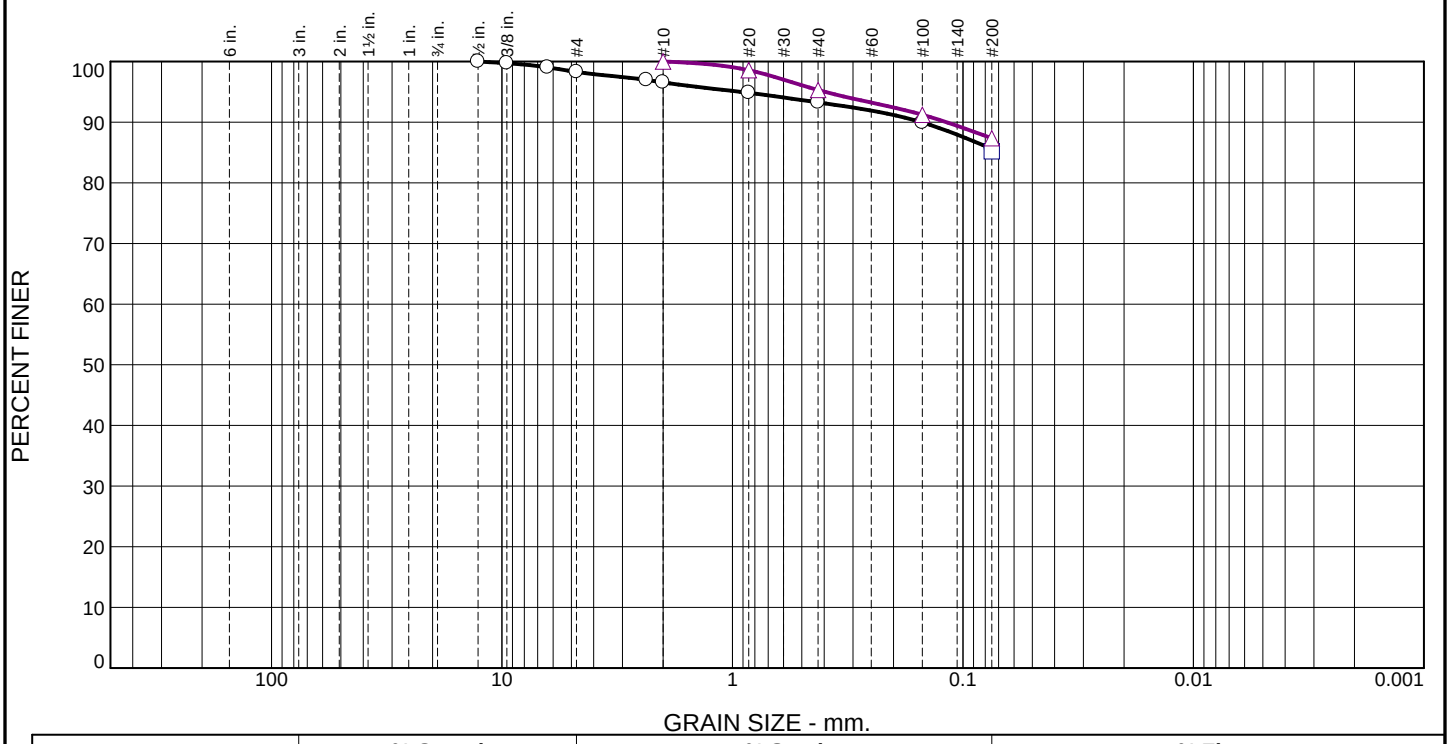
Remarks:

Pierce County Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.7	1.7	3.3	7.7	85.6	
□							85.2	
△	0.0	0.0	0.0	0.0	4.7	8.0	87.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	82	58								
△										

	Material Description	USCS	AASHTO
○			
□	elastic silt with sand	ML/SM	
△			

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-1 **Depth:** 2.5' **Sample Number:** S4

□ **Source of Sample:** AH-1 **Depth:** 4' **Sample Number:** S5

△ **Source of Sample:** AH-1 **Depth:** 4.5' **Sample Number:** S6

Remarks:

□ Most material retained above the #40 is organics.

Pierce County Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

LOG OF BORING
No. AH-2

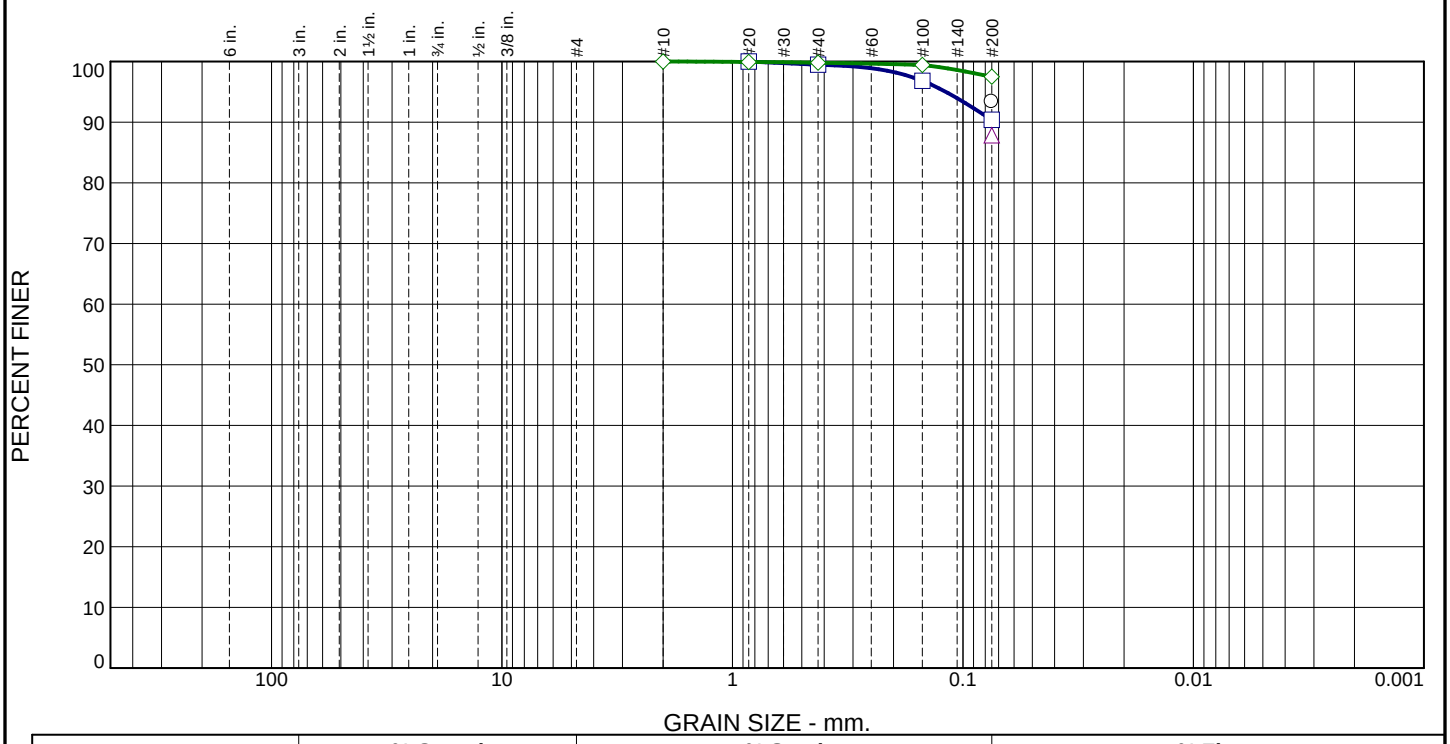
PROJECT: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting **CRP NO.:** P-111399
LOCATION: South side of bridge between Bents 9 and 10 **ELEVATION:**
STATION: **OFFSET:** **LOGGED BY:** Nick Averill
DRILLER: Ben Norton, Henry Gertje **DATE:** 12/29/2021
DRILL RIG: Hand Auger

DEPTH TO WATER - INITIAL: 0' **AFTER 24 HOURS:** 0' **CAVING>** C

Depth (feet)	Blow count	N Value	Color	%200	Description	Graphic	Sample No.	Recovery
		2	Gray	93.4			S1	
		3	Gray	90.4	5.0' elastic silt		S2	
6		4	Gray	87.8			S3	
7.5		5	Gray	97.5	8.0' silt		S4	
9		7	Gray	96.8			S5	
		8	Gray	93.3			S6	
10.5		10	Gray	95.5	11.8' Boring terminated at 11.8 ft. silt		S7	
12								
13.5								

TEST RESULTS
Plastic Limit — Liquid Limit
Water Content -
Penetration -
25 50 75 100 125

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							93.4	
□	0.0	0.0	0.0	0.0	0.5	9.1	90.4	
△							87.8	
◇	0.0	0.0	0.0	0.0	0.2	2.3	97.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□	63	45								
△										
◇	47	32								

	Material Description	USCS	AASHTO
○			
□	elastic silt	MH	A-7-5(23)
△			
◇	silt	ML/MH	A-7-5(19)

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-2 **Depth:** 4.5' **Sample Number:** S1

□ **Source of Sample:** AH-2 **Depth:** 5.0' **Sample Number:** S2

△ **Source of Sample:** AH-2 **Depth:** 6.3' **Sample Number:** S3

◇ **Source of Sample:** AH-2 **Depth:** 8.0' **Sample Number:** S4

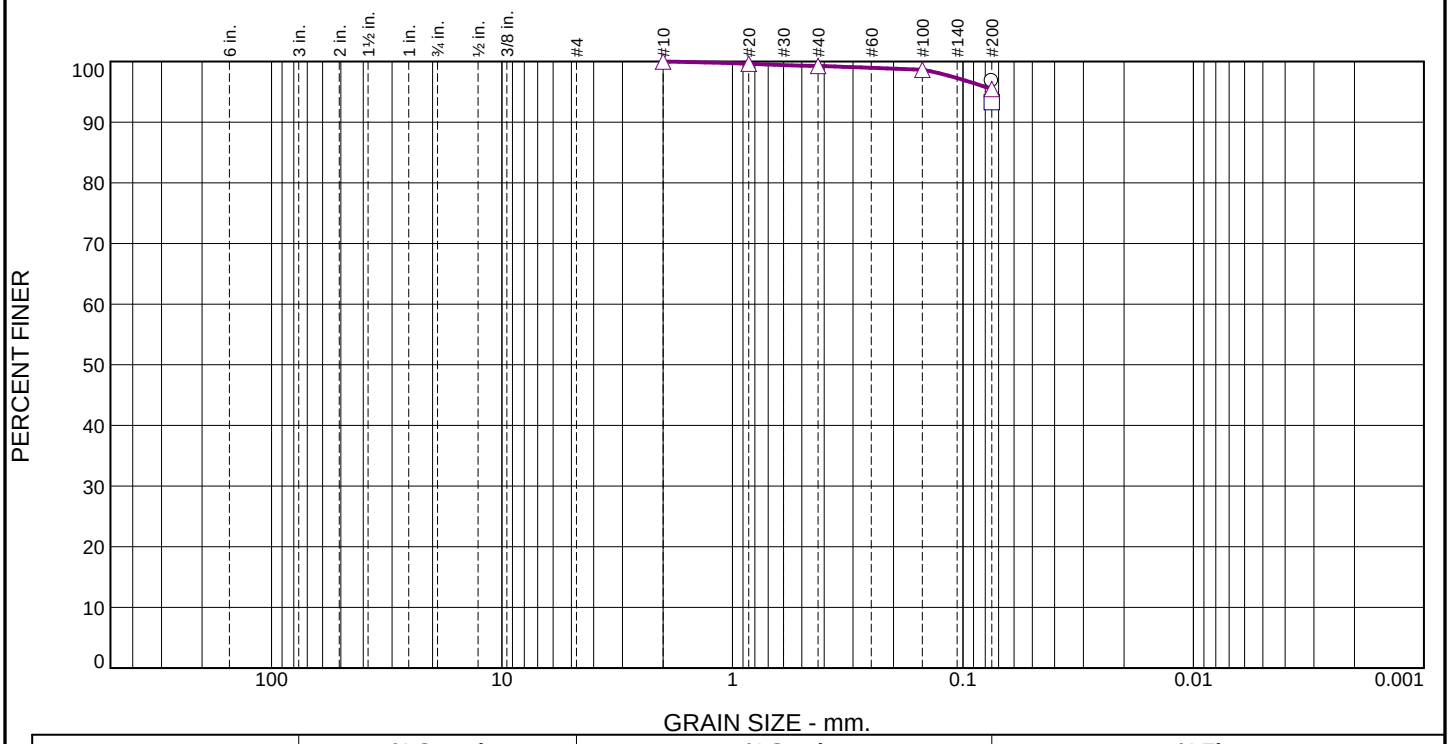
Remarks:

Pierce County
Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○							96.8	
□							93.3	
△	0.0	0.0	0.0	0.0	0.7	3.8	95.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○										
□										
△	38	30								

	Material Description	USCS	AASHTO
○			
□			
△	silt	ML	A-4(10)

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

○ **Source of Sample:** AH-2 **Depth:** 9.0' **Sample Number:** S5

□ **Source of Sample:** AH-2 **Depth:** 9.9' **Sample Number:** S6

△ **Source of Sample:** AH-2 **Depth:** 11.8' **Sample Number:** S7

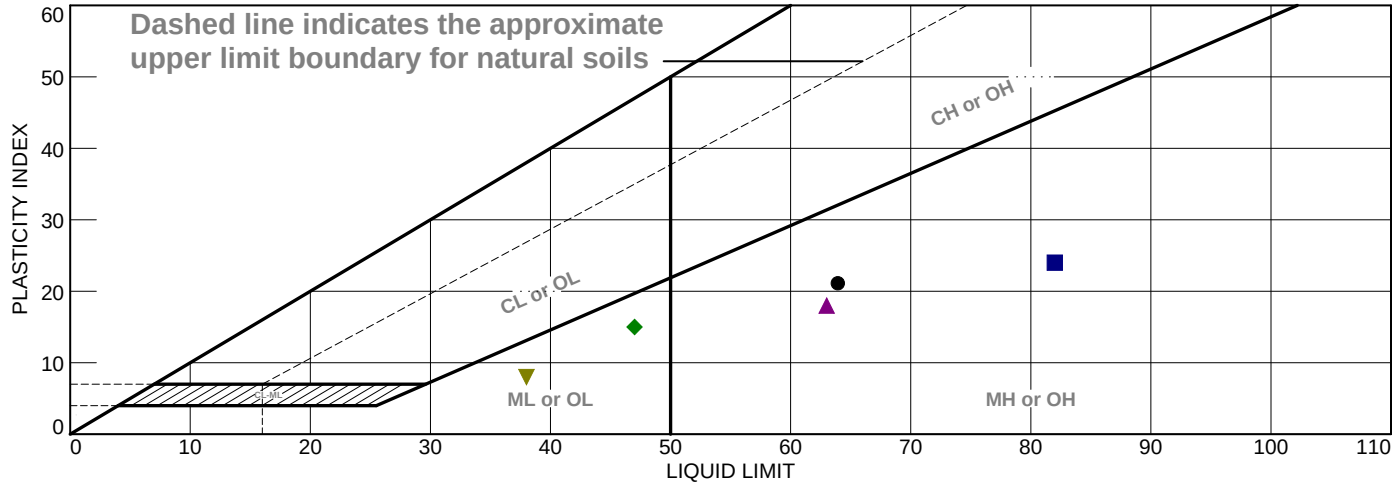
Remarks:

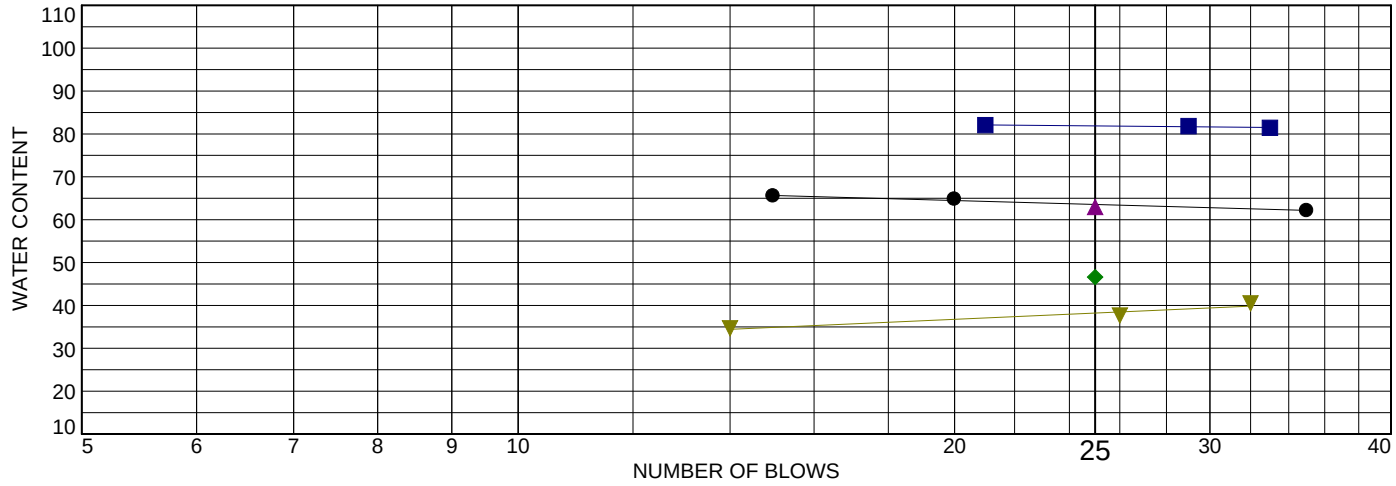
Pierce County Public Works

.

Tested By: Nick Averill **Checked By:** Nick Averill

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Elastic silt	64	43	21		89.5	MH
■	elastic silt with sand	82	58	24		85.2	
▲	elastic silt	63	45	18	99.5	90.4	MH
◆	silt	47	32	15	99.8	97.5	ML/MH
▼	silt	38	30	8	99.3	95.5	ML

Project No. P-111399 **Client:** Pierce County Parks Department

Project: PRT27195 E, Ski Park Bridge, Foothills Trail, Orting

● **Source of Sample:** AH-1 **Depth:** 1.5' **Sample Number:** S2

■ **Source of Sample:** AH-1 **Depth:** 4' **Sample Number:** S5

▲ **Source of Sample:** AH-2 **Depth:** 5.0' **Sample Number:** S2

◆ **Source of Sample:** AH-2 **Depth:** 8.0' **Sample Number:** S4

▼ **Source of Sample:** AH-2 **Depth:** 11.8' **Sample Number:** S7

Pierce County
Public Works

Remarks:

■ Sample A-1 S-6 (not tested for LL/ PL) had an organic matter content of 14.6%

▼ Sample A-2 S-7 had an organic matter content of 4.4%

All samples NM value may be slightly higher than in-situ material due to underwater augering.

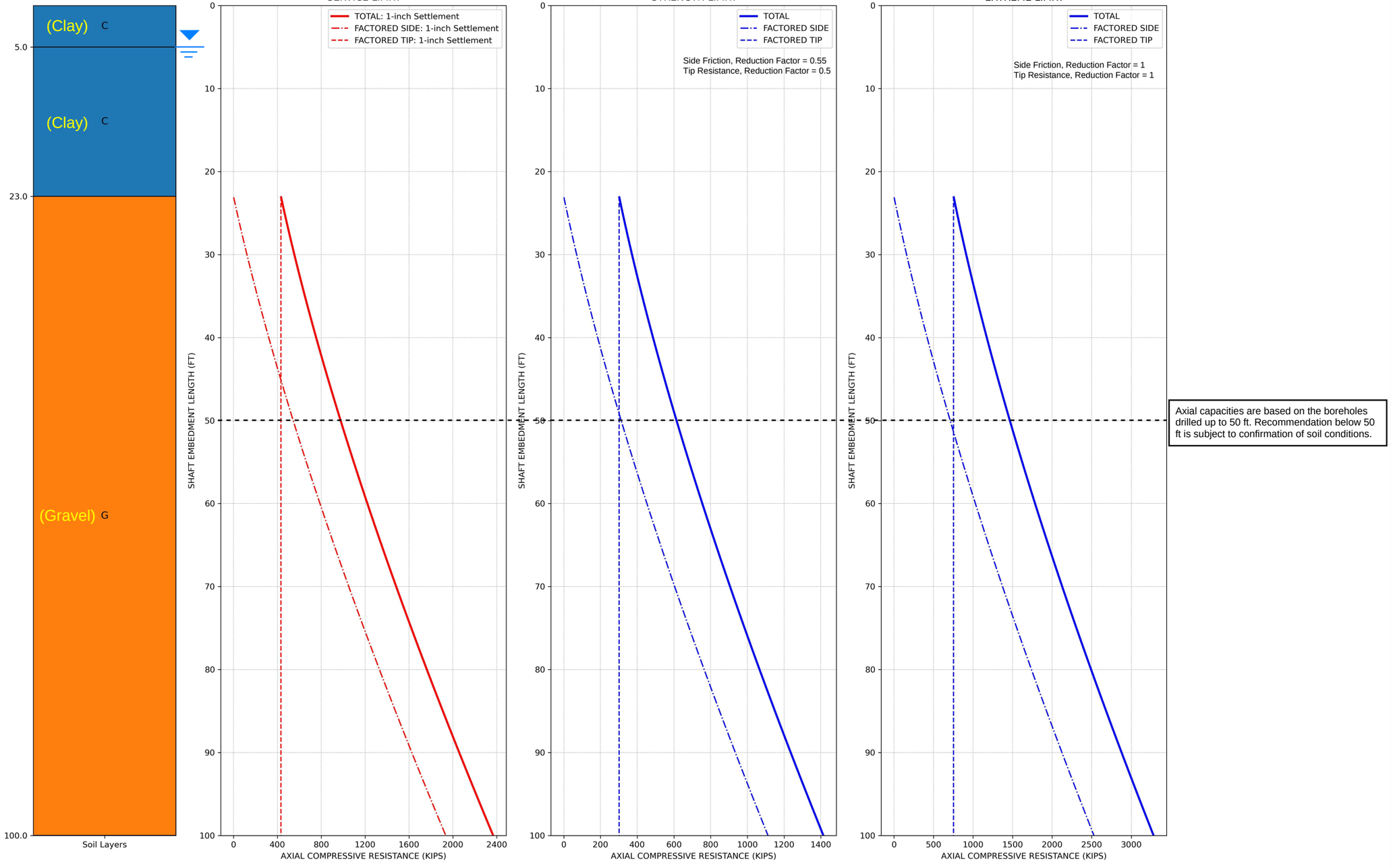
Tested By: Nick Averill **Checked By:** Nick Averill

APPENDIX E

AXIAL CAPACITY PLOTS FOR DRILLED SHAFT

SOIL PROFILE 1 (SOUTH ABUTMENT)

AXIAL CAPACITY PLOTS FOR DRILLED SHAFT



Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
3. 20% reduction is applied for single shaft per AASHTO LRFD (2020) Article 10.5.5.2.4.
4. The analysis is based on the subsurface conditions and boring logs provided by the County.
5. The analysis assumes the drilled shafts are in full contact with the surrounding soil.
6. No liquefaction is likely to occur for soil profile 1 based on boring B-1 on the South end of the bridge.
7. Assumes no permanent casings and all drilled shafts straight sided and do not have belled bases.
8. The shaft self weight is accounted for in the capacity calculations and the plots.
9. Assumes minimal sidewall disturbance during construction.
10. Assumes the top of drilled shaft at the ground surface.
11. Axial capacity was calculated assuming no adjacent utilities.

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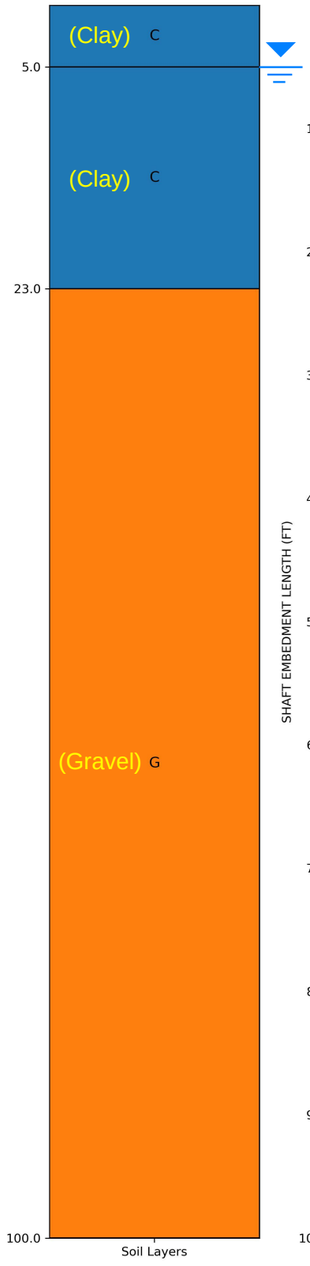
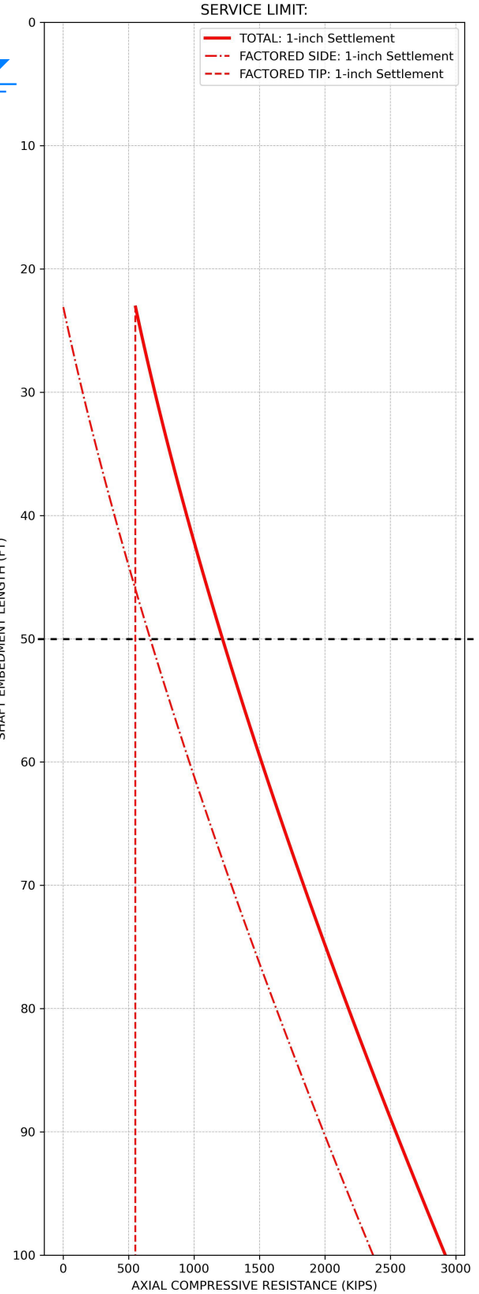
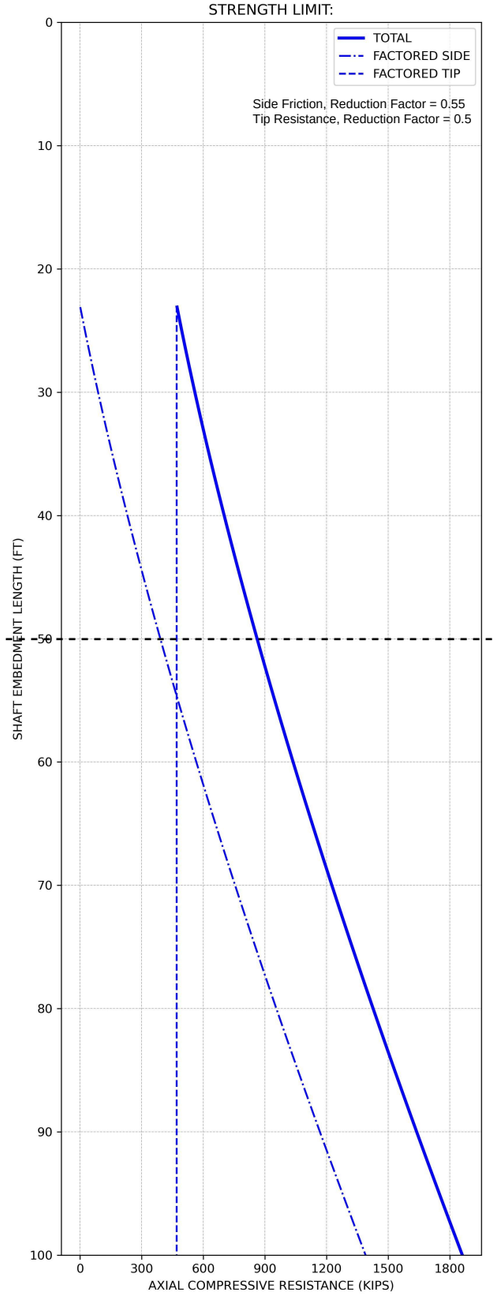
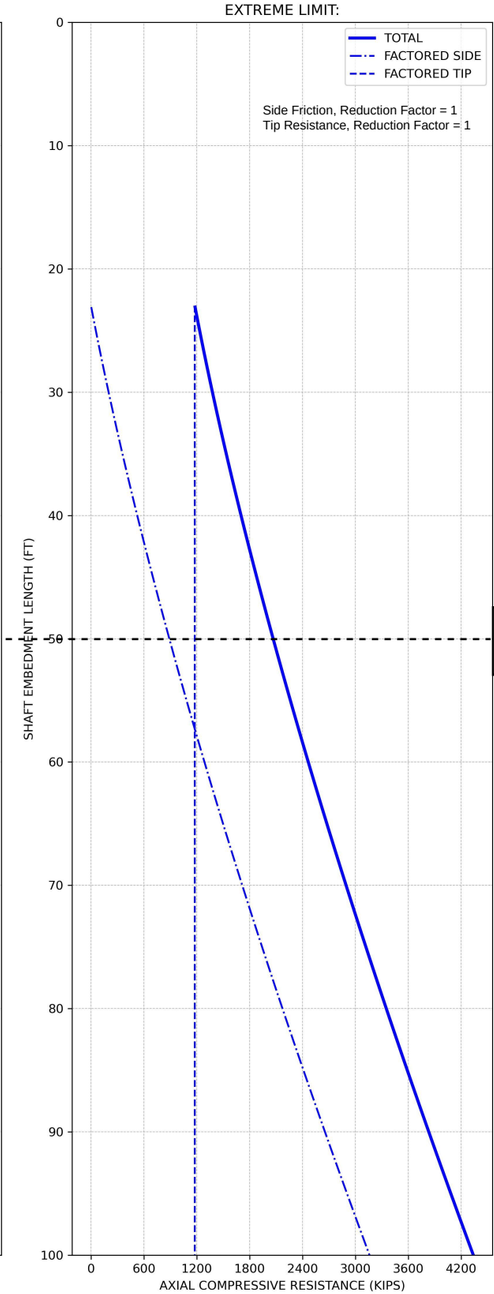
PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington	FIGURE: 1a
DRAWN BY: AP		
CHECKED BY: JLH	Soil Profile 1 - 4-ft Diameter Drilled Shaft Axial Capacity Plots	
FILE NAME: Parameters Plots		









Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
3. 20% reduction is applied for single shaft per AASHTO LRFD (2020) Article 10.5.5.2.4.
4. The analysis is based on the subsurface conditions and boring logs provided by the County.
5. The analysis assumes the drilled shafts are in full contact with the surrounding soil.
6. No liquefaction is likely to occur for soil profile 1 based on boring B-1 on the South end of the bridge.
7. Assumes no permanent casings and all drilled shafts straight sided and do not have belled bases.
8. The shaft self weight is accounted for in the capacity calculations and the plots.
9. Assumes minimal sidewall disturbance during construction.
10. Assumes the top of drilled shaft at the ground surface.
11. Axial capacity was calculated assuming no adjacent utilities.

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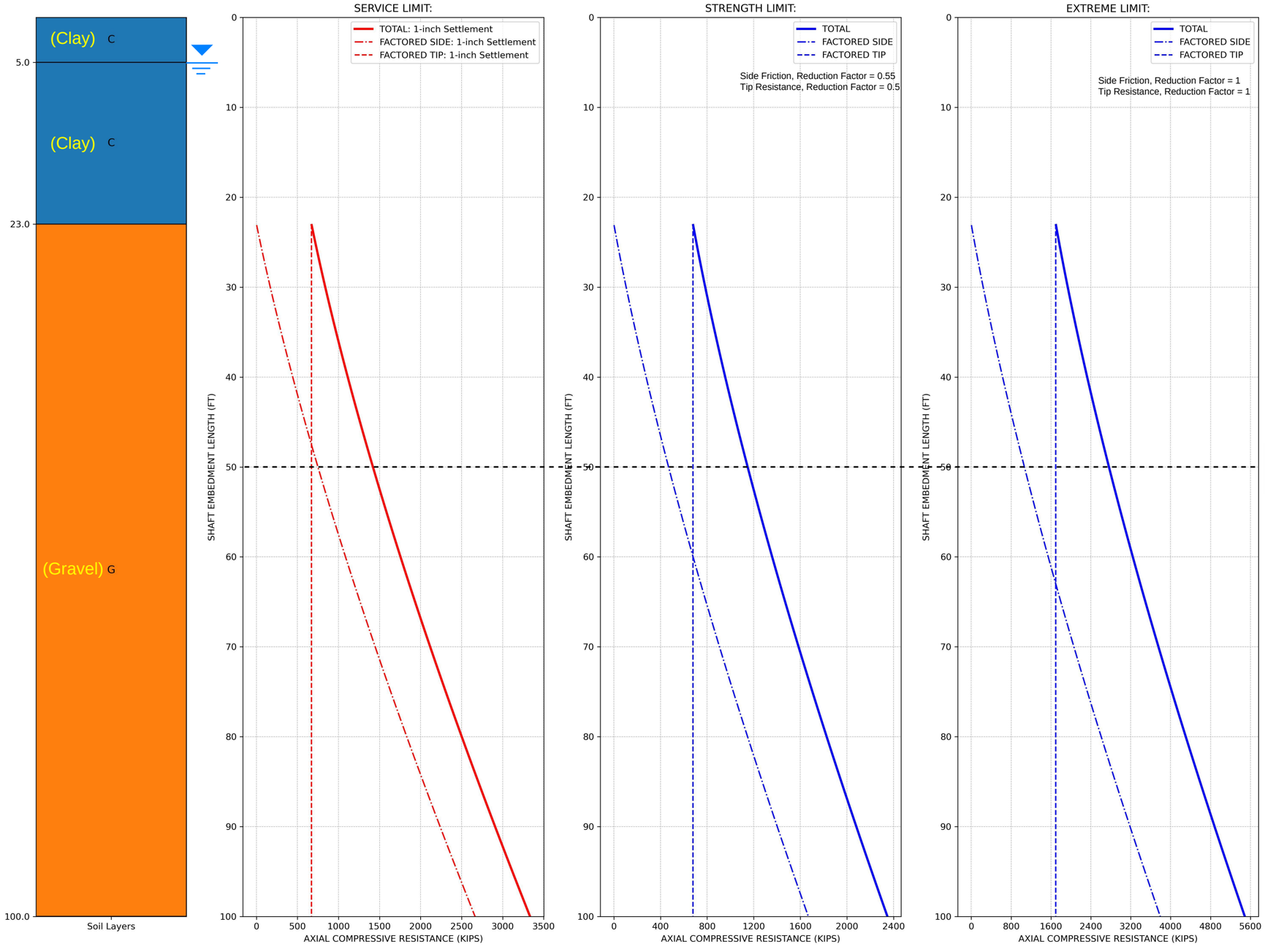
PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington	FIGURE: 1b
DRAWN BY: AP		
CHECKED BY: JLH	Soil Profile 1 - 5-ft Diameter Drilled Shaft Axial Capacity Plots	
FILE NAME: Parameters Plots		



Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
3. 20% reduction is applied for single shaft per AASHTO LRFD (2020) Article 10.5.5.2.4.
4. The analysis is based on the subsurface conditions and boring logs provided by the County.
5. The analysis assumes the drilled shafts are in full contact with the surrounding soil.
6. No liquefaction is likely to occur for soil profile 1 based on boring B-1 on the South end of the bridge.
7. Assumes no permanent casings and all drilled shafts straight sided and do not have belled bases.
8. The shaft self weight is accounted for in the capacity calculations and the plots.
9. Assumes minimal sidewall disturbance during construction.
10. Assumes the top of drilled shaft at the ground surface.
11. Axial capacity was calculated assuming no adjacent utilities.

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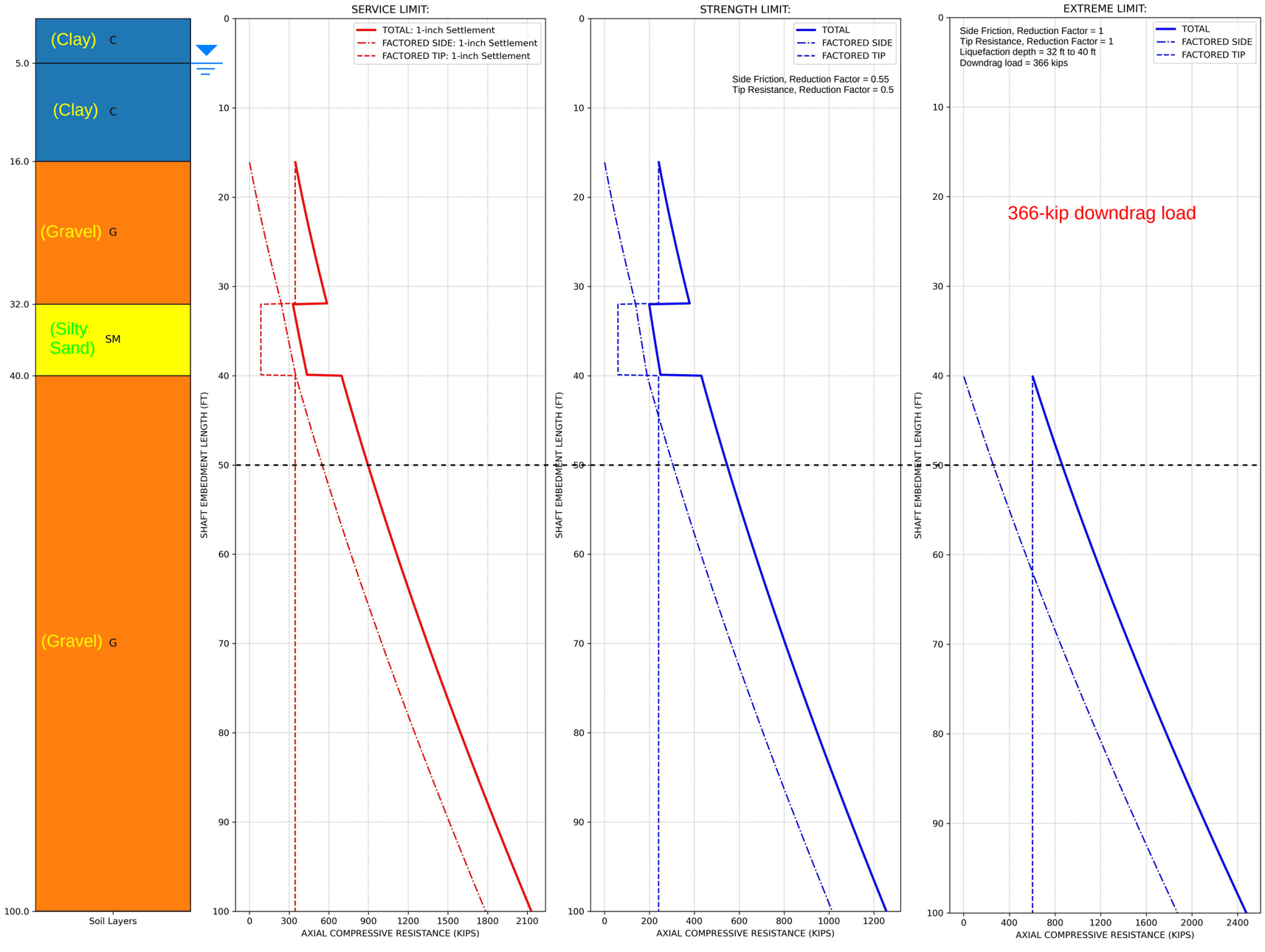
PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington
DRAWN BY: AP	
CHECKED BY: JLH	Soil Profile 1 - 6-ft Diameter Drilled Shaft Axial Capacity Plots
FILE NAME: Parameters Plots	FIGURE: 1c

SOIL PROFILE 2 (NORTH ABUTMENT)

AXIAL CAPACITY PLOTS FOR DRILLED SHAFT



Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
3. 20% reduction is applied for single shaft per AASHTO LRFD (2020) Article 10.5.5.2.4.
4. The analysis is based on the subsurface conditions and boring logs provided by the County.
5. The analysis assumes the drilled shafts are in full contact with the surrounding soil.
6. Liquefaction is likely to occur for soil profile 2 based on boring B-2 on the North end of the bridge.
7. Assumes no permanent casings and all drilled shafts straight sided and do not have belled bases.
8. The shaft self weight is accounted for in the capacity calculations and the plots.
9. Assumes minimal sidewall disturbance during construction
10. Assumes the top of drilled shaft at the ground surface.
11. Axial capacity was calculated assuming no adjacent utilities.

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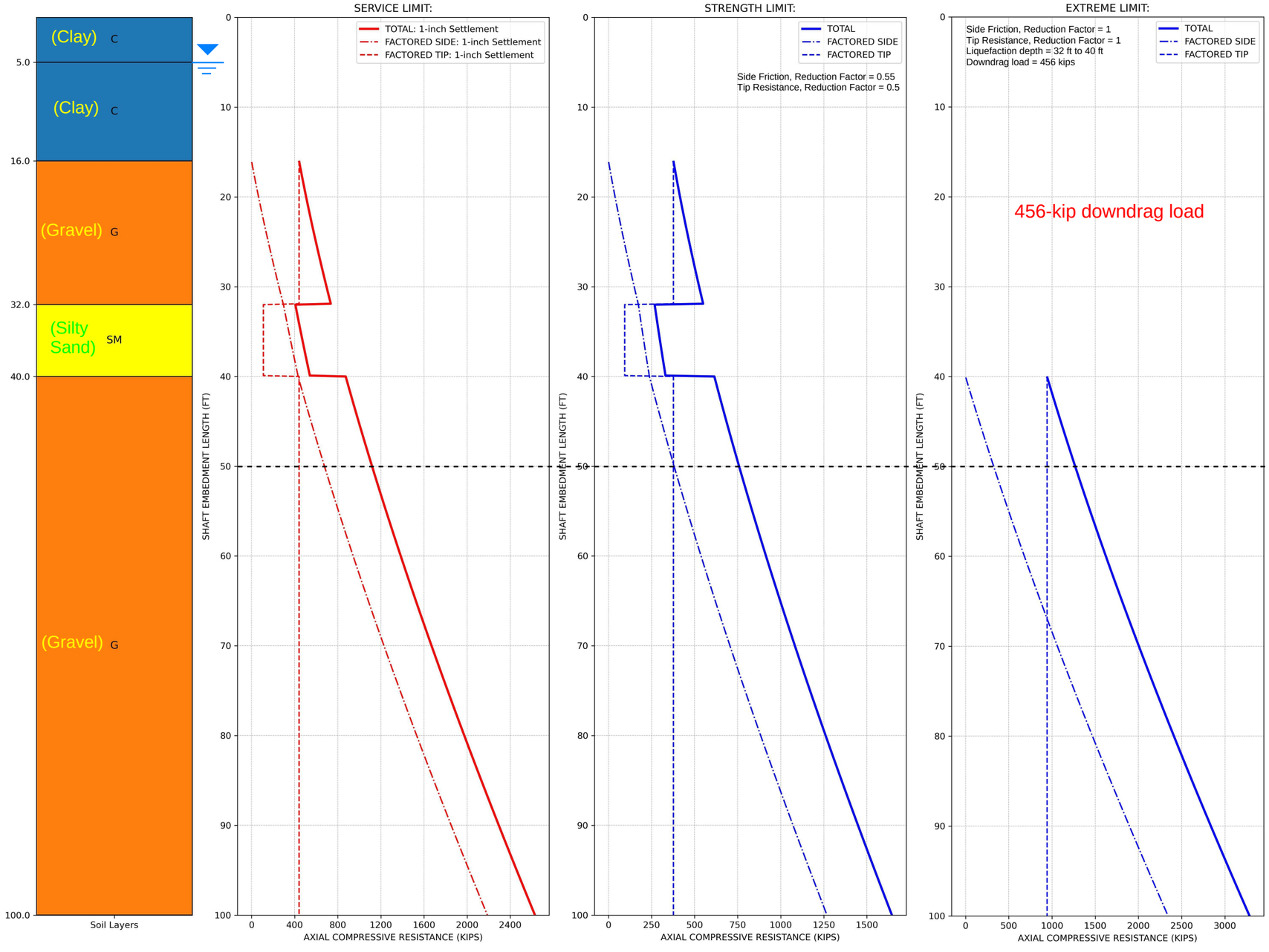
PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington	FIGURE:
DRAWN BY: AP		2a
CHECKED BY: JLH	Soil Profile 2 - 4-ft Diameter Drilled Shaft Axial Capacity Plots	
FILE NAME: Parameters Plots		



Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
3. 20% reduction is applied for single shaft per AASHTO LRFD (2020) Article 10.5.5.2.4.
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5. The analysis assumes the drilled shafts are in full contact with the surrounding soil.
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7. Assumes no permanent casings and all drilled shafts straight sided and do not have belled bases.
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10. Assumes the top of drilled shaft at the ground surface.
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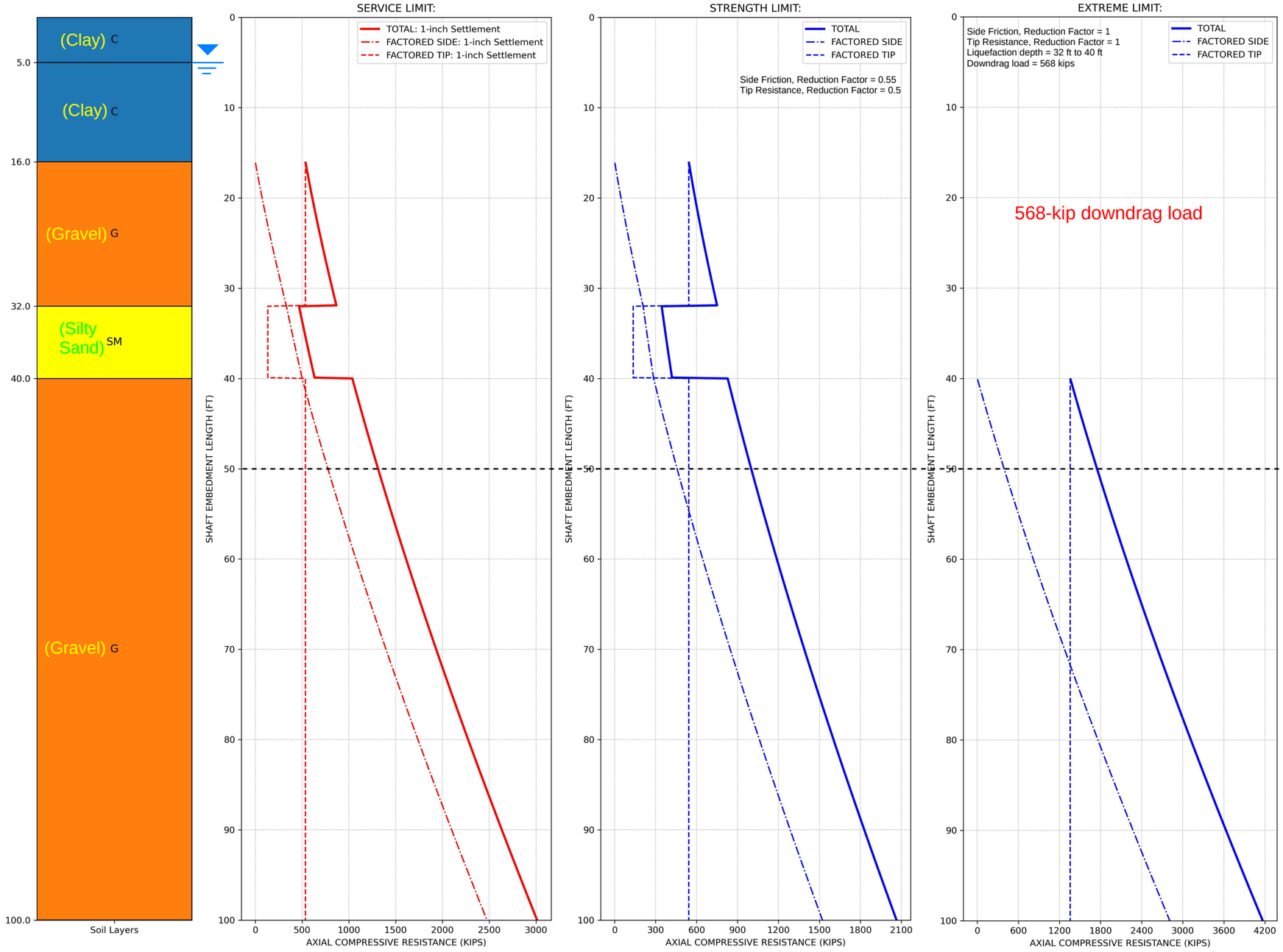
PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington	FIGURE:
DRAWN BY: AP		2b
CHECKED BY: JLH	Soil Profile 2 - 5-ft Diameter Drilled Shaft Axial Capacity Plots	
FILE NAME: Parameters Plots		



Axial capacities are based on the boreholes drilled up to 50 ft. Recommendation below 50 ft is subject to confirmation of soil conditions.

Notes:
1. All calculations are according to the AASHTO LRFD Bridge Design Specification (2020).
2. Resistance Factors (RF) are applied in accordance with AASHTO LRFD (2020).
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PROJECT NO. 24005147.001A	P-111399 Ski Park Bridge #PRT27195-E Replacement 3 Miles East of Orting, Washington	FIGURE: 2c
DRAWN BY: AP		
CHECKED BY: JLH	Soil Profile 2 - 6-ft Diameter Drilled Shaft Axial Capacity Plots	
FILE NAME: Parameters Plots		

APPENDIX F

GBA IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL REPORT

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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